Teamcenter 10.1

Utilities Reference
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Contents

Proprietary and restricted rights notice ............................................. 2

Getting started with Teamcenter utilities ...................................... 1-1
  Before you begin ................................................................................. 1-1
  Manually configuring your environment for Teamcenter utilities ....... 1-1
  Manually configure your UNIX environment for Teamcenter utilities .. 1-2
  Manually configure your Windows environment for Teamcenter utilities 1-2
  Log files produced by Teamcenter .................................................. 1-2
  System log files ................................................................................ 1-3
  Application log files .......................................................................... 1-4
  Manage password files ...................................................................... 1-5
  Preferences and variables used to control application logging .......... 1-6
  Syntax definitions ............................................................................. 1-6

Configuration utilities ................................................................. 2-1
  Preference management .................................................................. 2-1
  Data access management ................................................................ 2-34
  Business Modeler IDE .................................................................... 2-49
  Localization ...................................................................................... 2-115
  Attribute sharing ............................................................................ 2-125
  Organization ..................................................................................... 2-128
  Object validation ............................................................................. 2-140
  Teamcenter reporting ..................................................................... 2-143
  Teamcenter interface ...................................................................... 2-151

Product configuration utilities .................................................... 3-1
  Content management ........................................................................ 3-1
  Product structure maintenance ....................................................... 3-5
  Effectivity mode ............................................................................. 3-69
  Product structure clearance analysis .............................................. 3-71
  Appearance Configuration ............................................................... 3-73

Teamcenter Rapid Start utilities ............................................... 4-1

Collaborative Product Development utilities ............................... 5-1

Workflow utilities ............................................................................ 6-1

Data sharing utilities ........................................................................ 7-1

Visualization utilities ........................................................................ 8-1
  harvest mmv_index .......................................................................... 8-1

Repeatable Digital Validation (RDV) utilities ............................. 9-1
RDV cache maintenance .................................................. 9-48

Manufacturing utilities .................................................. 10-1

Classification utilities ................................................... 11-1

Sample files for smlutility and icsutility .......................... 11-20

Understanding the smlutility and SML file format .............. 11-20

Query utilities ............................................................... 12-1

Maintenance utilities ..................................................... 13-1

Installation ................................................................. 13-1

Audit Manager ............................................................. 13-13

Backup and Recovery ................................................... 13-32

Dispatcher ................................................................. 13-38

Migration ........................................................................ 13-46

Portfolio, Program, and Project Management .................... 13-50

Server manager ............................................................ 13-57

Subscription Manager ................................................... 13-62

System maintenance ...................................................... 13-64

Document management .................................................. 13-107

Teamcenter Integration for NX utilities ............................ 14-1

Integration utilities .......................................................... 15-1

Teamcenter/Community Collaboration ............................ 15-1

Teamcenter/System Engineering and Requirements Management .... 15-7

Teamcenter Automotive Edition-GM Overlay utilities .......... 16-1

Aerospace and Defense utilities ....................................... 17-1

Materials Management and Substance Compliance ............ 18-1

Consumer Packaged Goods utilities ................................ 19-1

Computer-aided engineering (CAE) utilities ..................... 20-1

Teamcenter mechatronics process management utilities ...... 21-1

Volume and database management utilities ....................... 22-1

File Management System (FMS) utilities ........................ 22-57

Systems Engineering utilities .......................................... 23-1

Index ............................................................................... Index-1
Chapter

1 Getting started with Teamcenter utilities

Before you begin

Unless otherwise noted in the description of a utility, the program files associated with the utilities described in this manual are located in the `bin` directory under the Teamcenter application root directory.

**Prerequisites**

Unless stated otherwise in the description of the utility, you must be a member of the `dba` group or a group that is granted `dba` privileges.

**Enable the utilities**

Most of the command utilities are enabled by user authentication using the user ID and password supplied in the `-u` and `-p` arguments. If these arguments are not required, the command is enabled by default.

If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

**Configure the utilities**

For information about configuring the utilities, see *Manually configuring your environment for Teamcenter utilities*.

**Start the utilities**

Each utility is initiated by entering its name and optional parameters.

Manually configuring your environment for Teamcenter utilities

Teamcenter administrators typically configure site workstations and computers so that users can log on without manually setting the environment. If this has not been done by your administrator, you must manually set the Teamcenter environment before you can run a session.

If you are unsure whether to perform this procedure, consult your administrator for additional information.

You configure utilities using environment variables.

`TC_ROOT` and `TC_DATA` are the only environment variable settings required to run the core Teamcenter application. These variables can be set automatically
at login. However, there are several stand-alone utilities such as install and clearlocks that also require that the entire Teamcenter environment be set.

If you are using Teamcenter Integration for NX, you must enter the following commands at the command line prompt:

```bash
set UGII_BASE_DIR=path to where NX6 is installed
set UGII_ROOT_DIR=%UGII_BASE_DIR\ugii
set PATH=%UGII_ROOT_DIR%;%PATH%
```

**Manually configure your UNIX environment for Teamcenter utilities**

[Note] The following procedures use default path names. If other path names were specified during Teamcenter installation, use those path names instead. Consult your administrator for additional information.

Manually configuring the Teamcenter environment on UNIX systems requires sourcing the tc_profilevars and tc_cshvars scripts. To manually set the Teamcenter environment, enter one of the following sets of commands:

**Bourne/Korn shell:**

```bash
TC_ROOT=/usr/tc2007; export TC_ROOT
TC_DATA=/usr/tc2007/tcdata; export TC_DATA
. $TC_DATA/tc_profilevars
```

**C shell:**

```bash
setenv TC_ROOT /usr/tc2007
setenv TC_DATA /usr/tc2007/tcdata
source $TC_DATA/tc_cshvars
```

Sourcing the `$TC_DATA/tc_cshvars` file creates a csh subshell in which Teamcenter environment variables are set.

**Manually configure your Windows environment for Teamcenter utilities**

[Note] The following procedures use default path names. If other path names were specified during Teamcenter installation, use those path names instead. Consult your administrator for additional information.

Manually configuring the Teamcenter environment on Windows systems requires running the `tc_profilevars.bat` script. This script is called automatically when exiting to an MS-DOS shell from the Teamcenter menu, but the environment can also be set manually. To manually set the Teamcenter environment, enter the following commands:

```cmd
set TC_ROOT=c:\tc2007
set TC_DATA=c:\tc2007\tcdata
call %TC_DATA%\tc_profilevars
```

**Log files produced by Teamcenter**

Teamcenter utilities often produce log files.
Teamcenter creates two types of log files: system log files and application log files. *System log files* are used to record information about global system events; *application log files* are used to record information about specific Teamcenter applications.

**Note** In this context, *application* means either a Teamcenter application (such as Teamcenter or Structure Manager) or a Teamcenter utility (such as *clearlocks*).

System log files and application log files are stored in different directories and controlled by different preferences. Site preferences control system log files and are write protected. Site preferences must be set in the *tc_preferences.xml* preference file stored in the *TC_DATA* directory. Various user, group, and role preferences control application log files. These preferences can be managed using the *Options* dialog box, accessed from the *Edit* menu. Use the *Options* dialog box to search for preferences, set preference values, create new preferences, and remove existing preferences.

For additional information about using this dialog box, see the *Rich Client Interface Guide*.

**Best practices**

Siemens PLM Software recommends that old log files be deleted. Log files can consume large amounts of hard disk space. Log file size should be monitored periodically and old log files deleted to recover hard disk space. Any required new log files can be recreated after old log files are deleted. Log files can be deleted while users are logged on to Teamcenter.

Siemens PLM Software recommends that directory write permissions are left open. It is extremely important to ensure that directories used to store log file have the required write permissions at all times. For example, it is especially important that Teamcenter be able to write to the *$TC_LOG* directory if any system logging is enabled. Otherwise, the system repeatedly attempts to write to this directory and performance is affected.

For information about log files, see the *System Administration Guide*.

**System log files**

The following log files record information about installation and global system events:

- **Administration log file** (*administration.log*)
  
  Contains a record of the following Teamcenter system administration objects when they are created, modified, deleted, or released:
  
  - user
  - group
  - group member creation
  - dataset type
  - tool creation
  - tool deletion
  - volume creation
  - volume deletion
Chapter 1  Getting started with Teamcenter utilities

- modification
- move
- grant access
- revoke access

The protected **TC_Administration_Logging** site preference enables administrative logging.

- Installation log file (install*date-time*.log)

  This log file is in the install directory under the application root directory. The *date-time* stamp represents the date and time Teamcenter Environment Manager was run. For example, **install0522241627.log** indicates that Teamcenter Environment Manager was run at 4:27 on February 24, 2005.

  The protected **TC_Installation_Logging** site preference enables installation logging.

- POM utilities log file (tc_install.log)

  Contains the standard output from the POM utilities called by Teamcenter Environment Manager. This log file is in the logs directory under the application root directory. The logs directory also contains the logs (and when POM utilities fail, **syslogs**) for utilities that Teamcenter Environment Manager calls.

- Security log file (security.log)

  Contains a record of attempted protection violations by users. For example, logs are kept of attempts to open a dataset without read permission on that dataset.

  The protected **TC_Security_Logging** site preference enables security logging. Security logging creates a record of invalid access of Teamcenter objects and writes the data to the $TC_LOG/security.log file. Enabling security logging also requires creating a file named **security.log** in the **TC_DATA** directory. The system first checks for the existence of this file; if it exists, it checks the value of this preference. If set to ON, security logging is enabled.

- System log file (system.log)

  Contains a record of global system events such as database shutdowns and system startup.

  The protected **TC_System_Logging** site preference enables system logging.

### Application log files

Each set of application log files consists of a journal file, monitor file, object log file and a syslog file. The **TC_Application_Logging** preference controls the logging of journal files. **syslog** files are always created and can not be suppressed.

Each application log file name is a concatenation of the application name, the OS process ID (PID), and a descriptive file extension. This ensures application log file names are unique for each session and prevents overwriting valuable troubleshooting information. The following is an example of Structure Manager log file names:

- PSEPID.jnl
- PSEPID.log
- PSEPID.syslog
The following application log files are used by Siemens PLM Software support and development to troubleshoot and debug Teamcenter:

- **Journal files (.jnl)**
  Contains diagnostic information and is intended for Siemens PLM Software use only.

- **Syslog files (.syslog)**
  Contains diagnostic information and is intended for Siemens PLM Software use only.

- **Object log files (.log)**
  Contains a record of Teamcenter objects (users, groups, volumes, and so on) created, modified, or deleted during the application session.

### Manage password files

To provide the best password security, you can store an encrypted password in a designated file and directory location on a local disk. You create the file containing the encrypted password using Teamcenter Environment Manager (TEM) or the **install** utility. An environment variable contains the password string to be encrypted. The variable is designated in TEM or by an **install** utility argument. The environment variable is not maintained, it is used only during the encryption process to ensure the clear text password is not persisted.

For more information about password encryption, see the **install** utility.

**Note** You can update the encrypted Teamcenter user password using TEM or the **install** utility. However, this does not change the password in the Teamcenter database. This must be done manually.

The encryption process uses an AES 256-bit encryption key.

For information about managing the encryption key, see the *System Administration Guide*.

The **-pf** argument provides enhanced password security by allowing you to place an unencrypted password in a text file and secure the file using operating system-level security. This is stronger security than is provided by the **-p** argument, in which passwords are placed on the utility program command line, allowing a user to run **ps -ef** to display all running utilities and gain access to the utilities’ passwords.

The file must contain only the password. Do not include user names or other text. The password must be one line; new lines and carriage returns are considered a terminator. The password must also be in character encoding consistent with the processes reading it.

You must place the file on a local disk to ensure that access control is managed securely by the operating system representing the file.

- To prepare the password file on UNIX, run **chmod 400 file-name**.

- To prepare the password file on Windows, right-click the file and choose **Properties**, and then click the **Security** tab and ensure that **Administrators** is the only group with read access on the local machine.
File access control becomes complicated when mapping between UNIX and Windows platforms.

- On UNIX, do not place the password file on disks mounted from other machines. You can run `df` to obtain a list of such disks.
- On Windows, do not place the password file on drives shared with other machines. Using a removal disk (usb) ensures that even local administrators only have access when the disk is physically present.

### Preferences and variables used to control application logging

The following preferences and environment variable control application logging:

- **TC_Application_Logging** preference
  Enables or suppresses application logging. This command can also be set in the rich client interface using the **Edit→Options** command.
  This preference only enables or suppresses application logging for journal and monitor files; **syslog** files are always created and cannot be suppressed.

- **TC_Journalling** preference
  Globally enables or suppresses creation of all journal files independently of monitor and **syslog** files. This command can also be set in the rich client interface using the **Edit→Options** command.

- **CLASSPATH** environment variable
  Defines the directory for storing the rich client object log (**.log**) files when the `java.io.tmpdir` key is defined in the Virtual Machine **CLASSPATH** variable, as follows:

  ```
  -Djava.io.tmpdir=
  path-to-temp-directory
  ```

### Syntax definitions

This manual uses a set of conventions to define the syntax of Teamcenter commands, functions, and values. Following is a sample syntax format:

```
verify_tasks  -u=user-id  [-p=password  |  -pf=password-file]
             [-g=group-name]  [-m=list  |  delete]  [-h]
```

The conventions are:

- **Bold**
  Bold text represents words and symbols you must enter exactly as shown.
  For example, you enter **verify_tasks** exactly as shown.

- **Italic**
  Italic text represents values that you supply.
  For example, you supply your values for **user-ID**, **password** and **group-name**.
| A vertical bar (also called a pipe) represents a choice between mutually exclusive elements.

For example, you must specify either the list value or the delete value for the -m argument.

[ ] Brackets represent optional elements.

For example, the -g=, -m= and -h arguments are optional.

(Arguments not in brackets are mandatory. For example, the -u= argument is required.)

{text} Braces surround mutually exclusive elements that are required.

For example, a password value is required. You must use either the -p= or -pf= argument.

... An ellipsis indicates that you can repeat the preceding element.

text-text A hyphen separates two words that describe a single value.

For example, group-name indicates that you input a single value.

Following are examples of correct syntax for the verify_tasks command:

```
$TC_ROOT/bin/verify_tasks -u=dba -p=DBA
$TC_ROOT/bin/verify_tasks -u=dba -p=DBA -m=list
$TC_ROOT/bin/verify_tasks -u=dba -pf=passwords.txt -m=delete
$TC_ROOT/bin/verify_tasks -u=dba -p=DBA -h
```
Chapter

2  Configuration utilities

Preference management
preferences_manager

Migrates legacy preference files to the database. In addition, this utility can be used to convert legacy preference files to XML format and to import and export preferences to and from the database.

SYNTAX

preferences_manager
-u=user-name
[-p=password | -pf=password-file]
-g=group-name
-mode={append | category | cleanup | cleanup_definitions | clear | export | generatexml | import | migrate | delete | remove | upgradexml}

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note: If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the user’s password.
If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-mode=append
Appends specified values to an existing preference in the database.
For more information about syntax specific to this mode, see -mode=append.
-mode=category
Manages preference categories. The list of categories is separated by a delimiter using the delimiter option. The default delimiter is a comma.

For more information about syntax specific to this mode, see -mode=category.

-mode=cleanup
Removes stale preferences not removed by other administrative tasks.

For more information about syntax specific to this mode, see -mode=cleanup.

-mode=cleanup_definitions
Deletes redundant preference definitions from the preference definition file stored in the database.

Redundant preference definitions are created when a saved query is performed in Teamcenter Engineering. Such preferences are named *query*.

For more information about syntax specific to this mode, see -mode=cleanup_definitions.

-mode=clear
Removes all preferences of the specified scope.

For more information about syntax specific to this mode, see -mode=clear.

-mode=export
Exports scope-based preferences to a specified output file.

For more information about syntax specific to this mode, see -mode=export.

-mode=generatexml
Converts a specified legacy preference file to XML format in the specified output location.

For more information about syntax specific to this mode, see -mode=generatexml.

-mode=import
Imports a specified XML or legacy preference file into the database.

For more information about syntax specific to this mode, see -mode=import.

-mode=migrate
Migrates preferences from legacy preference files into the database.

For more information about syntax specific to this mode, see -mode=migrate.

-mode=delete
Deletes the specified non-foundation preference definitions from the system.

Foundation preferences are the ones available from a basic Teamcenter installation.

For more information about syntax specific to this mode, see -mode=delete.

-mode=remove
Removes specified preferences of the specified scope from the database.

For more information about syntax specific to this mode, see -mode=remove.

-mode=upgradexml
Upgrades a preference file from a specified format to the current format.
For more information about syntax specific to this mode, see `-mode=upgradexml`.

-h
Displays help for this utility.

ENVIRONMENT

As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES

As specified in *Log files produced by Teamcenter*.

RESTRICTIONS

Creation and deletion of preferences is governed by the following rules:

- If you are a user, you can only create or delete user preferences.
- If you are a group administrator, you can create or delete group, role, and user preferences.
- If you are a site administrator, you can create or delete site, group, role, and user preferences.

EXAMPLES

- To migrate the legacy site, user, role, and group preferences files, enter the following command on a single line:

  ```
  preferences_manager -u=user-id -p=password -g=dba -mode=migrate -dir=some-directory
  ```

  The structure of `some-directory` can be:

  ```
  .iman_env (Site preference file)
  upfiles (Folder containing user preference files.
           The file names are <user name>.iman_env )
  rpfiles (Folder containing role preference files.
           The file names are <role name>.iman_env)
  gpfiles (Folder containing group preference files.
           The file names are <group name>.iman_env)
  ```

- To generate the site preferences XML file from the legacy site preference file, (can be a site, user, role, or group), enter the following command on a single line:

  ```
  preferences_manager -u=user-id -p=password -g=dba -mode=generatexml -context=Teamcenter
  -file=legacy-preference-file -out_file=C:\temp\site_pref.xml
  ```

- To import the site preferences in an XML file, skipping the processing for all preferences in the XML file that exist in the database, enter the following command on a single line:

  ```
  preferences_manager -u=infodba -p=password -g=dba -mode=import -scope=SITE -file=C:\temp\site_pref.xml -action=SKIP
  ```

- To import the site preferences in an XML file, overriding the values of preferences in the database with the values assigned to the same preference in the XML file, enter the following command on a single line:

  ```
  preferences_manager -u=user-id -p=password -g=dba -mode=import -scope=SITE -file=C:\temp\site_pref.xml -action=OVERRIDE
  ```
To import the site preferences in an XML file, merging the values of preferences in the database with the values assigned to the same preference in the XML file, enter the following command on a single line:

```
preferences_manager -u=infodba -p=password -g=dba -mode=import -scope=SITE -file=C:\temp\site_pref.xml -action=MERGE
```

To import the preferences in the site legacy preference file, overriding the values of the preferences in the database with the values of the same preference in the legacy file, enter the following command on a single line:

```
preferences_manager -u=infodba -p=password -g=dba -mode=import -scope=SITE -file=C:\temp\site_pref -action=OVERRIDE
```

To import a preference (specified on the command line) and override the values in the database with the values specified for the preference on the command line, enter the following command on a single line:

```
preferences_manager -u=infodba -p=password -g=dba -mode=import -scope=SITE -file=C:\temp\site_pref -preference=TestPreference -values=Val1,Val2,Val3 -action=OVERRIDE
```

To export all user preferences in the database for the user smith, enter the following command on a single line:

```
preferences_manager -u=smith -p=password -g=design -mode=export -scope=USER -out_file=C:\temp\smith.xml
```

**Note** In this example, the utility must be run by the user.

To export all group preferences in the database for the logged-on group of user smith, enter the following command on a single line:

```
preferences_manager -u=smith -p=password -g=design -mode=export -scope=GROUP -out_file=C:\temp\design.xml
```

To export preferences specified in an input file, enter the following command on a single line:

```
preferences_manager -u=smith -p=password -g=design -mode=export -file=C:\temp\input_file.txt -out_file=c:\temp\exported_preferences.xml
```

To generate an XML preference file in the Teamcenter context, enter the following command on a single line:

```
preferences_manager -u=smith -p=password -g=design -mode=generatexml -file=C:\temp\input_file.txt -context=Teamcenter -out_file=c:\temp\exported_preferences.xml
```

For the system administrator to export user preferences for Teamcenter user smith, enter the following command on a single line:

```
preferences_manager -u=infodba -p=password -g=dba -mode=export -scope=USER -target=smith -out_file=c:\temp\some-file
```

To generate an XML file, enter the following command on a single line:

```
preferences_manager -u=user-id -p=password -g=dba -mode=generatexml -file=IMAN_DATA\gpfiles\design.iman_env -scope=GROUP -out_file=C:\temp\design.xml
```
This command can be executed by any user, but the actual import is governed by the user's privileges.

- For the system administrator to remove the `pref1` and `pref2` preferences for the user `smith`, enter the following command on a single line:

  ```
  preferences_manager -u=infodba -p=infodba -g=dba
  -mode=remove -scope=USER -target=smith -preferences=pref1,pref2
  ```

- For the system administrator to remove the `pref1` and `pref2` preferences for the `Engineering` group, enter the following command on a single line:

  ```
  preferences_manager -u=infodba -p=infodba -g=dba
  -mode=remove -scope=GROUP -target=Engineering -preferences=pref1,pref2
  ```

- For the system administrator to append the `HRN_Cavity` value to the existing `Connection:HRN_Core,HRN_GeneralWire` values on the `Connected_ToRules` preference, enter the following command on a single line:

  ```
  preferences_manager -u=infodba -p=infodba -g=dba
  -mode=append -scope=SITE -preference=Connected_ToRules
  -prefix="Connection:" -values="HRN_Cavity" -delimiter="",""
  ```
-mode=append

Appends specified values to an existing preference in the database.

SYNTAX

preferences_manager
-u=user-name
{ -p=password | -pf=password-file }
-g=group-name
-mode=append
-scope={SITE | GROUP | ROLE | USER}
-preference=preference-name
[-prefix=prefix-to-be-searched-in-value]
-values=values-to-be-appended
-delimiter=delimiter-to-be-used-for-append
[-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note   If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the user's password.

If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-mode=append
Appends specified values to an existing preference in the database.
-scope
Specifies the location to which the specified preferences are appended. It is created in the specified location. Valid values are:

- **SITE**
  Appends the values to preference at the site location. This means that the logged-on user must be a system administrator.

- **GROUP**
  Appends the values to the preference at the group location. This means that the logged-on user must be a group administrator.

- **ROLE**
  Appends the values to the preference at the role location. This means that the logged-on user must be a group administrator.

- **USER**
  Appends the values to the preference at the user location.

**Note** In all these cases, if the preference does not exist at the location, the preference instance is created at the location with the specified value.

-preference
Specifies the preference to be used for append. If the preference is not found, it is created only if already defined in the database, and only if its protection scope allows for a definition at the given location.

-prefix
Specifies the prefix to be searched in the values. If the prefix is found, the value is appended to it. If the prefix is not specified, values separated by the delimiter are appended individually to the end of the values list.

-values
Specifies the values to append to the existing preference values.

-delimiter
Specifies the delimiter between the values.

-h
Displays help for this utility.
-mode=category

Manages preference categories. The list of categories is separated by a delimiter using the **delimiter** option. The default delimiter is a comma.

**SYNTAX**

```
preferences_manager
-u=user-name
[-p=password | -pf=password-file]
-g=group-name
-mode=category
-action=CREATE
-categories=category-names
[-delimiter=delimiter-used-between-categories]
[-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-mode=category**
  Manages preference categories.

  **Note** This mode requires system administration privileges.
-action
Specifies the action performed upon the category. The only valid value is CREATE.

**Note** You can delete categories from the Options dialog box in the rich client.

-cATEGORIES
Specifies categories to be created. Categories can be separated by a specified delimiter.

-dELIMITER
Specifies the delimiter used between categories. If not specified, the default delimiter is a comma.

-h
Displays help for this utility.

RESTRICTIONS
Only system administrators can create new categories using the **-mode=category** option.
-mode=cleanup

Removes stale preferences not removed by other administrative tasks.

SYNTAX

preferences_manager
-\texttt{u=admin-username}
[-\texttt{p=password} | -\texttt{pf=password-file}]
-\texttt{g=admin-group}
-\texttt{mode=cleanup}
[-\texttt{target=\{user-ID | role-ID | group-ID\}}]
[-\texttt{dry_run}]
[-\texttt{exception_file=path to the exception file}]
[-\texttt{report_file=full-path-to-report-file}]
[-\texttt{h}]

ARGUMENTS

-\texttt{u}
Specifies the user ID.

This is generally \texttt{infodba} or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

\textbf{Note} If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-\texttt{p}
Specifies the user's password.

If used without a value, the system assumes a null value. If this argument is not used, the system assumes the \texttt{user-ID} value to be the password.

This argument is mutually exclusive with the -\texttt{pf} argument.

-\texttt{pf}
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the \texttt{user-ID} value to be the password.

For more information about managing password files, see \textit{Manage password files}.

This argument is mutually exclusive with the -\texttt{p} argument.

-\texttt{g}
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-\texttt{mode=cleanup}
Deletes redundant preferences.

\textbf{Note} This mode requires system administration privileges.
-target
Specifies the user or role or group ID whose preferences are to be deleted. Must be a valid user, role or group ID.
If not specified, the cleanup applies to all preferences (including the site location).

dry_run
If specified, no preferences are removed.
The system only parses the preferences to be removed and prints the findings in the specified report file.

exception_file
Specifies the full path to the file that contains names of preferences (one per line) that are to be excluded from the cleanup operation. The information can be obtained from a run in dry_run mode.
If the argument is not specified, the system deletes all redundant preferences.

report_file
Specifies the full path to the file containing logging information on the task.
If the argument is not provided, the system creates a default file.

h
Displays help for this utility.
-mode=cleanup_definitions

Deletes redundant preference definitions from the preference definition file stored in the database.

Redundant preference definitions are created when a saved query is performed in Engineering Process Management. Such preferences are named *_query_.*.

**SYNTAX**

preferences_manager
   -u= username
   [-p=password | -pf=password-file]
   -g=group-name
   -mode=cleanup_definitions
   [-h]

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  
  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-mode=cleanup_definitions**
  Deletes redundant preference definitions from the preference definition file stored in the database.

- **-h**
  Displays help for this utility.
-mode=clear

Removes all the preferences in the database for the specified scope and/or targets.

**SYNTAX**

```
preferences_manager
-uh user-name
[-p=password | -pf=password-file]
-g=group-name
-mode=clear
[-scope={SITE | GROUP | ROLE | USER}]
[-target=user-ID | role-ID | group-ID]
[-u_target=list-of-user-IDs] [-r_target=list-of-role-IDs]
[-g_target=list-of-group-IDs]
[-h]
```

**ARGUMENTS**

- **u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **p**
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the -pf argument.

- **pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the -p argument.

- **g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **mode=clear**
  Removes all preferences of the specified scope.
  For more information about syntax specific to this mode, see -mode=clear.
Note: This mode requires system administration privileges.

-scope
Specifies the location from which the specified preferences are cleared. It is created in the specified location. Valid values are:

- SITE
Clears only site overlay preferences (that is, only the site preferences that have been modified at a site). This means that the logged-on user must have system administrator privileges.

- GROUP
Clears all the group preferences of the current logged-on group.

- ROLE
Clears all the role preferences of the current logged-on role. This means that the logged-on user must have group administrator privileges.

- USER
Clears all the user preferences of the current logged-on user.

-target
Specifies the user or role or group ID of the user whose preferences are to be cleared. This option can only be used with the -scope option.

-u-target
Specifies the list of users for which all preference instances are to be cleared. It cannot be used with the -scope argument but can be used with the -r_target and -g_target arguments. Entries are the IDs of users (separated by a comma) for which the logged-on user has privileges.

-r-target
Specifies the list of roles for which all preference instances are to be cleared. It cannot be used with the -scope argument but can be used with the -u_target and -g_target arguments. Entries are the IDs of roles (separated by a comma) for which the logged-on user has privileges.

-g-target
Specifies the list of groups for which all preference instances are to be cleared. It cannot be used with the -scope argument, but can be used with the -r_target and -u_target arguments. Entries are the IDs of groups (separated by a comma) for which the logged-on user has privileges.

-h
Displays help for this utility.
-mode=export

Exports scope-based preferences to a specified output file.

**SYNTAX**

```
preferences_manager
-\texttt{u}=user-name
[-\texttt{p}=password | -\texttt{pf}=password-file]
-\texttt{g}=group-name
-\texttt{mode}=export
[-\texttt{scope}= \{SITE | GROUP | ROLE | USER\}]
[-\texttt{target}= \{user-ID | role-ID | group-ID\}]
[-\texttt{file}=input-file]
[-\texttt{categories}=comma-separated-categories]
[-\texttt{delimiter}=value-delimiter]
[-\texttt{out_file}=output-file-name]
[-\texttt{report_file}=full-path-to-report-file]
[-h]
```

**ARGUMENTS**

- \texttt{u}
  
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  \textbf{Note} If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- \texttt{p}
  
  Specifies the user's password.

  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the \texttt{user-ID} value to be the password.

  This argument is mutually exclusive with the \texttt{-pf} argument.

- \texttt{pf}
  
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the \texttt{user-ID} value to be the password.

  For more information about managing password files, see \textit{Manage password files}.

  This argument is mutually exclusive with the \texttt{-p} argument.

- \texttt{g}
  
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.

- \texttt{mode=export}
  
  Exports scope-based preferences to a specified output file.
This mode requires system administration privileges.

- **scope**
  Specifies the location to which the specified preferences are exported. It is created in the specified location. Valid values are:
  
  - **SITE**
    Only the site preferences matching the specified criteria are considered for export.
  
  - **GROUP**
    Only the group preferences (of the current logged-on group) matching the specified criteria are considered for export.
  
  - **ROLE**
    Only the role preferences (of the current logged-on role) matching the specified criteria are considered for export.
  
  - **USER**
    Only the user preferences (of the current logged-on user) matching the specified criteria are considered for export.

- **target**
  Specifies the user or role or group ID whose preferences are to be exported. Must be a valid user, role or group ID.

  If not specified, the export applies to all preferences (including the site location).

- **file**
  Input file specifying the preferences to be exported. This file contains the preference names (in each line). For example:

  ```
  Item_show_relations
  Item_DefaultChildProperties
  ```

- **categories**
  Specifies the categories to export. Categories are a comma-separated list, unless a different delimiter is provided with the **-delimiter** option. This option is ignored if the **-file** option is provided.

- **delimiter**
  Specifies the delimiter to be used for the categories. The default delimiter is a comma if the **-delimiter** option is not specified.

- **out_file**
  Specifies the file to which preferences are exported. The output is generated in **XML** format.

- **report_file**
  Specifies the file that contains logging output. If not specified, a default file is created in the current directory.
Chapter 2  

Configuration utilities

-h
Displays help for this utility.
-mode=generatexml

Converts a specified legacy preference file to XML format in the specified output location.

SYNTAX

preferences_manager
-u=user-name
[-p=password | -pf=password-file]
-g=group-name
-mode=generatexml
-file=file-containing-preferences
-context=Teamcenter | NXManagerUnigraphics
-out_file=output-file-name
[-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

[Note] If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the user's password.
If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files. This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-mode=generatexml
Converts a specified legacy preference file to XML format in the specified output location.

[Note] This mode requires system administration privileges.
-file
Specifies the preference file containing the preferences to be converted.

-context
Specifies the context. Valid values are:
  • Teamcenter
  • NXManagerUnigraphics

-out_file
Specifies the file to which the converted preferences are exported.

-h
Displays help for this utility.
-mode=import

Imports a specified XML or legacy preference file into the database.

**SYNTAX**

```
preferences_manager
-u=user-name
[-p=password | -pf=password-file]
-g=group-name
-mode=import
[-scope={SITE | GROUP | ROLE | USER}]
[-target={user-ID | role-ID | group-ID}]
[-u_target=list-of-user-IDs] [-r_target=list-of-role-IDs]
[-g_target=list-of-group-IDs]
[-file=input-file] [-preview]
[-categories=categories-to-import] [-delimiter=delimiter]
[-preference=preference-name] [-values=comma-separated-values]
[-delimiter=delimiter]
[-protection_scope=default-protection-scope] [-enable_environment=activate]
[-action={SKIP | OVERRIDE | MERGE}]
-report_file=file-name
[-h]
```

**ARGUMENTS**

-u

Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p

Specifies the user's password.

If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

-pf

Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see *Manage password files*.

This argument is mutually exclusive with the -p argument.
-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-mode=import
Imports a specified XML or legacy preference file into the database.

-target
Specifies the user or role or group ID whose preferences are to be imported. Must be
a valid user, role or group ID.
If not specified, the import applies to all preferences (including the site location).

-u-target
Specifies the list of users whose preference instances are to be imported. This
argument can be used with the -r_target and -g_target arguments. Entries are the
IDs of users (separated by a comma) for which the logged-on user has privileges.

-r-target
Specifies the list of roles whose preference instances are to be imported. This
argument can be used with the -u_target and -g_target arguments. Entries are the
IDs of roles (separated by a comma) for which the logged-on user has privileges.

-g-target
Specifies the list of groups whose preference instances are to be imported. This
argument can be used with the -r_target and -u_target arguments. Entries are the
IDs of groups (separated by a comma) for which the logged-on user has privileges.

-preference
Specifies the preference name that has to be imported to the database. This works
only when the -file option is not specified. The preference must have already been
defined in the system for this option to work.

-scope
Specifies the modified (if needed) protection scope to give to the preference specified
in the preference option when the preference is a hierarchical preference already
defined in the database, and when the logged-on user is a system administrator.
Valid values are:

- SITE
Clears only site overlay preferences (that is, only the site preferences that have
been modified at a site). This means that the logged-on user must have system
administrator privileges.

- GROUP
Clears all the group preferences of the current logged-on group.

- ROLE
Clears all the role preferences of the current logged-on role. This means that the
logged-on user must have group administrator privileges.

- USER
Clears all the user preferences of the current logged-on user.
-enable_env
Activates the specified environment.

-values
Specifies the values for the preference specified in the -preference option. This can be comma-separated values if the -delimiter option is not specified. In order to specify a delimiter other than comma, use the -delimiter option. This option is valid only with the -preference option. If needed, values can be surrounded by double quotation marks. For example, "my value".

-delimiter
Specifies the delimiter to be used either for the values (when used in conjunction with the -values option) or for the categories (when used with the -categories option. The default delimiter is comma if the -delimiter option is not specified.

-categories
Specifies the categories to import. Categories are a comma-separated list, unless specified through the -delimiter option.

-action
Indicates the action to be taken if a preference exists in the database with a different value. Valid values are:

- SKIP
  The preference values in the database are untouched.

- OVERRIDE
  The preference values in the database are overridden with the new values in the input file

- MERGE
  Merges the values in the database with the values in the input file (that is, the union of values in the database and input file).

-report_file
Specifies the file that to which import results are logged. If not specified, a default file is created. The report file logs the following results:

- That the import file contains only user scope-protected preferences.

- That the import file contains role scope-protected preferences. These preferences were not imported for the given users (and a warning was printed in the output report).

- That the import file contains group scope-protected preferences. These preferences were not imported for the given users/roles (and a warning was printed in the output report).

- That the import file contains some scope-protected preferences or system preferences. These preferences were not imported for the given users/roles/groups (and a warning was printed in the output report).
That the import file contains preferences that are not yet declared at the site level. These preferences were not imported for the given users/roles/groups (and a warning is printed in the output report).

-h
Displays help for this utility.
-mode=migrate

Migrates preferences from legacy preference files into the database.

SYNTAX

preferences_manager
-uauser-name
{-p=password | -pf=password-file}
-g=group-name
-mode=migrate
-dir=directory
[-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

-Note If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the user’s password.
If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-mode=migrate
Migrates the preferences to the database.

-dir
Points to the directory containing the legacy site, group, role and user preference files. If the directory contains the legacy site preference file, all preferences in this file are migrated to the database. Additionally, the following rules apply for migrating user, role, and group preferences.
- If the `TC_GROUP_PFILE`, `TC_ROLE_PFILE` and `TC_USER_PFILE` environment variables are set, then the legacy files for group, role, and user are picked up from these directories.

- If these environment variables are not specified and the directory supplied contains the `fpfiles`, `rpfiles` and `upfiles` subdirectories, they are used for migration. To import all of the site, user, role and group preferences, the user must be a system administrator.

-`h`

  Displays help for this utility.
-mode=delete

Deletes the specified non-foundation preference definitions from the system. Foundation preferences are the ones available from a basic Teamcenter installation.

**SYNTAX**

```bash
preferences_manager
-u=user-name
[-p=password | -pf=password-file]
-g=group-name
-mode=delete
[preferences=preference_name-1,preference_name-2,...,preference_name-n |]
-exception_file=exception-file-name]
[-file=file-name]
[-dry_run]
[-report_file=report-file-name]
[-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user’s password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.
-mode=delete
Removes the specified non-foundation preference definitions from the system. You can supply the preference names in a file or on the command line. If you do not supply either, all non-foundation preferences are deleted.

**Note** This mode requires system administration privileges.

-preferences
Specifies a command separated list of preference names to delete from the database. Cannot contain foundation preference names. This argument cannot be used when the -exception_file argument is specified.

-exception_file
Specifies the full path and name of a file that contains names of preferences that are excluded from the delete operation. This argument cannot be used when the -preferences argument is specified. Each preference name to be excluded must be on a separate line in the file.

-file
Contains a list of preferences to be deleted. Each preference name must be on a separate line in the file.

**Note** This option cannot be used with the -preferences option.

-dry_run
Provides a report of the delete operation but does not actually delete the preferences.

-report_file
Full path and file name of the file that contains the log information for the utility. If you do not specify this argument, the utility creates a file using a default path and file name.

-h
Displays help for this utility.
-mode=remove

Removes the specified preference instances from the specified location in the database.

**SYNTAX**

```plaintext
preferences_manager
  -u=user-name
  [-p=password | -pf=password-file]
  -g=group-name
  -mode=remove
  [[-scope={SITE | GROUP | ROLE | USER}]]
  [-target={user-ID | role-ID | group-ID}]
  [-u_target=list-of-user-IDs] [-r_target=list-of-role-IDs]
  [-g_target=list-of-group-IDs]
  [preferences=preference-name]
  [-file=file-name]
  [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

- **-p**
  Specifies the user's password.
  
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

  For more information about managing password files, see `Manage password files`.

  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  
  If used without a value, the user's default group is assumed.
-mode=remove
Removes the specified preference instances from the specified location in the database.

**Note** This mode requires system administration privileges.

-scope
Specifies the location under which the preference instances are deleted. This option may be used with the -target option, but never with any of the -u_target, -r_target or -g_target options. This option can accept one of the following keywords:

- **SITE**
  Removes the specified preferences if they exist in the current logged-on group preferences list. This means that the logged-on user must have group administrator privileges.

- **GROUP**
  Removes the specified preferences if they exist in the current logged-on group preferences list. This means that the logged-on user must have group administrator privileges.

- **ROLE**
  Removes the specified preferences if they exist in the current logged-on role preferences list. This means that the logged-on user must have group administrator privileges.

- **USER**
  Removes the specified preferences if they exist in the current logged-on user preferences list.

  **Note** If not specified, this is the default value.

-target
Specifies the user or role or group ID whose preferences are to be removed. Must be a valid user, role or group ID.

If not specified, the removal applies to all preferences (including the site location).

-preferences
Specifies comma-separated preference names for which the preference instances are to be deleted from the database under the specified locations.

-file
Contains a list of preferences to be deleted. Each preference should be on a separate line in the file.

  **Note** This option cannot be used with the -preferences option.

-h
Displays help for this utility.
-mode=upgradexml

Upgrades a preference file from a specified format to the current format. The upgrade_preferences_file.pl perl script can also be used to perform these actions.

For more information about the administering preferences, see the Application Administration Guide

SYNTAX

preferences_manager
-u=user-name
[-p=password | -pf=password-file]
-g=group-name
[-mode=upgradexml]
-input_file=path-to-input-file
-definition_information=path-to-information-file
[-separator=separator-used-in-information-file]
[-default_protection_scope=SITE | GROUP | ROLE | USER]
[-default_env_variable_status=true | false]
[-correct_errors]
-output_file=path-to-output-file
-report_file=path-to-report-file
[-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note: If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the user's password.
If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-\texttt{mode=upgradexml}
Upgrades a preference file from a specified format to the current format.

\textbf{Note}  This mode requires system administration privileges.

-\texttt{input\_file}
Specifies the full path to the preferences file to be updated. If the file is in the format of a previous Teamcenter release, the output file is in the current format. If the file is in the current format, the output file is in the current format and the information updated using the file specified by the \texttt{definition\_information} argument. This is useful to update the preference file from an external text file.

-\texttt{definition\_information}
Specifies the full path to the text file containing information about updated preferences using the file passed in the desired protection scope and the desired environment variable status. If the file is in the format of a previous Teamcenter release, the output file is in the current format.

The content of the text file is in the format:

\begin{verbatim}
preference-name;protection-scope;environment-variable-status
\end{verbatim}

The content of the definition information text file must be in the format:

\begin{verbatim}
preference-name;protection-scope;environment-variable-capability
\end{verbatim}

The \texttt{protection-scope} and \texttt{environment-variable-capability} settings are optional. If these values are not specified, the values of the \texttt{-default\_protection\_scope} and \texttt{-default\_env\_variable\_status} arguments are used.

Valid values for the \texttt{protection-scope} setting are \texttt{User}, \texttt{Role}, \texttt{Group}, \texttt{Site}, or \texttt{System}.

Valid values for the \texttt{environment-variable-capability} setting are \texttt{true} (indicating that the preference can also be set using an environment variable) or \texttt{false}.

For example:

\begin{verbatim}
prefA;User;false
prefB;Role;
prefC;Site
prefD;false
\end{verbatim}
Tip You can create a one-to-one correspondence between each preference listed in the input file and the specified default settings in the definition file. Alternatively, omitting default settings in the definition information file for any given preference listed in the input file applies the values of the -default_protection_scope and -default_env_variable_status arguments to the preference.

If the -default_protection_scope argument is not specified, the system assigns that preference a default protection scope of User.

If the -default_env_variable_status argument is not specified, the system assigns that preference the environment variable capability of false.

-separator
Specifies the string used between each field in the file specified in the definition_information parameter. If not given, the character ; is assumed to be the separator.

-default_protection_scope
Specifies the default protection scopes to preferences not listed in the file specified in the definition_information parameter, or when the supplied information is incorrect or absent. Valid values are:

- SITE
  Upgrades the specified values to preferences at the site location. Only users logged on as system administrators can upgrade these preferences.

- GROUP
  Upgrades the specified values to preferences at the site location. Only users logged on as group administrators can upgrade these preferences.

- ROLE
  Upgrades the specified values to preferences at the site location. Only users logged on as role administrators can upgrade these preferences.

- USER
  Upgrades the specified values to preferences at the site location. Only users logged on as system administrators can modify these preferences.

  If not specified, this is the default value.

- SYSTEM
  Upgrades the specified values to preferences at the system location. Only users logged on as system administrators can upgrade these preferences.

-default-env-variable-status
Specifies the default value for the envEnabled attribute to apply to the preferences either not listed in the file specified in the definition_information parameter, or when the supplied information is incorrect or absent. Valid values are:

- false
Chapter 2  Configuration utilities

Note  If not specified, this is the default value.

•  true

-correct_errors
Corrects errors encountered whenever possible. Types of errors that can be corrected include incorrect types, array status, protection scope, and category errors. Errors that must be manually corrected are indicated in the report file.

-output_file
Specifies the full path to the output file containing the updated preferences. If the file already exists, it is overwritten.

-report_file
Full path to the file containing logging information about the upgrade task. If the argument is not provided, the system creates a default file.

-h
Displays help for this utility.

Data access management
am_install_tree

Installs an Access Manager (AM) rule tree at your site. Teamcenter supplies a default rule tree that provides a starting point for creating rules at your site. If you do not specify the [operation] option, it imports a rule tree. In that case, the [mode] option is required.

SYNTAX

am_install_tree -u=user-id [-p=password | -pf=password-file] [-g=group]
[-operation={import | export } ] -path=file-name [-mode={replace_all | replace_tree | no_replace}] -format={xml | txt} [-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

[Note] If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

-operation
Specifies whether to import or export the rule tree file.

If you do not specify the [operation] option, am_install_tree assumes the default of importing a rule tree. In that case, the [mode] option is required.

=import Default mode. Imports a rule tree.
=export  Exports a rule tree.

If you specify [-operation=export], the option [-mode] is not required.

-path
Specifies the full path of the rule tree file.

-mode
Specifies one of the following installation modes:

=replace_all
Overwrites both the existing rule tree and any named access control lists (ACLs) in the system.

=replace_tree
Overwrites the existing rule tree but does not overwrite existing named ACLs in the system.

=no_replace
Default mode. Used only when installing the first rule tree at your site. Does nothing if an existing rule tree is detected.

-format
Specifies one of the following file formats:

=xml
XML file format.

=txt
Text file format.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

RETURN VALUES

Return value upon success 0

Return value upon failure 1

EXAMPLE

The following example exports the rule tree export_rule.txt:

am_install_tree -u=tcadmin -p=tcadmin -g=admin -operation=export -path=D:\export_rule.txt -format=txt
Provides an alternate procedure to the user interface-based setting of classification/clearance and license information so it can be called from scripts. This utility supports the following authorized data access (ADA) functions:

- `set_classification`
- `set_clearance`
- `newlicense`
- `addlicense`
- `modlicense`
- `adduser`
- `adduser`

For more information about ADA licenses, see the *Authorized Data Access License Guide*.

**SYNTAX**

```bash
ada_util [-u=user-id -p=password | -pf=filename g=group]
-setclassification
-  -c=classification
-  -item=item [-rev=revision [-ot=object-type -on=object-name]]
-  -type=[itar | ip]
-setclearance
-  -c=clearance-level
-  -uid=user-id
-  -type=[itar | ip]
-newlicense
-  -l=license-id
-  [-d=date]
-  [-reason=reason]
-  [-type=[itar | ip | exclude]]
-  [-lock_date=date]
-  [-qualifying_cfr=string]
-  [-category=string]
-  [-citizenships=citizenship-list]
-addlicense
-  -l=license-id
-  [-ead_paragraph=string]
-  -item=item [-rev=revision [-ot=object-type -on=object-name]]
-modlicense
-  -l=license-id
-  -d=date
-  [-lock_date=date]
-  [-qualifying_cfr=string]
-  [-category=string]
-  [-citizenships=citizenship-list]
-adduser
-  -l=license-id
-  -uid=user
-addgroup
-  -l=license-id
-  -gid=group
```
[-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with IP Admin or ITAR Admin privilege according to the classification/clearance or license type involved in the operation. If this argument is used without a value, the operating system user name is used.

Note: If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-setclassification
Sets a classification for a given workspace object as specified by the -c, -item, -rev, -ot, -on, and -type arguments. This argument cannot be used with the -setclearance argument.

-setclearance
Sets a clearance level for a given user specified by the -c, -uid, and -type arguments. This argument cannot be used with the -setclassification argument.

-newlicense
Creates a license with given ID using the -l and -type argument with the optional -d expiration date, the optional -reason reason, the optional -lock_date lock date, and the optional -qualifying_cfr string. The -qualifying_cfr argument is applicable only to ITAR licenses. The -newlicense argument cannot be used with the -addlicense and -modlicense arguments.
-addlicense
Adds the license identified using the -l argument to the object specified by -item, -rev, -ot, and -on arguments. This argument cannot be used with the -newlicense and -modlicense arguments.

Additionally, qualifying paragraph information can be supplied using the -ead_paragraph argument.

-modlicense
Modifies a license identified using the -l argument to have a new expiration date specified using the -d argument, a new lock date specified using the -lock_date argument, and new qualifying Code of Federal Regulation (CFR) information specified for licenses of ITAR type using the -qualifying_cfr argument. This argument cannot be used with the -newlicense and -addlicense arguments.

-adduser
Adds the user identified using the -uid argument to the license identified by the -l argument.

-addgroup
Adds the group identified using the -gid argument to the license identified by the -l argument.

-c
Specifies a classification or clearance according to context. Use with the -setclassification argument to apply value given in this argument to a given object; use with the -setclearance argument to apply the value to the given user.

-item
Specifies the item to use in finding an object. See the description for the -on argument.

-rev
Specifies the revision within a given item to use in finding an object. See the description for the -on argument.

-ot
Specifies the object type to filter specification attachments of the given item/revision when finding an object. See the description for the -on argument.

-on
Specifies an object to which the various ADA operations apply. The value should be the object name, for example, a dataset name. This argument is required.

This argument also requires the -item, -rev, and -ot arguments to provide a basis for finding the object; first, uniquely identifying the item (-item), second, identifying the specific revision of that item (-rev), and third, filtering objects attached to the item revision based on object type and name (-ot).

- If you specify only the -item argument, the object is the item.
- If you specify the -item and -rev arguments, the object is the revision.
- If you specify the -item, -rev, and -ot arguments, the object is that named with the type on the item revision.
See `setclassification` and `addlicense`.

**-type**
Specifies the license type as itar (International Traffic in Arms Regulations), ip (intellectual property), or exclude (exclude license) to exclude certain users who are not allowed to see the data.

If `-type` is set to itar, the `setclassification` argument applies to `gov_classification` and the `setclearance` argument applies to `gov_clearance`.

If `-type` is set to ip, the `setclassification` argument applies to `ip_classification` and the `setclearance` argument applies to `ip_clearance`.

The default value is ip.

**-uid**
Specifies a user for the `setclearance` and `adduser` operations. This argument should not be confused with the login user argument, `-u`.

**-l**
Specifies a unique license ID for use with the `-newlicense`, `-addlicense`, and `-modlicense` arguments.

**-d**
Specifies a date for use in `-newlicense` and `-modlicense` operations.

The default date format is defined in `timelocal.xml` as `numericday-abbreviatedmonth-numericyear hours:minutes`. hours are in 24-hour format. For example, 11-dec-2006 15:20. The month names and default date format may change with locale.

**-reason**
Specifies a string when using the `-newlicense` argument.

**-lock_date**
Enables authorized users to freeze or unfreeze the license specified by the `-l` argument on the specified date. This argument can only be used with the `-newlicense` or `-modlicense` arguments.

**-qualifying_cfr**
Specifies the information for the In Accordance With attribute (a string of 80 characters) for the ITAR License object identified by the `-l` argument. This argument can only be used in with the `-newlicense` or `-modlicense` arguments.

**-category**
Specifies the category type (a string of 128 bytes) for an ADA license. This argument can only be used with the `-newlicense` or `-modlicense` arguments.

**-citizenships**
Specifies the user citizenships for an ADA license. Each citizenship is a two-letter country code from ISO 3166. Multiple citizenships are separated by a comma delimiter, such as:

```
-citizenships=US,GB
```
-ead_paragraph
Specifies the authorizing paragraph information (a string of 80 characters) recorded on the workspace object specified by -item, -rev, -ot, and -on arguments, while attaching an ITAR_License object identified by the -l argument.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
• To set a classification of secret on the 1234/A UG master dataset attached to the item 1234 revision A:
  ada_util -u=user -p=pass -g=group -setclassification -c=secret -item=1234 -rev=A -ot="UG Master" -on=1234/A -type=ip

• To set an IP clearance level of secret for the user2 user:
  ada_util -u=user -p=pass -g=group -setclearance -c=secret -uid=user2 -type=ip

• To create a new ITAR license license001 with an expiration date of 11 December 2006 at 15:20:
  ada_util -u=user -p=pass -g=group -newlicense -l=license001 -d="11-dec-2006 15:20" -type=itar

• To add user2 user to the license001 license:
  ada_util -u=user -p=pass -g=group -adduser -l=license001 -uid=user2

• To apply the license001 license to the 1234/A dataset attached to item 1234 revision A:
  ada_util -u=user -p=pass -g=group -addlicense -l=license001 -item=1234 -rev=A -ot="UG Master" -on=1234/A

• To apply the license001 license to the 1234/A dataset attached to item 1234 revision A without specifying the -rev,-ot, and -on options:
  ada_util -u=user -p=pass -g=group -addlicense -l=license001 -item=1234

• To create the ITAR_license001 ITAR license with a category of Category A:
  ada_util -u=user -p=password -g=group -newlicense -l=ITAR_license001 -category="Category A"

• To update the ITAR_license001 ITAR license to Category B:
  ada_util -u=user -p=password -g=group -modlicense -l=ITAR_license001 -category="Category B"

• To create a new ITAR_license01 with an allowed citizenship for Great Britain:
  ada_util -u=user -p=password -g=group -newlicense
Chapter 2  Configuration utilities

- l=ITAR_license01 -type=itar -citizenships=GB

- To update user citizenships on the license ITAR_license01 to Great Britain and Japan:

  ada_util -u=user -p=password -g=group -modlicense
  -l=ITAR_license01 -citizenships=GB,JP
install_authorization_rules

Creates system-level administration authorization rules.

**SYNTAX**

```
install_authorization_rules [-u=user-id -p=password | -pf=password-file] [-g=group]
[-function [install | create | add | listaccessors | listapplications | listutilities]
[-name=application-or-utility-name]
[-ruledomain=rule-domain-value]
[-role=role-name]
[-group=group-name]
[-h]
```

**ARGUMENTS**

**-u**
Specifies the user ID.

This is generally *infodba* or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

**-p**
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.

If this argument is not used, the system assumes the *user-ID* value to be the password.

**-pf**
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.

For more information about managing password files, see *Manage password files*.

This argument is mutually exclusive with the **-p** argument.

**-g**
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

**function**
Specifies one of the following functions:

**install**
Installs standard authorization rules for administration applications and utilities.
Chapter 2  Configuration utilities

create
Creates new authorization rules. If you specify this function, you must include values for the **name** and **ruledomain** arguments.

add
Adds a new accessor to an existing authorization rule. If you specify this function, you must include values for the **name**, **ruledomain**, and **group** arguments.

listaccessors
Lists accessors specified by the **name** and **ruledomain** arguments.

listapplications
Lists all application names for which rules are defined in the database.

listutilities
Lists all utility names for which rules are defined in the database.

-name
Specifies the application or utility name. Use this argument with the **create**, **add**, or **listaccessors** functions.

-ruledomain
Specifies the value of the rule domain. Use this argument with the **create**, **add**, or **listaccessors** functions.

-role
Specifies the role name.

-group
Specifies the group name. Use this argument with the **add** function.

-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities.*

FILES
As specified in *Log files produced by Teamcenter.*

RESTRICTIONS
None.

EXAMPLES
- Install the default authorization rules for applications and utilities:
  ```
  install_authorization_rules -u=infodba -p=infodba
  -g=dba -install
  ```
- Create authorization rule for the **APP_1** application:
  ```
  install_authorization_rules -u=infodba -p=infodba
  -g=dba -create -name=APP_1 -ruledomain=application
  ```
- Add the **GRP_1** group as a valid accessor for the **APP_1** application:
  ```
  install_authorization_rules -u=infodba -p=infodba
  -g=dba -add -name=APP_1 -ruledomain=application -group=GRP_1
  ```
- List all the accessors for the **APP_1** application:
install_authorization_rules -u=infodba -p=infodba
-g=dba -listaccessors -name=APP_1 -ruledomain=application

- List all application names for which rules are defined in the database:
  
  install_authorization_rules -u=infodba -p=infodba
  -listapplications

- List all utility names for which rules are defined in the database:
  
  install_authorization_rules -u=infodba -p=infodba
  -listutilities
install_callback

Registers the callbacks and persists them in the database.

SYNTAX

utility_name -u=user-ID [-p=password | -pf=password-file] [-g=group]
[-mode=[install | create | modify | delete | list]]
-type=
-library=
-function=
-name= [-h]

ARGUMENTS

-u
Specifies the user ID. The user must have administrative privileges.
If this argument is used without a value, the operating system user name is used.

[Note] If your Teamcenter server uses Security Services single sign-on, see Before you begin for additional information.

-p
Specifies the user's password.
If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

-mode
Specifies the callback mode.

- install
  Specifies the install mode.

- create
  Specifies the create mode.
  If running in this mode, specify -type, -library, -function, or -name.

- modify
  Specifies the modify mode.
If running in this mode, specify **-type**, **-library**, **-function**, or **-name**.

- **delete**
  Specifies the delete mode.
  If running in this mode, specify **-type** or **-name**.

- **list**
  Specifies the list mode.

  **-type**
  Specifies the type for the **create**, **modify**, or **delete** mode.

  **-library**
  Specifies the library for the **create** or **modify** mode.

  **-function**
  Specifies the function for the **create** or **modify** mode.

  **-name**
  Specifies the name for the **create**, **modify**, or **delete** mode.

  **-h**
  Displays help for this utility.
install_vminfo_acl

Creates access control list (ACL) rules for migration of the existing Teamcenter volume files. The Volume Management application introduces changes to the Access Manager (AM) rule tree. This utility verifies whether the AM rule tree contains the required rules (HSM_Info and VM_Info). If not, the rules are added to inherit the access privileges of the named ACL POM Open Access in par with the ImanFile object and saves the changes.

This utility runs automatically at install. Typically, there is no need for administrators to run the utility again. In cases where an administrator has overwritten the rule tree with custom rules, this utility can be run to ensure the required rules are added to the rule tree.

**SYNTAX**

```
install_vminfo_acl  [-u=user-id  [-p=password | -pf=password-file]
                    [-g=group]  [-v]  [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see Manage password files.

  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.

- **-v**
  Verbose mode. Provides information about results and progress.
-h
Displays help for this utility.

ENVIRONMENT

- The generic command window set with all Teamcenter-related environments.
- As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
This utility is intended only for system-level users.

RETURN VALUES

| Return value upon success | 0 |
| Return value upon failure | 1 |

EXAMPLES

`install_vminfo -u=infodba -p=infodba -g=dba -v`

Business Modeler IDE
Generates a common template between two or more sites and generates site-specific templates for each site. Use this utility when you have multiple sites containing custom data model. Previously, you had to manually analyze the site templates generated at each site to create a common template. This utility eliminates the manual work to create a template that contains custom data model common to all sites.

Place template files in the following directory structure:

```

<table>
<thead>
<tr>
<th>dir</th>
<th>Path of the directory given to the utility</th>
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<tbody>
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<td>sites</td>
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</tr>
</tbody>
</table>
```

**Directory structure required by the bmide_commontemplategenerator utility**

Obtain the files to place into the directories from the packaged `template-name_template.zip` files. The `sites` directory contains the templates from the different sites, the `templates` directory contains the standard templates that the site templates are dependent upon, and the `lang` directories contain the localization files used by the templates.

**SYNTAX**

```
bmide_commontemplategenerator
   -dir=site-templates-directory
   -name=common-template-name
   -displayname=common-template-display-name
   -outputdir=output-directory
   [-h]
```
ARGUMENTS

-dir
Specifies the path of the directory where sites and templates folders are located. The directory should contain a sites subdirectory that contains all the site templates and dependency files and a templates subdirectory that contains all the dependant templates. The sites and templates directories should contain a lang subdirectory containing locale files.

-name
Specifies the name of the common template to be generated.

-displayname
Specifies the display name of the common template to be generated.

-outputdir
Specifies the path of the directory where the generated files are to be placed.

-h
Displays help for this utility.

ENVIRONMENT

As specified in the *Manually configuring your environment for Teamcenter utilities*.

FILES

As specified in the *Log files produced by Teamcenter*.

RESTRICTIONS

This utility has a requirement that a minimum of 1500 MB memory must be allocated to the Java heap space. Before running the utility, set the following environment variable:

```
set BMIDE_SCRIPT_ARGS=-Xmx1500M
```

For more information about the BMIDE_SCRIPT_ARGS environment variable, see the *Preferences and Environment Variables Reference*.

EXAMPLES

```
bmide_commontemplategenerator -dir=c:\templates\temp
-name=commontemplate -displayname="Common Template"
-outputdir=c:\templates\temp\output
```
bmide_comparator

Compares two complete Teamcenter model files and generates a differences file. This utility must be run with either the -schema or -all argument.

**SYNTAX**

```
bmide_comparator -compare=[schema | all] -old=old-model-file-path
-new=new-model-file-path -delta=differences-file-path
[-log=log-file-path] [-h]
```

**ARGUMENTS**

- **-compare=[schema | all]**
  Compare data model. You must specify one of these options:
  - **schema**
    Compares only classes.
  - **all**
    Compares all elements.

- **-old**
  Specifies the file path and name of the file containing the old Teamcenter model.

- **-new**
  Specifies the file path and name of the file containing the new Teamcenter model.

- **-delta**
  Specifies the file path and name of the file into which data model differences will be written.

- **-log**
  Specifies file path and name of the log file that contains the results of this execution. This argument is optional.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in the *Manually configuring your environment for Teamcenter utilities.*

**FILES**

As specified in the *Log files produced by Teamcenter.*

**RESTRICTIONS**

None.

**EXAMPLES**

None.
bmide_consolidator

Consolidates all templates listed in the master file into a single file.

SYNTAX

```
bmide_consolidator -dir=master-file-directory -file=path-for-consolidated-file
-consolidate=[all | template | locale]
-forceconsolidate
[-version=version]
[-h]
```

ARGUMENTS

- **-consolidate**
  - **all**
    - Consolidates the template and its localization files.
  - **template**
    - Consolidates templates.
  - **locale**
    - Consolidates template localization files.

- **-dir**
  - Specifies the directory path and name of the directory containing the `master.xml` file and the list of template files to be consolidated.

- **-file**
  - Specifies the file path and name of the file which will contain the consolidated Teamcenter model.

- **-forceconsolidate**
  - Indicates that localization files must be consolidated irrespective of what is included in the `master.xml` file.

- **-version**
  - Specifies version for the consolidated file. This argument is optional.

- **-h**
  - Displays help for this utility.

ENVIRONMENT

As specified in *Manually configuring your environment for Teamcenter utilities*.

RESTRICTIONS

None.

EXAMPLES

None.
Prevents simultaneous deployments to a database from any source, including Teamcenter Environment Manager (TEM) and the Business Modeler IDE. Only administrative users are allowed to run this utility.

**SYNTAX**

```
bmide_deployment_lock -u=user-id [-p=password | -pf=password-file] [-g=group]
-lock | -release | -query
[-log=path]
[-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user’s password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the _user-ID_ value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. The file must be a single-line ASCII file containing the password in clear text. Teamcenter Environment Manager prompts you for a password and creates the password file during installation.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the _user-ID_ value to be the password.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-lock**
  Sets the deployment lock. If one already exists, the utility returns an error indicating a deployment is in process. If one does not exist, the utility sets the deployment lock and returns success.

- **-release**
  Releases the deployment lock. If one already exists, the utility removes the deployment lock and returns success. If one does not exist, the utility returns success.
-**query**
Queries for the deployment lock. If one already exists, a `-1` is returned. If one does not exist, the utility returns success.

-**log**
Specifies the full path to the log file containing utility execution results.

-**h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.
bmide_generatecode

Autogenerates C/C++ code for business objects and property operations from the Business Modeler IDE.

SYNTAX

bmide_generatecode
-templateProj=source-template-project-input-location
-templateDeps=dependent-templates-input-location
-srcDir=skeleton-implementation-classes-output-location
-gensrcDir= autogenerated-classes-output-location
-makefileDir=root-makefile-output-location
-serviceLibs=[all | service-libraries]
-log=log-output-file
[-h]

ARGUMENTS

-templateProj
Specifies the file path and name of the input location of the source template project.

-templateDeps
Specifies the file path and name of the input location of the dependent templates.

-srcDir
Specifies the file path and name of the output location of the skeleton implementation classes. This argument is optional.

-gensrcDir
Specifies the file path and name of the output location for autogenerated classes.

-makefileDir
Specifies the root file path of the output location for generated makefiles.

-serviceLibs
Generates code for all custom service libraries defined in the specified Business Modeler IDE project. Specify a comma-delimited list of service library names or all, for example, -serviceLibs=all.

Before running this utility with the -serviceLibs argument, you must do the following:

1. Set the JDK_HOME environment variable to point to the installed JDK location.

2. Add the JDK_HOME\bin directory to the path variable.

3. In the Business Modeler IDE project, ensure that the SoaExternalBuild.SoaClientKitLocation value in the ProjectInfo.xml file is set to the location of the soa_client folder. This corresponds to the value in the Teamcenter Services client kit home box in the Build Configuration dialog box for the project. To access this dialog box, in the Navigator view, right-click the project and choose Properties, and in the left pane, choose Teamcenter→Build configuration.
-log
Specifies file path and name of the log file that contains the results of this execution. This argument is optional.

-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.

EXAMPLES
```
bmide_generatecode
   -templateProj=D:\udu\meta_dev10\custom1
   -templateDeps=D:\udu\meta_dev10\templates
   -srcDir=D:\udu\meta_dev10\custom1\src\server
   -gensrcDir=D:\udu\meta_dev10\custom1\output\server\gensrc
   -makefileDir=D:\udu\meta_dev10\wnti32\drv\core
   -log=D:\udu\meta_dev10\CodeGenUtil.log
```
bmide_generate_compare_report

Reports the differences between two sets of data models. For example, you can compare two Teamcenter database sites to determine if the data model is the same in both sites. The report generated by this utility shows the differences. You must provide two consolidated data model sources as input to generate the report. (You cannot provide other source for input.)

You can also generate this report using the Business Modeler IDE.

For more information, see the Business Modeler IDE Guide.

SYNTAX

bmide_generate_compare_report
-file=consolidated-model-file
-comparefile=consolidated-model-file-to-compare
-reportfile=generated-report-file
-showequal=[true | false]
-log=log-file
[-h]

ARGUMENTS

-file
Specifies the initial consolidated model file used to generate the report. A consolidated model file can be obtained by running the business_model_extractor utility to extract all the elements or by getting the model.xml file from the TC_DATA\model directory of a Teamcenter database site.

-comparefile
Specifies the consolidated model file to be compared to the initial file specified in the -file argument.

-reportfile
Specifies the file where the report is generated.

-showequal
Defines whether equal values from both data models are shown in the generated report. The valid values are true or false. The default value is false. If the value is true, the equal attributes are shown in the generated report.

-log
Specifies the path of the log file containing results of the execution.

-h
Displays help for this utility.

ENVIRONMENT

As specified in Manually configuring your environment for Teamcenter utilities.

FILES

As specified in Log files produced by Teamcenter.

RESTRICTIONS

None.
bmide_generate_condition_report

Reports the details of a condition and all model elements that use it in a set of data model. Conditions are attached to various business rules, LOVS, and so on to define the behavior of Teamcenter. The generated report is a single HTML page showing the model elements that refer to the condition. To generate this report, you must provide a condition name and a consolidated model file for the data model source.

You can also generate this report using the Business Modeler IDE.

For more information, see the Business Modeler IDE Guide.

SYNTAX

bmide_generate_condition_report
- file=consolidated-model-file
- condition=condition-name
- reportfile=generated-report-file
- log=logfile
[-h]

ARGUMENTS

-file
Specifies the consolidated model file used to generate the report. A consolidated model file can be obtained by running the business_model_extractor utility to extract all the elements or by getting the model.xml file from the TC_DATA\model directory of a Teamcenter database site.

-condition
Specifies the condition name for which the report is to be generated.

-reportfile
Specifies the file where the report is generated.

-log
Specifies the path of the log file containing results of the execution.

-h
Displays help for this utility.

ENVIRONMENT

As specified in Manually configuring your environment for Teamcenter utilities.

FILES

As specified in Log files produced by Teamcenter.

RESTRICTIONS

None.
bmide_generate_datamodel_doc_report

Generates an HTML data model report of business objects, business rules, and LOVs of the current Teamcenter version. The data model for the report is built using the Business Modeler IDE templates found in the target templates directory specified by the user (for example, TC_ROOT/bmide/templates).

You can also generate this report using the Business Modeler IDE.

For more information, see the Business Modeler IDE Guide.

The data model report consists of the following sections:

- **Overview**
  Provides an overview of the data model report.

- **Template Data Model**
  Provides a list of the template names that contribute to the report.

- **What’s New**
  Provides a list of what has changed in the data model since a previous version.

- **Glossary**
  Provides a glossary of all the data model elements managed by the Business Modeler IDE.

- **Deprecated**
  Provides a list of all libraries and operations that are deprecated.

**SYNTAX**

```
bmide_generate_datamodel_doc_report
-targetTemplatesDir=target-file-path-name
[-sourceReleaseVersions={Tc200715 | Tc801 | Tc810 | Tc820 | Tc830 | all}]
-outputDir=directory-for-generated-reports
[-skip=XML-file-excluded-templates]
[-h]
```

**ARGUMENTS**

- **-targetTemplatesDir**
  Specifies the full path to the directory containing all templates from the target version for which the data model report must be generated, such as TC_DATA/model or TC_ROOT/bmide/templates.

- **-sourceReleaseVersions**
  Specifies a comma-separated list of Teamcenter versions to generate a comparison, for example, `-sourceReleaseVersions=Tc820,Tc830`.

  To generate a report for all versions, specify `-sourceReleaseVersions=all`.

- **-outputDir**
  Specifies the full path to the directory where the reports must be generated.
-skip
Specifies a list of templates in the target templates directory to skip during processing. This argument should specify the full path to the XML file that has the list of templates. Following is an example of the XML file format:

```xml
<?xml version="1.0" encoding="UTF-8" standalone="no">
<TcBusinessdataIncludes>
  <exclude file="hrn_template.xml"/>
  <exclude file="erp_template.xml"/>
</TcBusinessdataIncludes>
```

-h
Displays help for this utility.

RESTRICTIONS
Following are the limitations of this utility:

- This report only generates business objects and classes that are under the Item, ItemRevision, Form, Dataset, and Folder business objects or classes. This report also generates classes that are the form storage classes of any item master form or item revision master form business object. All other classes and business objects are not shown as they are considered internal to the product. Therefore, if you supply your own template in the target directory, only the business objects and classes that fall into these categories are shown in the report.

- The reporting tool contains a record of all Teamcenter templates that are included with Teamcenter for each prior version. Therefore, when generating the What's New section, the report is able to accurately generate a comparison of all elements in a target version against a designated former source version. This results in the What's New comparison displaying new, changed, and removed for each element. Because the reporting tool does not include a record of any other templates, including third-party and customer templates, the report automatically lists all elements from these templates as new in the What's New section. Disregard the new status because it does not reflect whether the element was really new, changed, or removed.

EXAMPLES
- To generate an HTML data model report, enter a command like the following on a single line:

  ```
bmide_generate_datamodel_doc_report
  -targetTemplatesDir=C:\Siemens\config1\tcdata\model
  -sourceReleaseVersions=all -outputDir=C:\datamodelreports\tc9.0
  -skip=C:\skiplist.xml
  ```

- To generate the What's New section of the report, choose one or more source versions to compare with the current version, as shown in the following examples:

  1. To generate a report that compares the data model found in Teamcenter 8.1, use the following command:

     ```
bmide_generate_datamodel_doc_report
  -targetTemplatesDir=C:\Siemens\config1\tcdata\model
  -sourceReleaseVersions=Tc810 -outputDir=C:\datamodelreports\tc9.0
  ```

  2. To generate a report that compares Teamcenter 8.1 and Teamcenter 8.2, use the following command:

     ```
bmide_generate_datamodel_doc_report
  -targetTemplatesDir=C:\Siemens\config1\tcdata\model
  ```
Chapter 2  Configuration utilities

To generate a report that compares all available versions, use the following command:

```
bmide_generate_datamodel_doc_report
 -targetTemplatesDir=C:\Siemens\config1\tcdata\model
 -sourceReleaseVersions=all
 -outputDir=C:\datamodelreports\tc9.0
```

- To skip templates during generation, provide a list of templates in a file. For example, to skip the `hrn_template` and `erp_template` templates, use the following `skiplist.xml` file:

  ```xml
  <?xml version="1.0" encoding="UTF-8" standalone="no"?>
  <TcBusinessDataIncludes>
  <exclude file="hrn_template.xml"/>
  <exclude file="erp_template.xml"/>
  </TcBusinessDataIncludes>
  ```

To use the `skiplist.xml` file, run the following command:

```
bmide_generate_datamodel_doc_report
 -targetTemplatesDir=C:\Siemens\config1\tcdata\model
 -sourceReleaseVersions=all
 -outputDir=C:\datamodelreports\tc9.0
 -skip=C:\skiplist.xml
```

If a template is skipped, all the templates dependent on it are also be skipped. For example, if `template2` is dependent on `template1`, and `template1` is specified in the skip list file, `template1` and `template2` are both be skipped in the generation of the report.
bmide_generate_datamodel_report

Reports the details of a given category of model elements.

Business Modeler IDE users can define a number of model elements and store them in a Business Modeler IDE template. These templates can be deployed to any Teamcenter database. At times a Business Modeler IDE user may be interested in generating a report of all LOVS or GRM rules in the system, or a report that shows a combination of multiple model element categories such as all deep copy rules and all naming rules. A user can use the Business Modeler IDE client to examine all of this information; however, this report offers an easier means to examine all elements within a given category by generating this information into a single HTML page. The data model source for the report can be specified only in the form of a consolidated model file. (You cannot provide other source for input.)

You can also generate this report using the Business Modeler IDE.

For more information, see the Business Modeler IDE Guide.

**Note** Not specifying the `-element` argument for the data model report generates a report for all elements. Because all elements are generated into a single file, this report has limitations. As the number of categories and elements within a category grows, so does the resulting file size. In cases where you want to generate a report of multiple categories, try using the `bmide_generate_datamodel_doc_report` utility.

**SYNTAX**
```
bmide_generate_datamodel_report
-file=consolidated-model-file
-element=element-name
-reportfile=generated-report-file
-log=log-file
[-h]
```

**ARGUMENTS**
- **-file**
  Specifies the initial consolidated model file used to generate the report. A consolidated model file can be obtained by running the `business_model_extractor` utility to extract all the elements or by getting the `model.xml` file from the `TC_DATA\model` directory of a Teamcenter database site.

- **-element**
  Specifies the comma-separated element names to include in report.

- **-reportfile**
  Specifies the file where the report is generated.

- **-log**
  Specifies the path of the log file containing results of the execution.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**
As specified in Manually configuring your environment for Teamcenter utilities.
Chapter 2  

Configuration utilities

FILES

As specified in *Log files produced by Teamcenter*.

RESTRICTIONS

This report only generates business objects and classes that are under the **Item, ItemRevision, Form, Dataset, and Folder** business objects or classes. This report also generates classes that are the form storage classes of any item master form or item revision master form business object. All other classes and business objects are not shown as they are considered internal to the product. Therefore, if you supply your own template in the target directory, only the business objects and classes that fall into these categories are shown in the report.

EXAMPLES

- To generate a report of all lists of values (LOVs), use the following command:

  ```bash
  bmide_generate_datamodel_report -report=model
  -file=model-file-path -element=lov -reportfile=report-file-path
  ```

- To generate a complete list of element names that are supported as arguments, use the following command:

  ```bash
  bmide_generate_datamodel_report -element -h
  ```
bmode_mange_batch_lovs

Manages the values for LOVs marked as externally managed, whose values are stored solely in the Teamcenter database. Use this utility to update and extract the values for externally managed LOVs and generate a report of these LOVs.

When you use this utility to update externally managed LOVs in the database, submit the LOV values in an XML file and submit the localizations in a separate XML file in a lang subdirectory, as shown in the following example:

![Batch LOV]

If the localizations are in locale-specific files, the files must be named per their locales, as shown in the following example:

![Batch LOV]

You can place either consolidated localization files or individual locale files into the lang directory. A consolidated localization file can contain localizations from all languages and is named file-name_lang.xml. Individual locale files contain localizations for one specific locale, and are named file-name_lang_locale.xml, for example, file-name_en_US.xml, file-name_zh_CN.xml, and so on. You can place either consolidated or locale-specific files in the lang folder, but not both at the same time. If you put both types in the lang folder, the utility does not know which to pick up and throws an error.

**Note** After updating the externally managed LOVs through the utility, if you are using client cache at your site, you must run the `generate_client_meta_cache` utility with the `generate lovs` command to update the LOV cache stored on the server.

For more information about externally managing LOVs, see the *Business Modeler IDE Guide*.

**SYNTAX**

```
```

**ARGUMENTS**

- `-u` Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **p**
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the -pf argument.

- **pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.

- **g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **option**
  Valid values for option are:
  - **update**
    Updates the values for all the externally managed LOVs defined in the input file.
  - **extract**
    Extracts all the externally managed LOVs and their corresponding values into the specified file. The localizations also get extracted and are stored in the lang directory. Use with the -lov argument to specify the externally managed LOVs to be extracted.
  - **report**
    Provides a report of all the externally managed LOVs in the Teamcenter database. Use with the -lov argument to specify the LOVs in the report. The report is generated in the HTML format.

- **lov**
  Use only in conjunction with the -extract or -report arguments. Valid values for option are:
  - **all**
    Extracts or runs a report on all externally managed LOVs.
- **comma-separated-list-of-lov-names**
  Extracts or runs a report only on the listed externally managed LOVs.
  If a list of LOV names is not specified, the **all** argument is assumed by default.

**-file**
Specifies the path to the file containing LOV values (when updating LOV values in the database), the path of file where the extracted LOVs are to be saved (when extracting LOV values from the database), or the file where the generated report needs to be saved (when running a report of LOV values in the database).

**-h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
When you install the Business Modeler IDE, sample files are installed to `TC_ROOT\bmide\client\samples\externallymanagedlovs`. Following are some additional examples:

- To update the LOV values and localizations, enter a command like the following on a single line:

  ```
  bmide_manage_batch_lovs.bat -u=username -p=password -g=dba
  -option=update -file=BatchLOV_LOV1.xml
  ```

  Following is the **BatchLOV_LOV1.xml** file used in the example:

  ```xml
  <TcBusinessData xmlns="http://teamcenter.com/BusinessModel/TcBusinessData"
  batchXSDVersion="1.0" >
  <Change>
  <TcLOV description="Simple Batch LOV" lovType="listOfValuesString"
  name="Ab0LOV" usage="Exhaustive" isManagedExternally="true" >
   <TcLOVValue conditionName="isTrue" description="L1" Desc value="L1"/>
   <TcLOVValue conditionName="isTrue" description="L2" Desc value="L2"/>
   <TcLOVValue conditionName="isTrue" description="L3" Desc value="L3"/>
   <TcLOVValue conditionName="isTrue" description="L4" Desc value="L4"/>
   <TcLOVValue conditionName="isTrue" description="L5" Desc value="L5"/>
   <TcLOVValue conditionName="isTrue" description="L6" Desc value="L6"/>
   <TcLOVValue conditionName="isTrue" description="L7" Desc value="L7"/>
   <TcLOVValue conditionName="isTrue" description="L8" Desc value="L8"/>
   <TcLOVValue conditionName="isTrue" description="L9" Desc value="L9"/>
   <TcLOVValue conditionName="isTrue" description="L10" Desc value="L10"/>
  </TcLOV>
  </Change>
  </TcBusinessData>
  ```

  Following is the **BatchLOV_LOV1_lang.xml** file that supplies the localization for the LOV values in the **BatchLOV_LOV1.xml** file. When you create a localization file, give it the same name as the LOV values file with **_lang** added to the file name, and place it in a **lang** subdirectory.

  ```xml
  <TcBusinessDataLocalization xmlns="http://teamcenter.com/BusinessModel/TcBusinessDataLocalization"
  batchXSDVersion="1.0" >
  <Add>
   <key locale="en_US" id="LOVValue::{:}Ab0LOV::{:}L1">Level 1</key>
   <key locale="en_US" id="LOVValue::{:}Ab0LOV::{:}L2">Level 2</key>
   <key locale="en_US" id="LOVValue::{:}Ab0LOV::{:}L3">Level 3</key>
   <key locale="en_US" id="LOVValue::{:}Ab0LOV::{:}L4">Level 4</key>
  </Add>
  </TcBusinessDataLocalization>
  ```
Chapter 2  Configuration utilities

To add LOV values and sub-LOV attachments to cascading LOVs, enter a command like the following on a single line:

```bash
bmide_manage_batch_lovs.bat -u:username -p:password -g:db
-option:update -file=BatchLOV_ValidCascading.xml
```

**Note** You can add sub-LOV attachments in this way only on externally managed LOVs.

Following is the `BatchLOV_ValidCascading.xml` file used in the example:

```xml
<Add>
  <TcLOVValueSubLOVAttach conditionName="isTrue" subLOVName="ExcelTemplateRules" targetLOVName="SampleCascadingBatchLOV" targetValue="v1"/>
  <TcLOVValueSubLOVAttach conditionName="isTrue" subLOVName="SampleCascadingBatchLOV" targetValue="v2"/>
</Add>
</TcBusinessDataLocalizations>

- To extract all the LOV values, sub-LOV attachments, and localizations from the database, enter a command like the following on a single line:

```bash
bmide_manage_batch_lovs -u:username -p:password -g:db
-option:extract -file=BatchLOV_LOV1_extracted.xml
```

Do this when you want to check the current values on any of the LOVs or to use the extracted file as the basis for the next set of changes if the original source input file is no longer available.

- To extract LOV values, sub-LOV attachments, and localizations for specific LOVs in the database, enter a command like the following on a single line:
bmise_manage_batch_lovs -u=username -p=password -g=dba
-option=extract -lovs=BatchLOV_LOV1,BatchLOV_LOV2
-file=BatchLOV_extracted.xml
bmide_manage_templates

Adds solution templates to the database table.

**SYNTAX**

```
bmide_manage_templates -u=user-id -p=password | pf=password-file [-g=group] -option=option-type -templates=template-names [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-option**
  Specifies whether to add templates to the database or list the existing templates in the database. Valid values are `add` or `list`.

- **-templates**
  Specifies the name of the template to add to the database. Multiple templates can be added by separating the names by a comma.

- **-h**
  Displays help for this utility.
Configuration utilities

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.
Chapter 2  
Configuration utilities

bmide_postupgradetotc.sh/.bat

Extracts the site’s customizations from the database. This utility is executed after upgrading the database to Teamcenter 10.1.

SYNTAX

```
bmide_postupgradetotc.sh -u=user-id  {-p=password | -pf=password-file} [-g=group]  
-sol_name=solution-name -sol_disp_name=display-name -log=log-file [-h]
```

ARGUMENTS

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-sol_name**
  Specifies the name of the solution to be created.

- **-sol_disp_name**
  Specifies the display name of the solution to be created.

- **-log**
  Specifies file path and name of the log file that contains the results of this execution.

- **-h**
  Displays help for this utility.
ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.
Chapter 2  Configuration utilities

bmide_setupknowledgebase

Generates the CLIPS (C Language Integrated Production System) rule file and uploads it to the database. It should only be run after upgrading the database from a pre-Teamcenter 2007 version to Teamcenter 2007 or later version.

SYNTAX


ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-regen
Regenerates the CLIPS file. Values can be true or false.

-log
Specifies file path and name of the log file that contains the results of this execution.

This argument is optional.

-h
Displays help for this utility.
ENVIROMENT

As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES

As specified in *Log files produced by Teamcenter*.

RESTRICTIONS

None.
business_model_extractor

Extracts the data model definitions in the database into a XML file.

SYNTAX

business_model_extractor
[-u=user-id  [-p=password | -pf=password-file] -g=group]
-outfile=output-file
-mode=[all | schema | localization]
-log=log-file
-stats
[-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-outfile
Specifies file path and name of the XML file to be created with business data.

-mode
Specifies the extraction mode:
  • all
Extracts the entire model. This is the default mode.

- **schema**
  Extracts the classes and attributes.

- **localization**
  Extracts all localizations in the localization's format.

**-log**
Specifies file path and name of the log file that contains the results of this execution.

**-h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
To extract the entire datamodel in the database and output to the **db_extract.xml** file:

```
  business_model_extractor -u=infodba -p=infodba -g=dba -mode=all
  -outfile=c:\temp\db_extract.xml
```
Chapter 2  
Configuration utilities

business_model_updater

Deploys tcschema, types, and business rules.

**Note**  
Database statistics must be updated following any business_model_updater actions that cause indexes to be created or updated. Without updated statistics, the indexes are not utilized correctly by the database. For example:

```sql
exec dbms_stats.gather_schema_stats
(oownername=>'INFODBA',estimate_percent=>100,method_opt=>'FOR
ALL COLUMNS SIZE 1',degree=>8,cascade=>true,no_invalidate=>FALSE);
```

For information about updating database statistics, see the *Site Consolidation Guide*.

**SYNTAX**

```bash
business_model_updater [-u=user-id  [-p=password]  |
-mode=[install | upgrade]
-update=[ all | non_schema | schema | main_types | types | rules |
   bmf_rules_skip_missing_types | bmf_rules | lovs | lov_attaches |
   non_schema_ignore_lov_attach | convert_to_primary]
-process=[add | delete | change | all]
-file=XML-file-path-name
-log=log-file-path-name
[-mergedatasettype] [-h]
```

**ARGUMENTS**

- **-u**  
  Specifies the user ID.

  This is generally *infodba* or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  
  If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**  
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

  If this argument is not used, the system assumes the *user-ID* value to be the password.

- **-pf**  
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.
For more information about managing password files, see *Manage password files.*

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-mode
Specifies the update method:

install
Specifies the update is for an installation of a new database.

upgrade
Specifies the update is for upgrading from one version to another version.

-update
Specifies which Business Modeler IDE object to update.

If you specify **non_schema_ignore_lov_attach**, the utility skips **TcLOVAttach** objects and processes all other **non_schema** objects.

-process
Specifies which Business Modeler IDE process to update.

-file
Specifies the path name to the XML file generated by Business Modeler IDE. The file contains Business Modeler IDE object definition data such as **Class**, **Type**, and **LOV** attachments.

-log
Specifies the path name to the log file.

-mergedatasettype
Specifies that dataset type definitions must be merged with existing dataset type definitions.

-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.
change_datasets

Modifies the dataset reference name and the associated tool. This utility is run when resolving dataset type name collisions.

For more information, see the Business Modeler IDE Guide.

**SYNTAX**

```
change_datasets [\-u=user-id [\-p=password | \-pf=password-file] \-g=group]
\-ds_info=change-dataset-information-xml-file-location
\-keep_definition
\-dry
\-bulk
[\-h]
```

**ARGUMENTS**

\-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

\-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the \-pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

\-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the \-p argument.

\-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

\-ds_info
Specifies the full path to the ChangeDatasetInfo.xml file generated by the utility.

\-keep_definition
Specifies to keep the original tool and reference definition.
-dry
Logs information about modifications. No actual modifications are done with this argument. This is an optional argument.

-bulk
Runs a bulk update. This is an optional argument.

-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.
clips_dataset_upload

Stores both the ASCII (text) version and binary version of the CLIPS knowledge base files into the CLIPS (singleton) dataset in Teamcenter. This utility is called during Business Modeler IDE deployment activities when changes are identified to condition objects or rules based framework objects (application extension point and application extension rules). Only administrative users are allowed to run this utility.

SYNTAX

`clips_dataset_upload [-u=user-id [-p=password | -pf=password-file] -g=group] -file=path-to-upload-file -log=output-file-for-the-log-file -force_uncheckout=true/false [-h]`

ARGUMENTS

- **u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- **g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **file**
  Specifies the full path to the file specified for upload. Read access must be allowed on the directory.
-log
Specifies file path and name of the log file that contains the results of this execution. This argument is optional.

-force_uncheckout
Cancel checkout of the CLIPS rules dataset and continue processing if set to true. If set to false, return an error if the CLIPS rules dataset is checked out. Values can be true or false.
This is typically used to restore the CLIPS rules dataset if left checked out in error.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.
convert_forms

Allows a user with DBA privileges to convert legacy file-based forms to storage-based forms. You can manage the conversion process, as follows:

1. Determine whether a given form type or all form types to be converted.

2. Define attribute mapping between the file-based and storage-based forms.

3. Control the conversion process by specifying the number of forms to be converted during each run of the utility. Before performing the conversion, you can run the utility to generate an output file containing the UIDs of the file-based forms. This allows you to formulate a plan for performing the conversion by distributing the workload between multiple runs on multiple machines, if necessary.

4. Run the utility in batch mode without user intervention.

5. Restart the process without data corruption in the event that the process is stopped or terminates abnormally.

6. Generate log files listing information about forms that were successfully converted, failed to convert, and which attribute values are dropped or truncated. These files are retained if the process is terminated before completion.

UPGRADING FORMS

Updating file-based forms to storage-based forms involves the following steps:

1. Generate a file containing the list of forms to be converted, by running the convert_forms utility, as follows:

   \[ \text{convert_forms} \]
   \[ -\text{identify} \quad -\text{output} \_\text{file}=\text{file-name} \quad [-\text{type}=\text{type-name}] \]

   This produces an output file containing the UIDs of file-based forms, one per line. The output file must be opened in append mode. This allows multiple lists of form type information to be contained in the same file. If the -type argument is not specified, all file-based forms are included in the output file.

2. Run the utility, as required, from one or multiple machines, as follows:

   \[ \text{convert_forms} \]
   \[ -\text{convert} \quad -\text{process} \_\text{file}=\text{file-name} \quad [-\text{input} \_\text{options}=\text{file-name}] \]

3. If errors occur during the conversion process, the UIDs of the forms that were not converted are listed in the error file. After identifying and correcting the errors, you can use the ErrorFile file as the input file when rerunning the utility to convert the forms.

   The -process_file argument specifies a file containing information that could be specific to each job. The -input_options argument specifies a file that is common to all jobs.
The `-process_file` argument specifies a file containing information related to specific runs of the utility. You can copy the following example, paste it into a text editor, and use it as a starting point for your process options file:

```xml
<?xml version="1.0" encoding="iso-8859-1"?>
<ProcessInfo xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:noNamespaceSchemaLocation="convertFormProcessInfo.xsd">
    <InputFile>C:\temp\form_uids.txt</InputFile>
    <StartLine>1</StartLine>
    <EndLine>100000</EndLine>
    <LogFile>C:\temp\log.txt</LogFile>
    <ErrorFile>C:\temp\error.txt</ErrorFile>
    <SuccessFile>C:\temp\success.txt</SuccessFile>
</ProcessInfo>
```

**InputFile**

Specifies either the file generated as output when the utility is run with the `-identify` option or the `ErrorFile` file generated during a conversion run.

**StartLine**

The line number in the `InputFile` that specifies the beginning of the block of forms to be converted. If the line number is not specified, the default value is 1.

**EndLine**

The line number in the `InputFile` file that specifies the end of the block of forms to be converted. If the line number is not specified, the default end line is the end of the file.

**LogFile**

Specifies the name of the file that logs information about dropped or truncated attribute values.

**ErrorFile**

Specifies the name of the file containing the UIDs of forms that were not converted due to errors. Errors encountered during conversion do not stop the process. When the reasons for the failure have been identified and corrected, the `ErrorFile` file can be used as the input file when the utility is rerun to convert those forms.

**SuccessFile**

Contains UIDs of forms that were successfully converted. This file can be useful for multi-site conversions.

All three files, `LogFile`, `ErrorFile`, and `SuccessFile`, are optional. If not specified, the corresponding file is not generated.
Unlike the process options file, which is specific to a particular run of the utility, the file specified by the **input_options** argument contains information that is common to all runs of the utility. The following example illustrates the format of an input options file:

```xml
<FormTypes>
  <Type name=<name>>
    <DropAttrs action=none | all | unmapped | DropList>
      <ImanFileAttr name=<name> log=no | yes />
    </DropAttrs>
    <MapAttr ImanFileAttr=<name> POMAttr=<name> truncate=no | yes | log />
    ................
    <KeepLastModified action=no | yes />
    <DeleteImanFile action=yes | no />
  </Type>
  ................
</FormTypes>
```

All element attributes in the file have default values, indicated in *italics* in the example. If all default values are assumed, the input options file can be omitted.

**Type**

One or more **Type** elements can exist in the mapping file.

Forms to be converted can be of different form types, all of which are listed in the file. If a form has no corresponding **Type** element, all form **ImanFile** attributes are mapped to the corresponding POM storage class attributes with the same names.

**DropAttrs**

Each **DropAttrs** element can contain zero or more **DropList** elements.

**DropAttrs action=none** indicates that no attributes are dropped, **all** indicates that all attributes are dropped and no storage object needs to be created. **unmapped** indicates that all unmapped attributes are dropped. **DropList** indicates that a list is created of attributes that are dropped.

**ImanFileAttr**

To use the **ImanFileAttr** element, the **DropList** action must be used for the **DropAttrs** element.

The **ImanFileAttr** element has a **log** attribute. If the value of this attribute is **yes**, the dropped attribute name and value are written to the log file.
MapAttrs

Each MapAttrs element can contain one or more Map elements. The Map element allows an ImanFile attribute to be mapped to a POM storage class attribute with a different name. If an ImanFile attribute is not included in this list, it is mapped to the storage class attribute with the same name.

The Map element allows you to truncate the string data on conversion. If the truncate attribute value is no an error occurs and the form is not converted. If the value of the truncate attribute is yes, the data is truncated and not logged on the log file, while the log attribute will truncate the data and log it in the log file.

Only primitive attribute types are supported by this utility. Date, typed, and untyped references are not supported.

Do not create empty storage objects. Create an object only if one or more values are copied from the ImanFile properties.

Form attributes are case sensitive.

KeepLastModified

The KeepLastModified element specifies whether the last modified date must be updated to reflect the time of conversion. The default value is to update the last-modified date.

DeleteImanFile

The DeleteImanFile element specifies whether to delete the ImanFile after conversion. The default value is to delete the file.

You can copy the following example, paste it into a text editor, and use it as a starting point for your input options file:

```xml
<?xml version="1.0" encoding="iso-8859-1"?>
<FormTypes xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:noNamespaceSchemaLocation="convertFormInputOptions.xsd">
    <Type name="UGPartAttr">
        <DropAttrs action="DropList">
            <ImanFileAttr name="ASSEMB_NO" log="yes" />
            <ImanFileAttr name="MODEL" log="yes" />
        </DropAttrs>
        <MapAttrs>
            <Map ImanFileAttr="CREATOR" POMAttr="CREATOR" truncate="log" />
        </MapAttrs>
        <KeepLastModified action="no" />
        <DeleteImanFile action="no" />
    </Type>
</FormTypes>
```

SYNTAX

```
convert_forms [-u=user-id [-p=password | -pf=password-file] -g=group]
               -identify -output_file=file-name [-type=form-type] -convert
               -process_file=file-name [-input_options=file-name]
```
ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

[Note] If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-identify
Generates an output file containing the UIDs of file-based forms. This argument is used in conjunction with the -output_file argument.

-output_file
Specifies the name of the output file.

-type
Specifies the type of the forms to be converted. If not specified, all file-based forms are converted.

-convert
Converts file-based forms that are read from a previous run of the utility using the-identify option. The -convert argument is used with the -process_file and -input_options arguments.

-process_file
Specifies the process file containing names of the input file, log file, error file, and success file, as well as the start line number and end line number. For more information about this file, see Process options file.
-input_options
Specifies the name of an input file containing information about how to convert forms. For more information about this file, see Input options file. This argument is optional.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
The convertFormProcessInfo.xsd and convertFormInputOptions.xsd XML schema files are delivered as part of your Teamcenter installation and are located in the imandata directory. You must use these schema files to process the XML files that you generate.

RESTRICTIONS
None.

EXAMPLES
• To output the UIDs of all file-based forms of UGPartAttr type into the C:\temp\form_uids.txt file, enter the following command on a single line:

        convert_forms -u=infodba -p=infodba -g=dba -identify
        -output_file=C:\temp\form_uids.txt -type=UGPartAttr

    The C:\temp\form_uids.txt file is used in the example in Process options file.

• To convert file-based forms, reading in the C:\temp\process_info.txt file containing process information and the C:\temp\options_file.txt containing conversion information, enter the following command on a single line:

        convert_forms -u=infodba -p=infodba -g=dba -convert
        -process_file=C:\temp\process_info.txt
        -input_options=C:\temp\input_options.txt
deploy_archive

Archives deployment files for both Teamcenter Environment Manager (TEM) and the Business Modeler IDE. An administrator can run this utility from the command line in retrieve mode to retrieve the last set of deployment archive files.

This utility is automatically run at deployment to archive files, but you can turn off this functionality by setting the DEPLOY_ARCHIVE_ACTIVE environment variable to false (or off, no, or 0).

The deployment archival process is as follows:

1. A set of extractor and updater utility log files (specified by an input directory) are zipped into an archive file.
2. A set of compare history files associated to the specific deployment are zipped into an archive file.
3. For every deployment, the zipped archive files are uploaded into a new deploy archive dataset (Fnd0BMIDEDeployArchive dataset type).

The deployment archive file retrieval process is as follows:

1. Locate the archive datasets (Fnd0BMIDEDeployArchive dataset type) from the Teamcenter database using the BMIDEDeployArchiveRecovery saved query.
2. A subdirectory using the dataset name with the create date/time stamp is created under a specified target directory.
3. Each named reference (archive zip file) for the archive dataset is exported to that subdirectory.

For more information, see the Business Modeler IDE Guide.

SYNTAX

```
deploy_archive -u=user-id [-p=password | -pf=password-file] [-g=group] 
-action=[deploy | retrieve] 
-dir=source-or-target-file-path 
-deploySource=[tem | bmide] 
-retrieveNum=number-of-archives 
-afterDate=date-and-time 
-log=log-file-path 
-h
```

ARGUMENTS

-`u`
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
If Security Services single sign-on (SSO) is enabled for your server, the \texttt{-u} and \texttt{-p} arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

\textbf{-p}

Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the \texttt{-pf} argument.

If this argument is not used, the system assumes the \textit{user-ID} value to be the password.

\textbf{-pf}

Specifies the password file. The file must be a single-line ASCII file containing the password in clear text. Teamcenter Environment Manager prompts you for a password and creates the password file during installation.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the \texttt{-p} argument.

If this argument is not used, the system assumes the \textit{user-ID} value to be the password.

\textbf{-g}

Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

\textbf{-action}

Creates or retrieves the archive. You must specify one of these options:

- \textbf{deploy}
  
  Collects and creates the deploy archive ZIP files and upload them into a deploy archive dataset. Requires the \texttt{-deploySource} argument to be specified.

- \textbf{retrieve}
  
  Extracts the deploy archive ZIP files from the specified deploy archive datasets. The dataset name is used to create a subdirectory in the OS under the directory name given by the \texttt{-dir} parameter. The named references (archive ZIP files) are exported to that subdirectory.

\textbf{-dir}

Specifies the full path to the source directory (when using the \texttt{-action=deploy} argument) or to the target directory (when using the \texttt{-action=retrieve} argument). The source directory must exist and have read access and contains files to archive for the deploy action. The target directory must exist and have write access and contains subdirectories (by dataset name) that each contain ZIP archive files from the retrieve action.

\textbf{-deploySource}

Identifies the source of the deployment activity when using the \texttt{-action=deploy} argument. (Ignored when the action is \texttt{retrieve}.) The dataset name format is \texttt{deploy_temp | bmide_user-id_date-time-stamp}. Valid values are:
Chapter 2  Configuration utilities

- tem
  Specifies that Teamcenter Environment Manager is the source of the deployment.

- bmide
  Specifies that the Business Modeler IDE is the source of the deployment.

-retrieveNum
Qualifies the number of archive datasets (from latest to earliest) to return from the saved query execution when the -action=retrieve argument is used. (Ignored when the action is deploy.) The default is 3. If not specified, 3 datasets are retrieved. If 0 is set, then all datasets are retrieved. The actual number of datasets exported can be different than this value based on the total number of deploy archive datasets.

-afterDate
Specifies the time after which to collect archive log files when using the -action=deploy argument. (Ignored when the action is retrieve.) The required format is yyyy-mm-dd hh:mm:ss.

-log
Specifies file path and name of the log file that contains the results of this execution. This argument is optional.

-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.
execute_rbf_rules

Executes the specified application extension rule. The utility validates the application extension rules are deployed and functioning correctly. Input parameters for the rule execution are specified in a file. Output is written to a specified file or displayed on the console. Execution details are written to a specified log file or displayed on the console.

DESCRIPTION
SYNTAX

execute_rbf_rules -u=user-id [-p=password | -pf=password-file] [-g=group]
-id=application-extension-point-id -inputfile=input-file-name
[-outputfile=output-file-name] [-log=log-file-name] [-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-id
Specifies the ID of the application extension point.

-inputfile
Specifies the location of the input file. The input file format is:
Column Name | Datatype | Value
There is one line for each input parameter.

Datatype is one of the following:

- String
- Integer
- Double
- Float
- Boolean
- Date
- Tag

See Examples for an example of the input file.

- **-outputfile**

  Specifies the location of the output file. The output file format is the same as the input file format. Datatype for a output parameter is one of the following:

  - String
  - Integer
  - Double
  - Float
  - Boolean
  - Date

- **-log**

  Specifies the location of the log file.

- **-h**

  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

None.

**EXAMPLES**

- The following is an example of the utility:

  ```
  execute_rbf_rules -u=infodba -p=infodba -g=dba
  -id=tcore.pse.icon -inputfile="d:\in1.txt"
  -outputfile="d:\out1.txt" -log="d:\rbf1.log"
  ```

- The following input file example specifies that there are two input columns, **Material** and **Pressure**, with corresponding datatypes of **String** and **Integer**. The value of **Material** is **Steel**; the value of **Pressure** is **10**.

<table>
<thead>
<tr>
<th>Material</th>
<th>String</th>
<th>Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure</td>
<td>Integer</td>
<td>10</td>
</tr>
</tbody>
</table>
getglobalconstantvalue

Returns the value of a particular global constant in the database. The utility provides help in troubleshooting issues on the server once the global constants are deployed. The utility accepts the name of a global constant and outputs the value of the constant, if present.

**SYNTAX**

```
getglobalconstantvalue [-u=user-id | -p=password | -pf=password-file] -g=group] -constantname=global-constant-name [-v=on | off] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally *infodba* or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  ![Note](image) If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  If this argument is not used, the system assumes the *user-ID* value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-constantname**
  Specifies the name of the global constant.

- **-v**
  Specifies verbose mode. Specify *on* to display a detailed message. Specify *off* to display only the value. Default value is *on*.

- **-h**
  Displays help for this utility.
Chapter 2  Configuration utilities

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.

EXAMPLES
Entering the following command:

```
globalconstantvalue -u=infodba -p=infodba -g=dba -constantname=SampleConstant
```

returns the following:

```
Value of the global constant SampleConstant = XYZ
```
get_key_definition

Gets the multifield key definition for a business object type. **Multifield keys** are identifiers assigned to each object to ensure their uniqueness in the database.

At a command prompt, type:

```
get_key_definition -class=business-object-type
```

The results are displayed as:

```
Key Definition for business-object-type is multifieldkey-definition
```

**Note** There are other utilities that you can use to work with keys. Use the **get_key_string** utility to get the multifield key value of an item instance as a string containing property names and values, and use the **mfk_update** utility to update multifield key definitions in the key table in the database.

For more information, see the *Business Modeler IDE Guide*.

**SYNTAX**

```
get_key_definition
-class=business-object-type
[-h]
```

**ARGUMENTS**

- **-class**
   The name of the business object type for which you want to get the multifield key definition.

- **-h**
   Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

None.

**EXAMPLES**

- To get the multifield key definition for a business object type named **T5_MyItem**:

  ```
  get_key_definition -class=T5_MyItem
  ```

  The results are displayed as follows:

  ```
  Key Definition for T5_MyItem is T5_MyItem[item_id,object_type]
  ```
get_key_string

Gets the multifield key value of an item instance as a string containing property names and values. This utility can be run on the Item business object or any of its children. Multifield keys are identifiers assigned to each object to ensure their uniqueness in the database.

If the -item or -key argument input corresponds to more than one item, the key values for each of the items found is displayed. If the -key argument is used, partial keys are allowed. For example, if the key for an item is defined as item_id,prop1,prop2, inputs such as -key=item_id=123456,prop1=abcd are allowed, which may result in multiple items being found and displayed.

To use the -item argument to get key values for an item, use the following command:

```
get_key_string -item=item-ID
```

The results are displayed as:

```
Item Type is business-object-name, Key String is property1=property1-value,property2=property2-value,etc
```

If other properties are added to the multifield key definition for an item business object, they are displayed separated by commas. For example, if the item_id and object_type properties comprise the multifield key for a custom item business object named T5_MyItem, the output of the command is:

```
Item Type is T5_MyItem, Key String is item_id=000016,object_type=T5_MyItem
```

To use the -key argument to get the business object type for an item, use the following command:

```
get_key_string -key=property=property-value
```

The results are displayed as:

```
Item Type is business-object-name, Key String is property=property-value
```

**Note**

- There are other utilities that you can use to work with keys. Use the get_key_definition utility to get the key definition for a business object type, and use the mfk_update utility to update multifield key definitions in the key table in the database.

- To change the delimiters used in the input for the get_key_string utility, create the TC_KEY_STRING_DELIMITER_VALUES preference.

For more information, see the Preferences and Environment Variables Reference.

For more information, see the Business Modeler IDE Guide.

**SYNTAX**

```
get_key_string
    -item=business-object-item-ID
    -key=key-string
    [-h]
```
ARGUMENTS

- **item**
  Specifies the ID of items for which key values are to be displayed.

- **key**
  Specifies the key value of items for which item types are to be displayed.

- **h**
  Displays help for this utility.

ENVIRONMENT

As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES

As specified in *Log files produced by Teamcenter*.

RESTRICTIONS

None.

EXAMPLES

- To get the values of the multifield key properties on an **Item** business object instance whose item ID is **000016**:

  ```
  get_key_string -item=000016
  ```

  The results are displayed as follows:

  ```
  Item Type is Item, Key String is item_id=000016,object_type=Item
  ```

- To get the values of the multifield key properties on an instance of a custom item business object (**T5_MyItem**) whose item ID is **000019**:

  ```
  get_key_string -item=000019
  ```

  The results are displayed as follows:

  ```
  Item Type is T5_MyItem, Key String is item_id=000019,object_type=T5_MyItem
  ```

- To get the item type of an instance whose key is **item_id=000016**:

  ```
  get_key_string -key=item_id=000016
  ```

  The results are displayed as follows:

  ```
  Item Type is Item, Key String is item_id=000016
  ```
getpropertyconstantvalue

Returns the value of a property constant on a particular business object and property in the database. The utility provides help in troubleshooting issues on the server once the property constants are deployed to the database. The utility also applies the inheritance and scope of the property constants while fetching the value. Therefore, it removes the burden of manually analyzing the extracted model to troubleshoot a property constants value on a given business object and property. The utility accepts the name of a property constant, business object and property and outputs the value of the constant, if present.

SYNTAX

getpropertyconstantvalue [-u=user-id | -p=password | -pf=password-file] [-g=group] -constantname=constant-property-name -typename=type-object-name -propertyname=property-name [-v=on | off] [-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-constantname
Specifies the constant property name.
-typename
Specifies the name of the business object.

-propertyname
Specifies the name of a property on the business object specified by the -typename argument.

-v
Specifies verbose mode. Specify on to display a detailed message. Specify off to display only the value. Default value is on.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
Entering the following command:

    propertyconstantvalue -u=infodba -p=infodba -g=dba
                  -constantname=Visible -typename=Item -property=item_id

returns the following:

    Value of the property constant Visible on Item.item_id = true
Returns the value of type constant, that is, a business object constant, on a particular business object in the database. The utility provides help in troubleshooting issues on the server once the type constants are deployed to the database. The utility also applies the inheritance and scope of the type constant while fetching the value. Therefore, it removes the burden of manually analyzing the extracted model to troubleshoot a type constants value on a given business object. The utility accepts the name of a type constant and business object and outputs the value of the constant, if present.

SYNTAX

```
gettypeconstantvalue [-u=user-id [-p=password | -pf=password-file] -g=group] 
           -constantname=type-constant-name -typename=type-name [-v= on | off] [-h]
```

ARGUMENTS

- **-u**
  Specifies the user ID.

  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.

  If this argument is not used, the system assumes the **user-ID** value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.

  For more information about managing password files, see **Manage password files**.

  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.

- **-constantname**
  Specifies the name of the type constant.

- **-typename**
  Specifies the name of the business object.
-v
Specifies verbose mode. Specify on to display a detailed message. Specify off to display only the value. Default value is on.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
Entering the following command:

```
gettypeconstantvalue -u=infodba -p=infodba -g=dba
-constantname=SampleConstant -typename=WorkspaceObject
```

returns the following:

```
Value of the type constant SampleConstant on type
WorkspaceObject = QWERTY
```
manage_icon_files

Manages uploading icon files to the database. Icons are images placed on business object instances to identify them in the user interface.

When templates are deployed to a server from the Business Modeler IDE or installed using Teamcenter Environment Manager, the template’s zipped icon files are placed into the TC_DATA/model/icons (TC_DATA_MODEL) directory. At deployment or installation time, the manage_icon_files utility is used internally by Teamcenter to upload the icons into Fnd0IconResource dataset instances in the database. To search for these datasets using the rich client, search for the Icon Resource Dataset type.

For more information, see the Business Modeler IDE Guide.

**Warning** This utility is used internally only. Do not run this utility yourself.

**SYNTAX**

```
manage_icon_files -u=user-id [-p=password | -pf=password-file] [-g=group] [-option=upload] [-template=template-name] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user's password.

  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see Manage password files.

  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

- **option=upload**
  Uploads all icon files from the `TC_DATA_MODEL/icons` directory to datasets for the templates specified in the -template argument.

- **template**
  Specifies the templates to upload. Multiple template are specified in a comma-separated list, for example, `foundation,tcae`.

- **h**
  Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
```
manage_icon_files -u=infodba -p=administrator-password -g=dba
-option=upload -template=bmideproject
```
manage_model_files

Manages upload and download of files in the TC_DATA_MODEL directory into Fnd0BMIDEResource datasets. These Business Modeler IDE datasets are stored in the database in a Fnd0BMIDEResource folder. You can query for this folder in the rich client for quick reference to the Business Modeler IDE resource files that are maintained in the database. You can use these files to restore your Business Modeler IDE environment.

For more information, see the Business Modeler IDE Guide.

**SYNTAX**

```plaintext
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  - **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-option**
  Valid values for option are:
  - list
Lists the version of all templates, language, and model files in the utility output by querying the versions from the datasets.

- **upload**
  Uploads all template-related files from the `TC_DATA_MODEL` directory to datasets. If `-template` is specified, files specific to the given template are uploaded from the `TC_DATA_MODEL` directory to datasets.

- **download**
  Downloads all template-related files from datasets to the `TC_DATA_MODEL` directory. If `-template` is specified, files specific to the given template are downloaded from datasets to the `TC_DATA_MODEL` directory. If `-dir` is specified, files are downloaded to the given directory instead of the `TC_DATA_MODEL` directory.

- **-dir**
  Absolute directory path where templates should be downloaded. This can be used only with the `-option=download` option.

- **-template**
  List of comma-separated template file names, for example, `foundation,tcae`.

- **-release**
  Teamcenter version, for example, `tc9000.1.0`. If the `-release` argument is specified, the template project backups for that release are retrieved. This argument can be used with only the `-resource=project` argument.

- **-resource=project**
  Downloads the template project backup to the directory specified by the `-dir` argument. The `-dir`, `-release`, and `-template` arguments must be used in conjunction with the `-resource=project` argument.

- **-syncToDb**
  Runs the extractor and uploads the extracted model file into the database. Run the utility with this option only if the data in the database is modified and the model file in the database is not synchronized.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
- To retrieve the latest backup of the **customer** template project to the local `D:\BackupDownloadDir` directory:

  ```
  manage_model_files -u=username -p=password -g=dba
  -option=download -template=customer -dir=D:\BackupDownloadDir
  -resource=project -release=tc9000.1.0
  ```
Chapter 2  Configuration utilities

mfk_update

Updates multifield key definitions in the database. Multifield keys are IDs assigned to each object to ensure their uniqueness in the database.

Normally, this utility is run automatically by the system when upgrading to update business object instances on the server to the new multifield key definitions. As an administrator, you can also run this utility manually to evaluate proposed multifield key definitions in a template before installing the template to the production server in order to avoid any potential key collisions during installation. You can also use this utility to analyze the multifield key definitions on the server, and if there are corrupt or inconsistent key definitions, rebuild the key table on the database.

**Note** There are other utilities that you can use to work with keys. Use the `get_key_definition` utility to get the multifield key definition for a business object type, and use the `get_key_string` utility to get the multifield key value of an item instance as a string containing property names and values.

For more information, see the Business Modeler IDE Guide.

**SYNTAX**

```
mfk_update -u=user-id  [-p=password | -pf=password-file] [-g=group]
-check
-file=template-file-path
-rebuild
[-log=log-file-path] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. The file must be a single-line ASCII file containing the password in clear text. Teamcenter Environment Manager prompts you for a password and creates the password file during installation.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -p argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

-check
Runs the utility in analysis mode. When analyzing proposed multifield key definitions, the -file option must specify the file name.

-file
Specify the path of the XML file that contains multifield key definitions to be analyzed. If -file option is not specified, the utility analyzes the multifield key definitions in the system.

-rebuild
Rebuilds all multifield key entries. This argument is mutually exclusive with the -check argument.

-log
Specify the path of the log file that contains results of the multifield key update. The default is the TC_TMP_DIR/mfk_updater_date-and-time.log file. If the TC_TMP_DIR environment variable is not set, the log file is created in the system temporary directory (C:TEMP on Windows or /tmp on UNIX).

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
- To perform an analysis of proposed keys in a custom Business Modeler IDE template:

```
mfk_update -u=infodba -p=infodba -g=dba -check -file=C:\delta.xml
-log=C:\mfk_check_template.log
```

- To perform an analysis of the keys in the database:

```
mfk_update -u=infodba -p=infodba -g=dba -check -log=C:\mfk_check_database.log
```

- To rebuild the key table for all multifield key definitions in the database:

```
mfk_update -u=infodba -p=infodba -g=dba -rebuild -log=C:\mfk_rebuild.log
```
package_live_updates

Packages live update templates stored in the database. Only templates that are enabled for live updates can be packaged using this utility.

For more information, see the Business Modeler IDE Guide.

**SYNTAX**

```
package_live_updates -u=user-id [-p=password | -pf=passwd-file] [-g=group]
-template=template-name [-dir=directory]
[-log=log-file-path] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.
  If this argument is not used, the system assumes the **user-ID** value to be the password.

- **-pf**
  Specifies the password file. The file must be a single-line ASCII file containing the password in clear text. Teamcenter Environment Manager prompts you for a password and creates the password file during installation.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-p** argument.
  If this argument is not used, the system assumes the **user-ID** value to be the password.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-template**
  Specifies the live update template to package.

- **-dir**
  Specifies the full path to the directory where the template package is created. If the **-dir** argument is not provided, the package is created in the
TC_DATA_MODEL directory. The name of the generated package template file is
\texttt{template-name\_template\_extracted\_from\_live\_update\_site-name}.

- \texttt{log}
  Specifies file path and name of the log file that contains the results of this execution.
  This argument is optional.

- \texttt{h}
  Displays help for this utility.

\textbf{ENVIRONMENT}

As specified in \textit{Manually configuring your environment for Teamcenter utilities}.

\textbf{FILES}

As specified in \textit{Log files produced by Teamcenter}.

\textbf{RESTRICTIONS}

None.
**process_action_rules**

Lists or deletes all the existing action rules in the database.

**SYNTAX**

```
process_action_rules [-u=user-id [-p=password | -pf=password-file] -g=group] [-delete | -list] [-h]
```

**ARGUMENTS**

- **-u**

  Specifies the user ID.

  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**

  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.

  If this argument is not used, the system assumes the **user-ID** value to be the password.

- **-pf**

  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.

  For more information about managing password files, see **Manage password files**.

  This argument is mutually exclusive with the **-p** argument.

- **-g**

  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.

- **-delete**

  Deletes all the existing action rules.

- **-list**

  Lists the actions rules configured for a site. This is the default mode if delete is not specified.

- **-h**

  Displays help for this utility.

**ENVIRONMENT**

As specified in **Manually configuring your environment for Teamcenter utilities**.
As specified in *Log files produced by Teamcenter*.  

None.

• To list all action rules in the database:
  
  ```
  process_action_rules -u=infodba -p=infodba -g=dba -list
  ```

• To delete all action rules in the database:
  
  ```
  process_action_rules -u=infodba -p=infodba -g=dba -delete
  ```
Generates a character-mode summary of the POM class hierarchy. The taxonomy summary is provided in one of two formats: brief summary or full summary. The brief summary provides a single-line description of each POM class; the full summary every attribute of every each POM class.

SYNTAX

```
taxonomy [-u=user-id {-p=password | -pf=password-file} -g=group] [-b] [-f=file-name]
```

ARGUMENTS

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  
  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-b**
  Specifies a brief summary. Each line of the summary provides the following information about a POM class: class depth in the schema, object class name, maximum size in bytes, minimum size in bytes, and application name.

- **-f**
  Specifies the name of the output file.
Configuration utilities

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.

EXAMPLES
None.

Localization
find_all_key_value_pairs

Finds all the key/value pairs related to a given installation of Teamcenter. The results are generated in separate text files named language_locale.txt, where language_locale is the Java standardized name for each locale supported by the system. The result files contain the information using the format key:value, where value can span over more than one line.

SYNTAX

```
find_all_key_value_pairs [-u=user-id [-p=password | -pf=password-file] -g=group] -resources_location=path -output_directory=directory [-h]
```

ARGUMENTS

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see Manage password files.

  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user’s default group is assumed.

- **-resources_location**
  Specifies the full path to the directory where the Teamcenter localization is located. This value is provided by the TC_MSG_ROOT environment variable.

- **-output_directory**
  Specifies the directory where the output files are generated.
-h
Displays help for this utility.

ENVIRONMENT
As specified in "Manually configuring your environment for Teamcenter utilities."

FILES
As specified in "Log files produced by Teamcenter."

RESTRICTIONS
None.

EXAMPLES
None.
Marks class attributes as localizable or nonlocalizable. When marking attributes as nonlocalizable, Teamcenter removes the translations of referenced ICO object properties.

**SYNTAX**

```
ics_localize_class_attributes [-u=user-id [-p=password | -pf=password-file] -g=group] -file=file_name -localizable=true|false [-continueOnError] [-h]
```

**ARGUMENTS**

- `-u`
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  [Note] If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- `-p`
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- `-pf`
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the `-p` argument.

- `-g`
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- `-file`
  Specifies a file name in text format. The input file contains the class ID and the attribute ID of the attributes to be marked as localized or nonlocalized. The format of this text file must be as follows:

  ```
  Class ID|AttributeID_1,AttributeID_2, AttributeID_3...
  ```
-**localizable**
If set to **true**, specifies that the class attributes listed in the input file are marked as localizable. If set to **false**, it marks the specified attributes as nonlocalized and removes the translations of referenced ICO object properties.

-**continueOnError**
Specifies that the utility continues processing after encountering an error.

-**h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
```bash
ics_localize_class_attributes -u=infodba -p=infodba -g=infodba
-file=my_class_attributes.txt -localizable=true -continueOnError
```

This example marks all the attributes found in **my_class_attributes.txt** as localizable. **my_class_attributes.txt** must contain the class and attribute IDs of the attributes to be localized. For example, to mark the **Description** (ID -1200 and **Comments** (ID -1210) attributes contained within the **Components** class (ID FIXT02) as localizable, the contents of the **my_class_attributes.txt** file are:

```plaintext
FIXT02|-1200,-1210
```
Exports property values of objects from the database to an XML file for translation purposes. It is also used to import the translated property values from the XML file to the database.

SYNTAX

```bash
l10n_import_export [-u=user-id [-p=password | -pf=password-file] -g=group] [-mode=export | import] -classificationObjectId=class-ID -transferMode=transfer-mode -type=type-name -properties=list-of-property-names -file=file-name -noTransExist -locale=locale-name -master -status=localization-status [-startDate="DD-MMM-YYYY HH:MM" -endDate="DD-MMM-YYYY HH:MM"] [-savedQueryName=saved-query-name -entryCount=entry-count -entryNames=entry-names -entryValues=entry-values] [-h]
```

ARGUMENTS

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.

  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

  For more information about managing password files, see `Manage password files`.

  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.

- **-mode**
  Specifies whether the user is performing an import or export operation. It takes one of the two values, `-import` or `-export`. 
-`transfermode`  
Specifies the name of the transfer mode used to export the objects. This transfer mode specifies the traversal rules, filter rules, and property sets to be used for export. It determines what is exported from the system. If not specified, a default transfer mode is used (TIEUnconfiguredExportDefault).

-`type`  
Specifies the type for which the instances have to be exported from the database:  
- `bdldb0` (view),  
- `icm0` (classification type),  
- `smlb0` (class),  
- `stxt` (key LOV type),  
- `unct_dict` (dictionary attribute).

-`properties`  
Specifies the list of properties (separated by a comma) for which the values must be exported from the database.

-`file`  
Specifies the file name. It acts as an output XML file while exporting objects from the database and acts as an input XML file while importing objects to the database.

-`noTransExist`  
Specifies that no translations exist. This option should only be used with the `-mode=export` option. This option should be used along with the `-locale` option to export objects for a given type that do not have translations for the specified locale.

-`locale`  
Specifies the locale. When this option is used with the `-mode=export` and `-noTransExist` options, it exports all objects for a given type that have no translations for the specified locale. When this option is used with the `-mode=export` and `-master` options, it exports all objects for a given type that have the specified locale as the master locale.

-`master`  
Exports master values to XML file. This option should only be used with the `-mode=export` option.

-`status`  
Specifies the status of the localization. This option is used with the `-mode=export` option to specify the localization status of the property values that must be exported to the XML file for translations. This option is used with the `-mode=import` option to specify the localization status that needs to be set on the property values that are being imported to the database. This option takes one of the following localization statuses:  
- `A` (approved),  
- `P` (pending),  
- `R` (in review),  
- `I` (invalid),  
- `M` (master).

-`startDate`  
Specifies the start date in the date range using format `DD-MMM-YYYY HH:MM`, for example, `28-OCT-2010 12:01`.

-`endDate`  
Specifies the end date in the date range using format `DD-MMM-YYYY HH:MM`, for example, `28-OCT-2010 12:01`.

-`savedQueryName`  
Specifies the saved query name that already exists in the database. This option can be used with the `-mode=export` option to export the specified list of localizable properties on objects returned by the saved query.
-**entryCount**
  Specifies the entry count of an input to the saved query.

-**entryNames**
  Specifies the list of entry names separated by commas.

-**entryValues**
  Specifies the list of entry values separated by commas.

-**classificationObjectId**
  Specifies the ID of the classification object that needs to be exported.

-**h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

None.

**EXAMPLES**

- To search for **Item** objects that have translations so that translations can be done for a new language (for example, Japanese):
  
  ```
  l10n_import_export -mode=export -type=item -locale=ja_JP -notrans -file=abc
  ```

- To find all **Item** objects that were created in the month of January 2010:
  
  ```
  l10n_import_export -mode=export -type=Item -file=abc -startDate=01-01-2010 -endDate=01-31-2010
  ```

- To import the objects in the Japanese localized file to the database and set the status to pending (P):
  
  ```
  l10n_import_export -mode=import -file=xyz_ja_JP.xml -status=P
  ```

- To localize the **object_name** property and description for new items, first create a saved query in the rich client to search for the new items (for example, **findNewItems**) and then export the items using the saved query as an option:
  
  ```
  l10n_import_export -mode=export -savedQueryName=findNewItems -type=Item -properties=object_name,description -file=abc
  ```

- To export **Item** objects where the master locale of the **object_name** property is Japanese:
  
  ```
  l10n_import_export -mode=export -type=Item -properties=object_name -locale=ja_JP -master -file=abc
  ```

  Only one XML file (for the Japanese locale) is created as **output** - abc.jp_JP.xml. All item instances that have the master locale as Japanese for the **object_name** property are included in this file.

- To export **Item** objects where the localization status of the **object_name** property is pending (P):
  
  ```
  l10n_import_export -mode=export -status=P -type=Item -properties=object_name -file=abc
  ```
Only one XML file (for the Japanese locale) is created as output (abc_jp_JP.xml). All the item instances that have the master locale as Japanese for the `object_name` property are included in this file.
**l10n_purge_translations**

Purges the property translations on instances of a given business object. This utility is typically used to clean up the instances of a business object whose property was once marked as localizable with the **Localizable** property constant in the Business Modeler IDE.

For more information, see the *Business Modeler IDE Guide*.

For example, if you add the **Localization** button to a property by setting the **Localizable** property constant to `true`, and then later decide to remove the button by setting the constant to `false`, you must run the **l10n_purge_translations** utility to remove translations that were entered using the **Localization** button on that property. The utility must be executed after the Business Modeler IDE template is deployed.

The **l10n_purge_translations** utility is necessary only if the **Localizable** constant on a property is moved or deleted from one level, but still exists at another level of the hierarchy. For example, if the **Localizable** property constant is set to `false` on a property on a business object, and there are no sub-business objects that need to be set to `true`, then the utility does not need to be executed. The Business Modeler IDE deploy automatically drops all instances of the **Localization** button translations on the changed property.

**SYNTAX**

```
  l10n_purge_translations [-u=user-id | -p=password | -pf=password-file] -g=group]
  [-properties=business-object:property]
  [-file=file-containing-list-of-properties-to-be-purged]
  [-purge_lot_size=number]
  [-log=file-name]
  [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user's password.

  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.

  This argument is mutually exclusive with the **-pf** argument.
-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-properties
Specifies properties to be purged. The format of the property is business-object:property, for example, Item:object_name. Multiple business object/property combinations can be supplied as a comma-separated string.

-file
Specifies the file to read the business-object:property to be purged. Each line must contain a business object/property combination.

-purge_lot_size
Specifies the batch size of instances to be loaded for purging. The default value is 10000.

-log
Specifies the file name to report any failures. The default is the TC_TMP_DIR/l10n_purge_translations_date.log. If the TC_TMP_DIR environment variable is not set, the log file is created in the /tmp or %TEMP% directory.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

Attribute sharing
Configuration utilities

**tc_config_attr_mapping**

Enables an administrative user to create or delete the mapping between Teamcenter properties and external attributes. The utility reads the `attribute_sharing_config.xml` configuration file in the `TC_DATA` directory to create the mapping. If the properties are already mapped to an LOV, the properties are not remapped to the external attributes when the utility is run.

**Note** As of Teamcenter 9.1, this utility is deprecated and the `bmide_manage_batch_lovs` utility should be used instead.

**SYNTAX**

```
tc_config_attr_mapping [-u=user-id [-p=password | -pf=password-file] -g=group] -action=create_mapping | delete_mapping=type-name.property-name] -h
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-create_mapping**
  Reads the configuration file and creates `ExternalAttributes` objects by establishing a connection to the external data source. In addition, the utility creates `MappedProperty` objects using the Teamcenter type property and the external
attributes as well as creating a List of Values (LOV) based on the type of Teamcenter property. The LOV type may be any of the following, based on the value type:

- **ListofValuesExternalStringExtent**
- **ListofValuesExternalIntegerExtent**
- **ListofValuesExternalDoubleExtent**
- **ListofValuesExternalFloatExtent**
- **ListofValuesExternalDateExtent**
- **ListofValuesCharExtent**

The LOV is not populated with any values at this time, the population occurs at runtime when the user requests the values for the LOV. The values are fetched by connecting to the external data source and executing the external query.

**-delete_mapping**

Deletes the mapping between the specified property and the external attribute. To delete specific mappings, specify the type and property names in the following format:

```
type-name.property-name,type-name.property-name...
```

The attached object mapping and saved query are deleted when the mapping is deleted.

**-h**

Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

The configuration file must be prepared and validated using the `xml_validator` utility prior to running the `tc_config_attr_mapping` utility.

**EXAMPLES**

- To display help for this utility, enter the following command on a single line:
  
  `tc_config_attr_mapping -h`

- To create the attribute mapping, enter the following command on a single line:
  
  `tc_config_attr_mapping -u=infodba -p=password -g=dba -action=create_mapping`

- To delete mapping for a specific Teamcenter type property, enter the following command on a single line:
  
  `tc_config_attr_mapping -u=infodba -p=password -g=dba -delete_mapping=type1.property1 type2.property2...`

This command also deletes the associated query. If the LOV that is attached to the property is not referenced by another property in the database, it is deleted when this command is run.
Chapter 2  

Configuration utilities

Organization
Idapsync

Compares data in an LDAP directory server with the user data in the Teamcenter database and adds user and person entries that are missing from the Teamcenter database. If the LDAP information is more recent than the Teamcenter information, the tool synchronizes the Teamcenter definitions with the LDAP data. In addition, if user data in Teamcenter does not have a corresponding entry in the LDAP directory, the Teamcenter user is deactivated.

Preferences must be set to enable this feature. For more information, see the Preferences and Environment Variables Reference.

**SYNTAX**

```
lidapsync [-u=user-id [-p=password | -pf=password-file]
-\=\g=\=\group\] -M=runMode -l=LDAP-password [-t] [-v] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  
  For more information about managing password files, see Manage password files.
  
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  
  If used without a value, the user's default group is assumed.

- **-M**
  Specifies the mode in which to run the `sync` tool.
Chapter 2  Configuration utilities

-1
Specifies the LDAP user password. This value overrides the value of the
LDAP_admin_pw preference.

-t
Specifies trace mode. This value runs the utility in trace mode for debugging or
obtaining extra information.

-v
 Specifies verbose mode.

-h
Displays help for this utility.

RESTRICTIONS
This utility cannot be used to update replicated organization objects, but can be used
to update master organization objects.

EXAMPLES
To update existing user data and add new user entries, enter the following command
on a single line:

$TC_ROOT/bin/ldapsync -u=administrative-user
   -p=administrative-password -g=dba -l=ldap-password
**make_user**

Creates new users, groups, persons, roles, and volumes outside of a Teamcenter session. This utility also allows you to modify properties of existing user, group, and role objects. The `make_user` utility supports batch mode processing using an input file.

The `make_user` utility creates each of the objects specified by the command line arguments. If the minimum arguments are specified, the utility creates a person and an associated user. If the `-group` argument is supplied, a group is created and the user becomes a member of the group. If the `-role` argument is supplied, a role is created and assigned to that user.

**Note** If a user is created without specifying a role, the user assumes the default role of the group to which they belong. Because a single user can have multiple roles, it is possible for a user to be a member of the same group multiple times, once for each role. Therefore, although the `make_user` utility does not require that a role be specified, it is recommended that one be specified, particularly if there is more than one role associated with the group.

In addition, if a user is created without specifying a password, Teamcenter assigns the user ID as the password.

More than one user can be created at a time. All of the users created become members of the specified group. If both the `-volume` and `-group` arguments are supplied, the group will have a default volume or be granted access to the volume. If any of the specified objects already exist, this utility does not attempt to create them.

You can modify an existing group, role, person, or user using command line options. Use the `-update` argument to modify the properties of user, person, group, or role objects. Use the `-rename` argument to rename an existing user, person, group, or role. For a user, the `-rename` argument specifies the user ID; for a person, group and role objects, the `-rename` argument specifies the group name and role name, respectively.

Use the `-description` argument to set or modify the description of the group and/or role. When using the `-description` argument with the `-role` and `-group` arguments, the same description is set for both the group and role.

Use the `-volume` argument to create volumes. Before creating volumes, you must have an FMS server cache (FSC) installed and running, and you must set the `FMS_BootStap_Urls` preference with the FSC host and port information.

Use the `-licenselevel` argument to set the license level when creating a user.

Use the `-datasource` argument to fix an object incorrectly configured as internally or externally managed via LDAP synchronization. Use this argument only to correct incorrect synchronization settings. Set this argument to 0 to reset the object as internally managed. Set this argument to 1 to reset the object as externally managed. Set this argument to 2 to reset the object as remotely managed.

Use the `-citizenships` argument to set the nationalities of a user. You can define multiple nationalities, for example, Great Britain and the United States.
Chapter 2  

Configuration utilities

SYNTAX

make_user [-u=user-id | -p=password | -pf=password-file] -g=group]  
[-update] -user=user-id [-password=password] [-OSuser=name]  
[-person=name] [-status=0 | 1] [-defaultgroup=default-group]  
[-group=group-name] [-parent=parent] [-privilege=0 | 1]  
[-description=description] [-security=security] [-defaultrole=default-role]  
[-defaultvolume=default-volume] [-defaultlocalvolume=default-local-volume]  
[-role=name] [-rename=user-id] [group-name | role-name | person-name | -os]  
[-volume=name]  
[-node=name] [-path=name] [-file=file]  
[-filestoregroupid=filestore-group-ID] [-loadbalancerid=load-balancer-ID]  
[-licenselevel= author | consumer | occasionaluser | ]  
[-licensebundle=license-bundle]  
[-nationality=nationality] [-geography=geography] [-ip_clearance=ip_clearance]  
[-gov_clearance=government_clearance]  
[-PA1=person-PA1-attribute(address OOTB)]  
[-PA2=person-PA2-attribute(city OOTB)]  
[-PA3=person-PA3-attribute(state OOTB)]  
[-PA4=person-PA4-attribute(zip code OOTB)]  
[-PA5=person-PA5-attribute(country OOTB)]  
[-PA6=person-PA6-attribute(organization OOTB)]  
[-PA7=person-PA7-attribute(GID OOTB)]  
[-PA8=person-PA8-attribute(mail code OOTB)]  
[-PA9=person-PA9-attribute(e-mail address OOTB)]  
[-PA10=person-PA10-attribute(phone number OOTB)]  
[-ga=0 | 1 | false | true] [-gm_status=0 | 1 | false | true]  
[-citizenships=user_citizenship-list]  
[-v] [-datasource=0 | 1 | 2] [-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

1. The types of licenses available depends on your license agreement. For descriptions of the available license levels, see your license agreement documentation.
-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-update
Use when modifying any of the existing user, group, or role objects. See restriction #5.

-user
Creates a new Teamcenter user.

-password
Creates a password for the new user.

[Note] If a password is not specified for the new user, Teamcenter assigns the user ID as the password.

-OSuser
Specifies the operating system user name for the new user. If this argument is not supplied, the operating system user name defaults to the value specified in the -user argument.

-group
Specifies the group to which the new user is added. See restriction #1.

-person
Specifies the person associated with the new user. See restriction #2.

-status
Specifies a user’s status. See restriction #8.

-defaultgroup
Specifies a user’s default group. See restriction #7.

-parent
Specifies a group’s parent group. See restriction #7.

-privilege
Specifies a group’s privilege. See restriction #6.

-description
Specifies the description of a group and/or role.

-security
Specifies a group’s security.

-defaultrole
Specifies default role for a group. See restriction #7.
-**defaultvolume**
Specifies default volume for group and/or user. If you specify this argument, you must also specify the -user, -password, and -group arguments. See restriction #7.

-**defaultlocalvolume**
Specifies the default local volume on the user object. See restriction #9.

-**role**
Specifies the role to which the new user is assigned.

-**rename**
Specifies a new name for an existing user, group, role, or person.

-**os**
Specifies that user names and groups specified in the operating system /etc/passwd and /etc/group files are used to create new users. See restriction #3.

-**volume**
Specifies the new volume to be created. See restrictions #4 and #10.

-**node**
Specifies the network node where the new volume is located. See restriction #4.

-**path**
Specifies the full path to the location of the new volume. See restriction #4.

-**file**
Specifies that the input file is read to create users or to modify existing users, groups and roles after other arguments are processed. Each record in the file contains the following information:

```
person|user|password|group|role|option_name1|option_value1
|option_name2|option_value2|...|update
```

**option_name** is any command line argument and **option_value** is a valid value for **option_name**.

Each field is delimited by the (|) character. The password and role fields can be null (||). The role defaults to the last value specified in either the file or on the command line using the -role argument.

**Note** If a password is not specified for the new user, Teamcenter assigns the user ID as the password.

When modifying an existing user, group, or role, specify the properties to be modified by option_name|option_value pairs followed by the -update argument.

-**licenselevel**
Specifies the license level of the user. The default value is author. For information on setting license levels, see the Organization Guide.

The types of licenses available depends on your license agreement. For descriptions of the available license levels, see your license agreement documentation.

-**licensebundle**
Specifies a license bundle for the user.
The following four arguments are required if you want the FMS master configuration updated when a volume is created. Do not include these arguments if you intend to update the FMS configuration manually. If supplied, only one of the `fscid`, `filestoregroupid`, or `loadbalancerid` arguments is permitted.

- **fscid**
  Specifies the FSC ID in the FMS configuration to which the volume element will be added. The maximum length of this argument is 32 characters.

- **filestoregroupid**
  Specifies the Filestore Group ID in the FMS configuration to which the volume element will be added. The maximum length of this argument is 32 characters.

- **loadbalancerid**
  Specifies the load balancer ID in the FMS configuration to which the volume element will be added. The maximum length of this argument is 32 characters.

- **nationality**
  Specifies the nationality of the user.

- **citizenships**
  Specifies the citizenship of the user. Citizenships are a two-letter country code from ISO 3166. A user can have multiple citizenships. Multiple citizenships are specified with a comma delimiter, such as:

  ```
  -citizenships=US,GB
  ```

- **geography**
  Specifies the geographical location of the user.

- **ip_clearance**
  Specifies the intellectual property (IP) clearance level of the user. This is the level of access the user has to sensitive (classified) information.

- **gov_clearance**
  Specifies the level of clearance the user has to classified data.

- **PA1**
  Specifies the person attribute: address.

- **PA2**
  Specifies the person attribute: city.

- **PA3**
  Specifies the person attribute: state.

- **PA4**
  Specifies the person attribute: zip code.

- **PA5**
  Specifies the person attribute: country.

- **PA6**
  Specifies the person attribute: organization.
-PA7
Specifies the person attribute: GID (group ID).

-PA8
Specifies the person attribute: mail code.

-PA9
Specifies the person attribute: e-mail address.

-PA10
Specifies the person attribute: phone number.

-ga
Specifies the group member admin privilege. If the user is an administrator, set this value to either 1 or true. If the user is not an administrator, set this value to either 0 or false.

-gm_status
Specifies the group member status. If the group member is inactive, set this value to either 1 or true. If the group member is active, set this value to either 0 or false.

-v
Runs the utility in verbose mode to display the maximum amount of information. Typically, nonverbose utility sessions only display error messages.

-datasource
Determines whether the synchronization of the specified object (via LDAP synchronization) is reset. Use this argument only to correct incorrect synchronization settings.

Set this argument to 0 reset the object as internally managed. Set this argument to 1 to reset the object as externally managed. Set this argument to 2 to reset the object as remotely managed.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

REstrictions
1. If the command line argument parameter contains spaces, it must be enclosed in quotes, for example, “product validation”. This restriction does not apply to arguments from a file using the -file argument because quotes are automatically added using this argument.

2. The make_user utility does not assign person attributes, such as address and phone number.

3. The -os argument is only valid on UNIX platforms.

4. The -volume, -node, and -path arguments must not be separated by other arguments.
5. Only one object (user, group, or role) can be updated at a time.
   If the -user, -group, or -role arguments are specified when using the -update argument, the user object is assumed as the target object of the update.
   If the -group or -role arguments are specified without the -user argument, the group object is updated.
   If the -role argument is specified without the -user or -group arguments, the role is updated. The object to be updated must already exist.

6. The privilege setting for a group can be either 0 or 1. 1 implies that the group has DBA privileges. 0 implies a non-DBA group. The default value is 0.

7. The objects specified for the -defaultgroup, -defaultrole, -defaultvolume, and -parent arguments must be existing objects.

8. The valid values for the -status argument are 0 (active) and 1 (inactive). If these values are not specified, the default status is active.

9. If both defaultlocalvolume and defaultvolume arguments are specified, their values must be different. The default local volume must be configured as a valid FMS volume.

10. To create volumes, an FSC must be installed and running, and the FMS_BootStap_Urls preference must be set with the FSC host and port information.

RETURN VALUES

Return value upon success 0
Return value upon failure 1
EXAMPLES

- To create three new users (tom, dan, and bob) and assign them to the london.dev group, enter the following commands, each on a single line:

  ```
  $TC_ROOT/bin/make_user -u=infodba -p=password -g=dba
  -user=tm -group=london.dev -person=tom
  $TC_ROOT/bin/make_user -u=infodba -p=password -g=dba
  -user=dm -group=london.dev -person=dan
  $TC_ROOT/bin/make_user -u=infodba -p=password -g=dba
  -user=bp -group=london.dev -person=bob
  ```

- To assign the role of planner to london.dev member tm and assign the role of qc to london.dev members dm and bp, enter the following commands, each on a single line:

  ```
  $TC_ROOT/bin/make_user -u=infodba -p=password -g=dba
  -user=tm -group=london.dev -role=planner
  $TC_ROOT/bin/make_user -u=infodba -p=password -g=dba
  -user=dm -group=london.dev -role=qc
  $TC_ROOT/bin/make_user -u=infodba -p=password -g=dba
  -user=bp -group=london.dev -role=qc
  ```

- To add all london.dev group members tm, dm, and bp to the qa group, enter the following commands, each on a single line:

  ```
  $TC_ROOT/bin/make_user -u=infodba -p=password -g=dba
  -user=tm -group=qa
  $TC_ROOT/bin/make_user -u=infodba -p=password -g=dba
  -user=dm -group=qa
  $TC_ROOT/bin/make_user -u=infodba -p=password -g=dba
  -user=bp -group=qa
  ```

- To create a volume test on network node svr1, enter the following command on a single line:

  ```
  $TC_ROOT/bin/make_user -u=infodba -p=password -g=dba
  -volume=test -node=svr1 -path=/user/volumes/test
  ```

- To modify the default volume for an existing user (tm), enter the following command on a single line:

  ```
  make_user -u=infodba -p=password -g=dba
  -update -user=tm -defaultvolume=test1
  ```

- To create a new group dev2, another new group hongkong.dev2 (a subgroup of the new group dev2) and assign to the latter group the default volume test, enter the following command on a single line:

  ```
  $TC_ROOT/bin/make_user -u=infodba -p=password -g=dba
  -volume=test -node=svr1 -path=/user/volumes/test -group=hongkong.dev2
  ```

- To create a new group (Test), add a role (Test Engineer) to the group and also define a common description for the group and role, enter the following command on a single line:

  ```
  make_user -u=infodba -p=password -g=dba
  -group=Test -role="Test Engineer"
  -description="Common description for both the Group and Role"
  ```
• To rename a group (hongkong), rename a user (tm) and modify the user’s status to inactive, enter the following commands:

```
make_user -u=infodba -p=password -g=dba
   -update -group=hongkong -rename=hk
make_user -u=infodba -p=password -g=dba
   -update -user=tm -rename=tm_new -status=1
```

• To create three new users (tom, dan, and bob), whose user IDs are (tm, dm, and bp) and assign them to the london.dev group, create a file named user.lst containing the following data:

```
tom|tm||london.dev|
dan|dm||london.dev|
bob|bp||london.dev|
```

Then enter the following command on a single line:

```
$TC_ROOT/bin/make_user -u=infodba -p=password -g=dba -file=user.lst
```

• To rename the three users (tom, dan, and bob), whose user IDs are (tm, dm, and bp), create a file named user.lst containing the following data:

```
|tm||||rename|tm_new|update
|dm||||rename|dm_new|update
|bp||||rename|bp_new|update
```

Then enter the following command on a single line:

```
make_user -u=infodba -p=password -g=dba -file=user.lst
```

• To inactivate a user with a user ID of tom, create a user.lst file containing the following data:

```
|tom|||status|1|update
```

Then enter the following command on a single line:

```
make_user -u=infodba -p=password -g=dba -file=user.lst
```

• To rename user bob, whose user ID is bp, and change the default volume, create a file named user.lst containing the following data:

```
|bp||||rename|bp_new|defaultvolume|new_volume|update
```

Then enter the following command on a single line:

```
make_user -u=infodba -p=password -g=dba -file=user.lst
```

• To set the default local volume for an existing user:

```
make_user -u=infodba -p=password -g=dba
   -update -user=mrd -defaultlocalvolume=milfordtempvol
```

• To create a new user (user_id3) who is a citizen of the United States:

```
Person_name3|user_id3||PGroup|PRole|citizenships|US
```

• To create a new user (user_id4) who is a citizen of both the United States and Japan:

```
Person_name4|user_id4||PGroup|PRole|citizenships|US,JP
```
To modify the citizenship of an existing (user_id3) who is a citizen of both the United States and Great Britain:

|user_id3||PGroup|PRole|citizenships|US,GB|update

To modify the citizenship of an existing (user_id4) who is a citizen of the United States:

|user_id4||PGroup|PRole|citizenships|US|update

To create user user1 with a license level of consumer and user user2 with a license level of author, create a file named user.lst containing the following data:

user1person|user1|user1|group1|Consumer|licenselevel|consumer
user2person|user2|user2|group1|Author|licenselevel|author

Then enter the following command on a single line:

make_user -u=infodba -p=password -g=dba -file=user.lst

Note The types of licenses available depends on your license agreement. For descriptions of the available license levels, see your license agreement documentation.

To create user user1 with a license level of consumer and user user2 with a license level of author, and assign user1 to the LBundle1 license bundle and user2 to the LBundle2 license bundle, create a file named user.lst containing the following data:

user1person|user1|user1|group1|role1|licenselevel|consumer|licensebundle|LBundle1
user2person|user2|user2|group1|role1|licenselevel|author|licensebundle|LBundle2

Then enter the following command on a single line:

make_user -u=infodba -p=password -g=dba -file=user.lst

Note The types of licenses available depends on your license agreement. For descriptions of the available license levels, see your license agreement documentation.

To update user user1 with a license level of consumer and user user2 with a license level of author, and assign user1 to the LBundle1 license bundle and user2 to the LBundle2 license bundle, create a file named user.lst containing the following data:

user1person|user1|user1|group1|role1|licenselevel|consumer|licensebundle|LBundle1|update
user2person|user2|user2|group1|role1|licenselevel|author|licensebundle|LBundle2|update

Then enter the following command on a single line:

make_user -u=infodba -p=password -g=dba -file=user.lst

Note The types of licenses available depends on your license agreement. For descriptions of the available license levels, see your license agreement documentation.

Object validation
create_validationdata

Creates validation data or validation agent objects in Teamcenter.

Before creating validation data, ensure the validation agent exists in the database. If the validation agent does not exist, the utility issues an error message and terminates. If the validation data already exists for the given validation agent, the utility issues an error message and terminates.

SYNTAX

The following syntax applies to creating validation data:

```
create_validationdata [-u=user-id [-p=password | -pf=password-file] -g=group]
-v_name=validation-name
-v_agent_name=agent-name
-clr_name=closure-rule
-v_desc=validation-data-description
-v_category=category
-v_ext_rule_file=external-rule-file-path
-log
-h
```

The following syntax applies to creating validation agent:

```
create_validationdata [-u=user-id [-p=password | -pf=password-file] -g=group]
-create_agent
-v_agent_name=agent-name
-v_util_cmd=utility-command
-clr_name=closure-rule
-v_desc=validation-agent-description
-v_args=validation-arguments
-log
-h
```

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note: If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-create_agent
Indicates the utility is to create a validation agent.

-v_name
Specifies the name of the validation data, for example, 

mgc_exam_geometry_combo in NX Check-Mate.

-v_agent_name
Specifies the name of the validation agent in the database.

-v_desc
Describes the validation data or validation agent, for example, "Test geometry".

-v_category
Specifies the category of the validation data, for example, template.modeling.

-v_util_cmd
Specifies the utility command string for the validation agent, for example, 

ug_check_part.

-clr_name
Specifies the name of the closure rule. Closure rule names must be unique. If multiple closure rules are encountered, the utility considers only the first rule. If the closure rule name does not exist in the database, the utility issues an error message and returns a list of closure rules in the database available to the user. An example of a closure rule is NX.

-v_args
Specifies the arguments associated with the validation agent, for example, -pim=yes.

-v_ext_rule_file
Specifies the external rule file path for validation data, for example, 

D:\Temp\ExtRuleFile.xls.

-log
Specifies the output of this utility to be written to the log file.

-h
Displays help for this utility.
ENVIRONMENT
Requires no special environment. Teamcenter environment is sufficient to run this utility.

RESTRICTIONS
None.

EXAMPLES
The following example creates a validation agent for the **NX Check-Mate** utility for the **mqe_exam_geometry** checker.

```bash
create_validationdata.exe -create_agent -v_agent_name= "NX CheckMate"
-v_desc= "testing create agent" -v_util_cmd= "ug_check_part"
-clr_name= "NX" -v_args= "-pim=yes"

create_validationdata.exe -v_name= "mqc_exam_geometry"
-v_agent_name= "NX CheckMate" -v_desc= "testing create checker"
-v_category= "modeling"
```

**Teamcenter reporting**
install_default_report_designs

Creates the default report designs contained in the default_report_design.xml file as part of the Teamcenter installation process. Other report designs can be imported into the database by adding them to the default_report_design.xml file and rerunning the utility.

**SYNTAX**

install_default_report_designs [-u=user-id | -p=password | -pf=password-file] -g=group

-file=xml-file-list -design_name=report-design-name -create_new [-update_all | -update_query | -update_pff | -update_formatter [-v] [-h] ]

**ARGUMENTS**

-u

Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note: If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p

Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf

Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g

Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-file

Specifies the name of the XML file containing report design definitions.

-design_name

Specifies the name of the report design.
-create_new
Creates new objects.
This cannot be used with update modes.

-update_all
Updates all existing objects (query, pff, and formatter).

-update_query
Updates existing query objects.

-update_pff
Updates existing pff objects.

-update_formatter
Updates existing formatter objects.

-v
Displays detailed status information.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

RETURN VALUES

Return value upon success
0

Return value upon failure
>1, –1

EXAMPLES
To create default report enter the following command on a single line:

    install_default_report_designs -u=infodba -p=infodba -g=dba -file=$TC_DATA\report_writer\default_report_designs.xml

XML FILE FORMAT
The format required for the XML file is as follows.
Chapter 2  Configuration utilities

<ReportDesign>
  <DesignName>Admin - Objects By Status</DesignName>
  <DesignDesc>This report returns objects of a specified type released to a specified status.</DesignDesc>
  <Query>
    <QueryName>Admin - Objects By Status</QueryName>
    <QueryDesc>This query was created to support the Admin - Objects By Status Report.</QueryDesc>
    <QueryClass>WorkspaceObject</QueryClass>
    <QueryClause>SELECT qid FROM WorkspaceObject WHERE "object_type" = "${Type = ItemRevision}" AND "release_status_list.name" = "$\{Release Status = \}"</QueryClause>
  </Query>
  <DomainFlag>QRY_DOMAIN_LOCAL</DomainFlag>
  <Pff>
    <PffName>Admin - Objects By Status</PffName>
    <PffDesc>This PFF was created to support the Admin - Objects By Status Report.</PffDesc>
    <PffClass>WorkspaceObject</PffClass>
    <PffClause>
      WorkspaceObject.object_name;Object Name,
      WorkspaceObject.object_type;Object Type,
      WorkspaceObject.release_status_list.name;Release Status,
      WorkspaceObject.date_released;Date Released,
      WorkspaceObject.owning_user.user_id;UserName,
      WorkspaceObject.owning_group.name;GroupName
    </PffClause>
  </Pff>
  <Formatter>
    <Filename>default_xml_template.xsl</Filename>
    <Datasettype>XMLReportFormatter</Datasettype>
  </Formatter>
  <Formatter>
    <Filename>default_excel_template.xlt</Filename>
    <Datasettype>ExcelReportFormatter</Datasettype>
  </Formatter>
</ReportDesign>

XML file format
rep_batch_report

Used in batch or shell script files to generate reports in batch mode when the user selects the Batch mode option in the Generate ME Report dialog box.

The following administrative tasks must be performed to enable batch reporting:

1. Create a report request flat file containing default values and details of item ID, revision ID, operating system report location, Teamcenter report location, report format, revision rule, variant rule, transfer mode, and status. The format of the file is as follows:

```
start_global_definitions
User ID infodba
Password infodba
TC_ROOT w:\iman_wnti
TC_DATA w:\src\iman\data
Default Report Location Teamcenter # possible values are OS or Teamcenter
Default OS Location C:\temp\Reports
Default Revision Rule Latest Working
Default Saved Variant Rule DemoVariantRule
Default Transfer Mode web_reports
Default Formatter : Product_Structure.xsl
Delimiter ~
end_global_definitions
start_data_definition
#ItemID~Revision~Report Location~OS Location~Revision Rule~Saved Variant Rule~Transfer Mode~Formatter~Status
000234~A~OS~~~MyVariantRule~~Standard Product~
end_data_definition

start_data_definition
#ItemID~Revision~Report Location~OS Location~Revision Rule~Saved Variant Rule~Transfer Mode~Formatter~Root Product Tag~ (line continued)
Root Product Rev rule~Root Product Var rule~Root Process Tag~Hierarchy
UID tags~level~Root PlantTag~Root Plt Rev Rule~Root Plt Var Rule~Status
GM00071~001~OS~~Latest Working~~web_reports~Product_Structure.xsl~~~~~~~~~~
ABC000007~A~OS~~Latest Working~~web_reports~station_weld.xsl~SvNJmIl8l9P7VD~
~3~zwDJ2_1$l9P7VD~Latest Working~~
end_data_definition
```

Note A sample batch file and shell script file are located in the 
TC_ROOT/web/htdocs/web_reports/data directory. In addition, you can manually append data to an existing batch_request file and run the utility.

2. Schedule a task in the operating system.

3. Select the program and specify the execution date and time.

The utility performs the following activities:

1. Reads the location of the report request flat file from the value of the Batch_Report_Request_File preference.

For more information, see the Preferences and Environment Variables Reference.
2. Reads the global definition values.

3. Parses each line in the flat file, checks the status field of the line, and processes the line if the status is not success.

4. An XML file is generated for each line in the file, using the revision rule, variant rule, and closure rule associated with the transfer mode. If the rules are not specified in the line, default rules are used.

5. The report format (style sheet) is applied on the XML file and report HTML files are generated. The datasets are exported during the transformation.

6. If the report location is specified as Teamcenter, the dataset is created and the files generated are attached to the item revision, including the exported dataset files.

7. If the report location is specified as OS, the reports are saved at the OS location specified in the file.

8. Create or update the log file for the process.

9. Update the status field once the line is processed.

SYNTAX

rep_batch_report [-u=user-id [-p=password | -pf=password-file] -g=group] -h

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.
-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.
import_export_reports

Allows report definitions, their dependent data (for example, saved query definitions and property set definitions), and their associated style sheets to be exported from one Teamcenter server and imported to another Teamcenter server.

**SYNTAX**

```
import_export_reports [-import | -export | -execute]
[-u=user-id -p=password | -pf=password-file -g=group]
-stageDir=directory -reportId=report-identifier
[-reportFile=xml-output-file] [-f=xml-file] [-h]
```

**ARGUMENTS**

- **-import**
  Specifies the report definitions are to be imported to the Teamcenter server.

- **-export**
  Specifies the report definitions are to be exported from the Teamcenter server.

- **-execute**
  Generates a report in the command line. This argument requires the **-f** argument.

- **-u**
  Specifies the user ID.

  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the **user-ID** value to be the password.

  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.

  For more information about managing password files, see `Manage password files`.

  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user’s default group is assumed.
**-stageDir**
Specifies the fully qualified name of the directory that contains all of the report definitions and its associated data in predefined format.

**-reportId**
Specifies the ID of the report definition.

**-reportFile**
Specifies the name of the XML containing the list of report templates.

**-f**
Specifies the name of an XML file containing report parameters. This argument is used with the **-execute** arguments.

**-h**
Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

None.

**EXAMPLES**

- The following command exports report definitions and associated data (style sheets) to the file system pointed by the **stageDir** argument:

  ```
  import_export_reports -export -u=<username> -p=<password> -g=<group> -stageDir=<data directory> -reportId=<reportname>
  ```

- The following command imports report definitions from a Teamcenter server:

  ```
  import_export_reports -import -u=<username> -p=<password> -g=<group> -stageDir=<data directory> -reportId=<reports>
  ```

**Teamcenter interface**
Communicates with the application registry, either as a stand-alone program or within an application (such as an installation program), to:

- Check the existence or availability of an application registry.
- Register an application instance with the application registry.
- Unregister an application instance from the application registry.

**SYNTAX**

```plaintext
AppRegUtil -mode={verify | register | unregister | list | help}
    [-import | -export | -execute]
    [-u=user-id -p=password | -pf=password-file -g=group]
    [-file=default | data-file] [-appRegUrl=application-registry-URL]
    [-guid=guid-of-chooser-application-instance] [-file=file-name] [-h]
```

**ARGUMENTS**

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-mode**
  Specifies the task to perform. The value can be **verify**, **register**, **unregister**, **list**, or **help**. If the mode is not specified, the program exits with an error.

  **verify**
  Checks whether the given application registry URL is running and also provides the registry information file for the URL.

  **register**
  Registers an application with the application registry with the details from the specified registry file, based on the data in the file specified by the **-file** argument. If the **appRegUrl** argument is used with this argument, it overrides the URL specified in this file.
**unregister**
Unregisters the application identified by the `guid` argument from the application registry identified with the `appRegUrl` argument. It also provides the registry file for this information.

**list**
Lists all entries in the application registry.

**help**
Displays help for this argument.

**-file**
Specifies the file name of the configuration file containing the application details and the application registry URL. Examples of application details are `AppGUID`, `launcher URL`, `portal launcher URL`, and `webService URL`.

The file format must be `Name=Value` pairs, separated by the equal sign (=). For formatting examples, see the `AppRegUtil.data.default` file in the `$TC_DATA` directory.

If you specify `default`, rather than a file name, the utility uses the `AppRegUtil.data.default` file in the `$TC_DATA` directory. This is a template file you can either edit, or save and modify.

**-appRegUrl**
Specifies the URL of the application registry. The value can be passed as an argument or as a property in the configuration file provided as an argument. For more information, see the description of the `-file` argument.

**-guid**
Specifies the `guid` of the Teamcenter application instance.

**-h**
Displays help for this utility.

**ENVIRONMENT**
If the `-file` option is used with a value of `default`, the `TC_DATA` environment must be available.

**RESTRICTIONS**
The file format of the configuration file specified by the `-file` argument must be `Name=Value` pairs, separated by the equal sign (=). For more information about formatting this file, see the `AppRegUtil.data.default` file in the `$TC_DATA` directory. This is a template file you can either edit, or save and modify.

**EXAMPLES**
The following examples illustrate use of the `AppRegUtil` utility.

**Verifying the existence of the Application Registry**

- To verify the existence of the application registry:

  ```
  AppRegUtil -mode=verify -appRegUrl=application-registry-URL
  ```

  Tests whether the given application registry is running. Returns `true` if the application registry is not running.

- To test whether the application registry identified by the `ApplicationRegistryUrl` property in the `config` file is active:
Chapter 2  Configuration utilities

AppRegUtil -mode=verify -file=absolute-path-of-config-file

Returns a failure if the application registry is not active or is unreachable.

- To test whether the application registry identified by the ApplicationRegistryUrl property in the default config file in the $TC_DATA/AppRegUtil.data directory is active:

  AppRegUtil -mode=verify -file=

  Returns a failure if the application registry is not active or is unreachable.

Registering a Teamcenter application instance with the Application Registry

- To register an application instance defined in the given config file:

  AppRegUtil -mode=register -file=absolute-path-of-config-file
  or
  AppRegUtil -mode=register -file=default

  The data in the file must be Name=Value pairs. If the value of the -file option is defined as default, the utility uses the AppRegUtil.data.default file in the $TC_DATA directory. This is a template file you can either edit, or save and modify.

  The configuration contains the ApplicationRegistryURL property, which provides the application registry information. The value of this property can be overridden using the -appRegUrl=application-registry-URL on the command line.

Unregistering a Teamcenter application instance with the Application Registry

- To unregister an application instance defined in the given config file:

  AppRegUtil -mode=unregister -file=absolute-path-of-config-file
  or
  AppRegUtil -mode=unregister -file=default

  The data in the file must be Name=Value pairs. If the value of the -file option is defined as default, the utility uses the AppRegUtil.data.default file in the $TC_DATA directory. This is a template file you can either edit, or save and modify.

  The configuration contains the ApplicationRegistryURL property, which provides the application registry information. The value of this property can be overridden using the -appRegUrl=application-registry-URL on the command line.
Chapter

3  Product configuration utilities

Content management
contmgmt_upgrade_8x

Adds a prefix to DITA object item IDs and updates all content references with the correct extensions. This utility must be run after upgrading from a Teamcenter release prior to 9.0 and after performing the other migration tasks.

For more information, see the Content Management Guide.

SYNTAX

```
contmgmt_upgrade_8x [-u=user-id -p=password | -pf=password-file -g=group]
[-prefix=DITA-prefix]
[-dryrun] [-h]
```

ARGUMENTS

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges.

- **-p**
  Specifies the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.

- **-prefix**
  The prefix that will be added to all DITA objects during upgrade if they do not already have this prefix. This prefix should begin with an alphabetic character.

- **-dryrun**
  Generates a report of the changes that will be made but does not update the database. Places a text file that contains the old and new item_id values and the old and new XML files that have updated content references in the Teamcenter temporary directory.

- **-h**
  Displays help for this utility.

ENVIRONMENT

As specified in Manually configuring your environment for Teamcenter utilities.

FILES

As specified in Log files produced by Teamcenter.

RESTRICTIONS

None.
EXAMPLES

- To run a test to see which DITA objects will have their item_id values changed and which content references will be changed:

  `contmgmt_upgrade_8x -u=infodba -p=pswd -g=dba -prefix=X -dryrun`

- To change all the item_id values of DITA topics to begin with the prefix and to update content references:

  `contmgmt_upgrade_8x -u=infodba -p=pswd -g=dba -prefix=X`
contmgmt_migration_100

In Teamcenter 10 and later, a new relationship exists between the PSOccurrence object between two related topics and the reference topic type that is between the two topic types. When upgrading from a prior release, the contmgmt_migration_100 utility must be run to add this relationship to PSOccurrence objects. If more than one reference type exists between the two topic types, the utility selects one and the selection is noted in a log file.

For more information, see the Content Management Guide.

SYNTAX

contmgmt_migration_100 [-u=user-id -p=password | -pf=password-file -g=group] [-clear] [-dryrun] [-h]

ARGUMENTS

-u
    Specifies the user ID.
    This is generally infodba or another user with administration privileges.

-p
    Specifies the password.

-pf
    Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
    For more information about managing password files, see Manage password files.
    This argument is mutually exclusive with the -p argument.

-g
    Specifies the group associated with the user.

-clear
    Clears any existing Ctm0RefTopicTypeR relations before processing.

-dryrun
    Generates a report of the changes to be made but does not update the database.

-h
    Displays help for this utility.

ENVIRONMENT

As specified in Manually configuring your environment for Teamcenter utilities.

FILES

As specified in Log files produced by Teamcenter.

RESTRICTIONS

None.

EXAMPLES

- To run a test to see which PSOccurrences objects will have relationships added:
  contmgmt_migration_100 -u=infodba -p=pswd -g=dba -dryrun
To update all the **PSOccurrences** objects with the new relationship:

```
contmgmt_migration_100 -u=infodba -p=pswd -g=dba
```

**Product structure maintenance**
bom_expand

DESCRIPTION

Expands the bill of materials (BOM) and generates a report on the BOM structure and expansion statistics.

You can use this utility to find the total size and depth of a BOM structure as well as the number of lines at each level of the structure.

This utility provides a `bomset` mode that can help you expand the BOM in equal-sized sets without encountering memory issues.

SYNTAX

```
bom Expand [-u=user-id -p=password | -pf=password-file -g=group]
-item=item | -key=item-key
[-revision_rule=revision-rule] [-rev=revision]
[-saved_variant_rule=saved-variant-rule]
[use_packing] [-show_unconfigured] [-show_unconfigured_variants]
[-props=comma-separated-list-of-property-names] [-level_props]
-output=output-filename] [-props= | -props_output=
comma-separated-list-of-property-names]
[-bom_report_file=report-file-name] [-report_mode=[TOP | LEVEL | FULL]]
[-no_verbose] [-mem_debug] [-bom_closure_rule=closure-rule]
[-bomset] [-bomset_criteria=[MEMORY | NUM_LINES | PERCENT]]
[-bomset_help]
[-bomset_criteria_data=[Number-of-Lines | PERCENT]]
[-bomset_override_data_complexity_preference=[true | false]]
[-bomset_use_mem_percentage_preference=percent]
[-create_absocc]
[-create_absocce_ids] [-h]
```

ARGUMENTS

- **-u**
  Specifies the user ID.

  This is generally `infodba` or another user with or without administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.

  If this argument is not used, the system assumes the `user-ID` value to be the password.
-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-item
Specifies the item ID for which the associated BOM view revision (BVR) is traversed. (BVRs are associated with revisions corresponding to the specified item.)

-key
Specifies the key for which the associated BVR is traversed. (BVRs are associated with revisions corresponding to the specified item.)

[(keyAttr1=keyVal1],[keyAttr2=keyVal2]…,[keyAttrN=keyValN])
To find the key of an object, use the get_key_string utility.
For more information, see the Business Modeler IDE Guide.

-revision_rule
Specifies the revision rule to use when configuring the BOM window.
If this argument is omitted, uses the default revision rule, Latest Working.

-rev
Specifies the item revision specified by the -item argument. The revision must have an associated BVR.

-saved_variant_rule
Specifies the variant rule to apply to the BOM window when configuring the BOM.

-use_packing
Indicates whether the packed lines in the BOM window should be packed or unpacked.

-show_unconfigured
Indicates whether unconfigured BOM lines are considered for BOM expansion.

-show_unconfigured_variants
Indicates whether to consider unconfigured BOM lines due to variant conditions for BOM expansion.

-props
Specifies the set of properties to fetch for BOM structure lines. If the value specified is rich client (RAC), fetches all properties required by the rich client. You can also specify a comma-separated list of properties. For example, if you want properties bl_formula and bl_variant_state, specify this argument as -props= bl_formula, bl_variant_state.
-level_props
Indicates whether to fetch all properties together for a BOM level during expansion. If this flag is absent, fetches properties once for the entire BOM after expansion.

-output
Directs the output to a specific file by specifying a file name.

-props_output
Lists BOM line properties separated by a comma that should be written to output. The -props and -props_output arguments are mutually exclusive.

-bom_report_file
Specifies the report file name, for example, report.csv (CSV file type is preferred).

-report_mode
Specifies report generation mode. Valid values are:
- TOP prints expansion report for top node of BOM only.
- LEVEL prints summary of expansion for all levels in BOM.
- FULL prints detailed expansion report for each node in BOM.

The default mode is LEVEL.

-no_verbose
Indicates whether to write detailed output to the console.

-mem_debug
Indicates whether to print additional debug information related to memory usage during BOM expansion.

-bom_closure_rule
Specifies BOM closure rule to apply to BOM window during BOM expansion.

-bomset
Indicates whether expansion should be done in equal-sized sets of BOM lines.

-bomset_criteria
Specifies creation criteria of BOM sets for expansion. Valid values are:
- MEMORY
  The BOM is divided and expanded in sets that occupy the same memory. This memory is calculated based on the available system physical memory and BOM size.
- NUMLINES
  The BOM is divided and expanded in sets that contain the same number of BOM lines. Use the argument -bomset_criteria_data to specify the number of lines for each BOM set.
- PERCENT
  The BOM is divided and expanded in sets that contain the number of lines which are the same percent as the total number of BOM lines in the BOM. Use the argument -bomset_criteria_display to specify this percent.
The default is MEMORY.

-bomset_help
Prints examples for using bomset options.

-bomset_criteria_data
Specifies data for BOM set creation to use with -bomset_criteria. Valid values are NUMLINES or PERCENT.
This argument should be used when -bomset_criteria_data=NUMLINES or -bomset_criteria_data=PERCENT.
For example, if you have a 10,000 item BOM and you want it to be divided and expanded in sets each having the size 1,000 items, include the following arguments in your command:

• -bomset -bomset_criteria=NUMLINES
• -bomset_criteria_data=1000
If you want a 10,000 item BOM to be divided and expanded in sets that are 10 percent of its size, include the following arguments in your command:

• -bomset -bomset_criteria=PERCENT
• -bomset_criteria_data=10

-bomset_override_data_complexity_preference
Specifies whether BOM lines have complex data, such as incremental changes and absolute occurrences, which can decide the size of the BOM set when the -bomset_criteria value is set to MEMORY. The valid values are true or false. The default value is false.

-bomset_use_mem_percentage_preference
Specifies the percent of system memory available to use for expansion. Valid values must be set between 0 and 100.

-create_absoccs
Creates absolute occurrence appearance path node (APN) objects on a BOM structure during expansion.

-create_absoccs_ids
Creates or uses existing absolute occurrence IDs on a BOM structure during expansion.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.
This utility can generate different output files based on the [-output=output-filename] or the -bom_report_file options.

RESTRICTIONS
This is a debug utility and should only be used for debugging purposes.
Chapter 3  Product configuration utilities

EXAMPLES

• BOM expansion with properties, using revision rules and variant rules.
  
  ```
  bom_expand -u=user-id -p=password -pf=password-file -item=item
  -rev=revision -revision_rule=revision-rule -saved_variant_rule=
  saved-variant-rule -bom_closure_rule=closure-rule -props=RAC-level_props
  ```

• BOM expansion with out properties, using revision rule and variant rule.
  
  ```
  bom_expand
  -u=user-id -p=password -pf=password-file -item=item -rev=revision
  -revision_rule=revision-rule -saved_variant_rule=
  ```

• BOM expansion with properties, using revision rule and variant rule and closure rule.
  
  ```
  bom_expand -u=user-id -p=password -pf=password-file -item=item
  -rev=revision -revision_rule=revision-rule -saved_variant_rule=
  saved-variant-rule -props=RAC-level_props bom_report_file=report-file-name -report_mode=FULL
  ```

• BOM expansion with properties, using revision rule and variant rule and providing output in a file (txt).
  
  ```
  bom_expand -u=user-id -p=password -pf=password-file -item=item
  -rev=revision -revision_rule=revision-rule -saved_variant_rule=
  saved-variant-rule -props=RAC-level_props -output=output-filename
  ```

• BOM expansion with properties, using revision rule and variant rule and closure rule with properties, using revision rule and variant rule and providing BOM report file (csv) (BOM data).
  
  ```
  bom_expand -u=user-id -p=password -pf=password-file -item=item
  -rev=revision -revision_rule=revision-rule -saved_variant_rule=
  saved-variant-rule -props=RAC-level_props bom_report_file=report-file-name -report_mode=FULL
  ```

• BOM expand with BOM set.
  
  ```
  bom_expand -u=user-id -p=password -item=item_id -bomset
  bom_expand -u=user-id -p=password -item=item_id -bomset
  -bomset_criteria=PERCENT -bomset_criteria_data=% of bomlines in a set. Value between 0–100>
  bom_expand -u=user-id -p=password -item=item_id -bomset
  -bomset_criteria=NUMLINES -bomset_criteria_data=num of lines in a set
  bom_expand -u=user-id -p=password -item=item_id -bomset
  -bomset_override_data_complexity_preference=true/false
  -bomset_use_mem_percentage_preference=% of system mem which can be used for bomset/expansion. Value between 0 -100.
  Only valid when --bomset_criteria=Empty value of MEMORY
  ```
bom_roll_up_report

Creates BOM properties rollup reports. The reports can be created systematically by a task scheduler to generate weekly or daily reports to track property changes of assembly structures.

**SYNTAX**

```
    bom_roll_up_report [-u=user-id -p=password | -pf=password-file -g=group]
    [[-item=item | [-key={keyAttr1=keyVal1}[,[keyAttr2=keyVal2...,keyAttrN=keyValN]]] 
    [-rev=revision] [-revrule=revision-rule]] 
    [-effdate=mm:dd:yyyy:HH:MM:SS | now | today] 
    [-varrule=variant-option] [-name=name] [-desc=description] 
    -template=name:scope-context [-folder] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.
  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see **Manage password files**.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-item**
  Specifies the item to be used as the root line for the BOM properties rollup report.

- **-key**
  Specifies the key to be used as the root line for the BOM properties rollup report.
  Use the following format:
To find the key of an object, use the `get_key_string` utility.

For more information, see the Business Modeler IDE Guide.

- **-rev**
  Specifies the item revision to be used as the root line for the BOM properties rollup report. If this argument is omitted, the report is based on the latest revision of the item.

- **-revrule**
  Specifies the revision rule to use when creating the BOM properties rollup report. If this argument is omitted, the default revision rule, `LATEST_WORKING`, is used.

- **-effdate**
  Specifies the date to use when configuring the effectivity of the assembly structure. If this argument is omitted, no effectivity date is set.
  
  - *mm* specifies the month (01–12)
  - *dd* specifies the day (01–31)
  - *yyyy* specifies the year (0001–9999)
  - *HH* specifies the hour (00–23)
  - *MM* specifies the minute (00–59)
  - *SS* specifies the second (00–59)

- **-varrule**
  Specifies the variant option set to use when setting the variant options of the assembly structure. If this argument is omitted, default variant options are used or no options are set.

- **-name**
  Specifies the name of the BOM properties rollup report. If this argument is omitted, an auto-generated name is created.

- **-desc**
  Contains a description of the BOM properties rollup report. If this argument is omitted, an autogenerated description is created. The autogeneration occurs only if a default description is defined in the BOM properties rollup template that was used to create the report.

- **-template**
  Specifies the name and scope context of the BOM properties rollup template to use when creating the BOM properties rollup report. Scope context is the user, group, or site scope identifier.

- **-folder**
  Indicates that the system is to place the new BOM properties rollup report dataset into the users `Newstuff` folder. If user privileges do not allow for BOM properties rollup report datasets to be attached to item revisions, the report is placed in the user’s `Newstuff` folder.
-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.

EXAMPLES
- The following example creates a BOM properties rollup report with autologin, autogeneration options, and attaches the report to the item revision:

  ```bash
  bom_roll_up_report -item=12345678 -template="masstemplate:engineering"
  ```

- The following example creates a BOM properties rollup report with autologin, autogeneration options, and attaches the report to the **Newstuff** folder:

  ```bash
  bom_roll_up_report -item=12345678 -template="masstemplate:engineering" -folder
  ```

- The following example creates a BOM properties rollup report with autologin, but with no autogeneration options:

  ```bash
  bom_roll_up_report -item=12345678 -rev=B -name="My Report"
  -desc="Validating mass values." -template="masstemplate:engineering"
  ```

- The following example creates a BOM properties rollup report with autologin and configures the assembly:

  ```bash
  bom_roll_up_report -item=12345678 -rev=B -revrule="Released"
  -effdate=02:20:2006 -varrule="High performance option set" -name="My Report"
  -desc="Validating mass values." -template="masstemplate:engineering"
  ```
create_or_update_bbox_and_tso

This utility performs the following tasks:

- Creates, updates or deletes bounding box data from NX (UGMASTER) and JT (DirectModel) datasets.
- Creates or updates TruShape data (.tso files) for JT files.
- Generates reports of:
  - NX or JT datasets not having a bounding box object.
  - NX datasets not having a UGPartBBox form.
  - JT datasets not having a .tso file. Using this report, the same utility can generate Dispatcher requests so the translation (conversion to the bounding box and TSO) occurs on the dedicated Dispatcher machine.

SYNTAX

create_or_update_bbox_and_tso [-u=user-id -p=password | -pf=password-file
 -g=group] -mode=usermode -translation_mode=operatingmode -generate_ets_request
 -delete_all_bboxes -dataset=dataset_uids -dataset_list=filename
 -output_dir=dirname [-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

-Note If Security Services single sign-on (SSO) is enabled for your server, the -u
and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no
session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually
exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the
password.

-pf
Specifies the password file. If used without a value, the system assumes a null
value. If this argument is not used, the system assumes the user-ID value to be the
password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.
-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-mode
Specifies one of the following modes:

- query
  Generates a report of NX or JT datasets that require updates to the bounding boxes, TSO files (JT files only), or missing UGPartBBox forms (NX datasets only).

- process
  Creates or updates bounding boxes, TSO files (for JT datasets only) or both for a set of NX or JT datasets.

- query+process
  Generates a report of NX or JT datasets that require updates to the bounding boxes or TSO files (JT files only). It then creates or updates bounding boxes or TSO files (for JT datasets only) for the identified datasets.

- delete
  Deletes the specified datasets.

-translation_mode
Specifies one of the following translation modes:

- JTTOBBOX
  Creates or updates the bounding boxes in JT datasets.

- JTTOTSO
  Creates or updates the TSO files in JT datasets.

- JTTOBBOX+JTTOTSO
  Creates or updates the bounding boxes and TSO files in JT datasets.

- NXBBOXTOBBOX
  Creates or updates the bounding boxes in NX datasets.

- processAll
  Use with the NXBBOXTOBBOX mode to force creation of bounding boxes for all NX datasets.

- NXBBOXFORM
  Creates a report listing all NX datasets for which the associated UGPart-BBOX form is not available. You can use this report file with the ugmanager_refile utility to generate UGPart-BBOX form data.
Chapter 3  
Product configuration utilities

-generate_ets_request
Specify this argument when you specify query mode and are working only with JT datasets. Creates a Dispatcher request in the database for each JT dataset that needs updates to bounding boxes or TSO files. Before you use this argument, ensure the Dispatcher translation service is configured and running, as described in Getting Started with Dispatcher (Translation Management).

-delete_all_bboxes
Deletes all the bounding boxes, multibounding boxes and relations between them from the database. (It does not delete TruShape data and you should re-create the TSO files if necessary.)

-dataset
Specifies one or more dataset UIDs as a string separated with commas, in the format:  
dsl, ds2, ...., dsn
This argument is valid only if you specify process mode.

-dataset_list
Specifies the absolute path to an input file that contains a list of dataset UIDs to process. Each dataset must appear on a new line of this file. This argument is valid only if you specify process mode.

-output-dir
Specifies the absolute path to the directory where the report file is generated. If no path is specified, the report is generated in /output_dir. This argument is valid only if you specify query mode.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
- Create bounding box and TruShape data for all the JT datasets in the database. You can do this in one of two ways:
  - Create a report file of the datasets that do not have bounding box information as a log file. Process the log file and create the missing bounding box information on the dataset. This method is suitable if you have a large quantity of data to process as you can split the report log file can be split into multiple files, allowing the utility to process fewer datasets in each execution:
    ```
    create_or_update_bbox_and_tso -u=<user> -p=<password> -g=<group> -mode=query -translation_mode=JTTOBBOX+JTTOTSO -output_dir=c:\temp
    create_or_update_bbox_and_tso - u=user> -p=password> -g=group> -mode=process -translation_mode=JTTOBBOX+JTTOTSO -dataset_list=c:\temp\file generated by above command
    ```
  - Query and process the datasets with a single command:
    ```
    create_or_update_bbox_and_tso -u=<user> -p=<password> -g=<group>
    ```
-mode=query+process -translation_mode=JTTOBBOX+JTTOTSO

- Create bounding boxes for all NX datasets in the database. You can do this in one of two ways:
  - Create a report file of the datasets that do not have bounding box information as a log file. Process the log file and create the missing bounding box information on the dataset. This method is suitable if you have a large quantity of data to process as you can split the report log file can be split into multiple files, allowing the utility to process fewer datasets in each execution:

    ```
    create_or_update_bbox_and_tso -u=user> -p=password> -g=group> 
    -mode=query -translation_mode=NXBBOXTOBBOX -output_dir=c:\temp
    ```

    ```
    create_or_update_bbox_and_tso -u=user> -p=password> -g=group> 
    -mode=process -translation_mode=NXBBOXTOBBOX 
    -dataset_list=c:\temp\file generated by above command>
    ```
  - Query and process the datasets with a single command:

    ```
    create_or_update_bbox_and_tso -u=<user> -p=<password> -g=<group> 
    -mode=query+process -translation_mode=NXBBOXTOBBOX
    ```

- Create a report file of all NX datasets in a log file that do not have an associated UGPART-BBOX form:

    ```
    create_or_update_bbox_and_tso -u=<user> -p=<password> -g=<group> 
    -mode=query -translation_mode=NXBBOXTOBBOX 
    -output_dir=c:\temp\report.txt
    ```

- Delete all bounding box and TruShape data associated with a specified item revision:

    ```
    create_or_update_bbox_and_tso -u=<user> -p=<password> -g=<group> 
    -mode=delete -dataset=uid_of_item_rev1 or absocc1[,uid_of_item_rev2 or absocc2, ...]
    ```

- Delete all bounding box and TruShape data associated with the parts specified in an input file:

    ```
    create_or_update_bbox_and_tso -u=<user> -p=<password> -g=<group> 
    -mode=delete -dataset_list=<path of file containing a list of uids of item revisions or absolute occurrences separated by new lines>
    ```

- Delete all bounding box data in the database:

    ```
    create_or_update_bbox_and_tso -u=<user> -p=<password> -g=<group> 
    -delete_all_bboxes
    ```
generate_tc_ps_path

Runs an ITK program that accepts the changed part list and generates the paths up to the top assembly for each item revision.

**SYNTAX**

generate_tc_ps_path [-u=user-id -p=password | -pf=password-file -g=group] [-revision_rule=rule-name] -item_rev_list=rev-file-name [-item_type=item-type] [-out_file=output-file-name] -output_format= new | old [-configure_top_level_revs= yes | no] -rev_full_file=rule-file-name [-h]

**ARGUMENTS**

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-item_rev_list
Defines the file containing the list of item revisions. Typically, this file is the output from the find_released_item_rev utility or the find_recently_saved_item_rev utility. This file can also be custom made.
-revision_rule
Defines the revision rule on the basis of which the configured parent is returned. These revision rules are used to determine whether they configure the item revisions specified in the item_rev_list file.
This argument may be repeated for various revisions rules.
This argument is not allowed if the rev_rule_file argument is defined, specifying the name of a file containing the list of revision rules. Otherwise, this argument is mandatory.

-out_file
Specifies the file to be used to write the utility output. If not defined, the output is written in the standard output.

-output_format
Specifies whether the utility output is in new format or old format. This argument is optional. If it is not defined, the new format is used. Possible values for this option are new and old.
The old format is as follows:
@DB/VEH0001/004, @DB/VPPS0002/001, @DB/VPPS0006/001, @DBIA0009/002: Precise; Aplp2 Best w/PDI
The new format is as follows:
PathPartRev@DBseparatorItem IDseparatorRevID/PartRev
[PartRev@DBseparatorItemIDseparatorRevID]/PartRev]
RevisionRuleRevisionrulename/RevisionRule/Path

-item_type
Specifies the item type of the top-level assembly. The utility lists only those paths with top-level assemblies of this type. In cases where such assemblies have parents, the defined path begins at the item with the given type. This argument is optional.

-rev_rule_file
Lists all the revisions rules to be used for the found item revisions. This argument is optional only if the revision rule arguments are defined; otherwise, this argument is required.
If both the revision_rule argument and the rev_rule_file argument are defined, the rev_rule_file argument takes precedence.

-configure_top_level_revs
Specifies whether to configure the top-level revision. This argument is optional.
If Yes is specified, the top-level item of the changed item revision is configured and the changed item revision is checked to determine if it uses the top-level item revision.
If No is specified, or the argument is not specified, the top levels are not configured.

-h
Displays help for this utility.

ENVIRONMENT
This utility should be run from a shell where the Teamcenter environment is set.

FILES
As specified in Log files produced by Teamcenter.
RESTRICTIONS
None.

EXAMPLES
To generate a path for the item revisions specified in a text file:

```
generate_tc_ps_path -item_rev_list=released_items.txt
-revision_rule=revision-rule-name -output_file=path_list.txt
-output_format=new -configure_top_level_revs=no
```
identify_non_structure_edges

Marks parent and child items that are ignored when adding, listing, or removing entries in spatial indexes. There are four ways to use this utility.

- Adding and specifying what to add using parallel lists of item IDs or UIDs. For example, in a parallel list of parents and children, the first parent goes with the first child, the second parent goes with the second child, and so on.

- Adding and specifying what to add by a parent item type and child item type.

- Listing all elements or optionally specifying that only elements relevant to a particular product or particular parent or child objects be listed.

- Removing and specifying what to remove by giving parallel lists of item IDs or UIDs. For example, in a parallel list of parents and children, the first parent goes with the first child, the second parent goes with the second child, and so on.

**SYNTAX**

```plaintext
identify_non_structure_edges [-u=user-ID [-p=password | -pf=password-file] ] [-g=group] ]
[-add [-parent_item_id=parent-object1, parent-object2, ... | @filename]
-child_item_id=child-object1, child-object2, ... | @filename] |
-parent_uid=parent-uid1, parent-uid2, ... | @filename] |
-child_uid=child-uid1, child-uid2, ... | @filename] |
-parent_item_type=parent-type -child_item_type=child-type] ]
[-remove [-parent_item_id=parent-object1, parent-object2, ... | @filename]
-child_item_id=child-object1, child-object2, ... | @filename] |
-parent_uid=parent-uid1, parent-uid2, ... | @filename] |
-child_uid=child-uid1, child-uid2, ... | @filename] ]
[-list [-all [parent1, parent2, ... | @filename] ]
[child1, child2, ... | @filename] ]
[product=product1, product2, ...
[-parent_item_id=parent1, parent2, ... | @filename]
[-child_item_id=child1, child2, ... | @filename] ] |
[-parent_uid=parent1, parent2, ... | @filename]
[-child_uid=child1, child2, ... | @filename] ]
[-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID. The user must have administrative privileges.

  If this argument is used without a value, the operating system user name is used.

  **Note** If your Teamcenter server uses Security Services single sign-on, see *Before you begin* for additional information.

- **-p**
  Specifies the user’s password.

  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

-add
Adds entries for parent and child pairs. You can specify a parent and child object pair using item IDs or UIDs. You enter the identifiers as parallel, comma-separated lists for the parent and child flags.

For long lists of values, you can create parent and child object files that contain a separate identifier on each line. Use the @file-name values to supply the file names on the command line in place of the comma-separated lists.

Alternatively, you can use the -parent_item_type=parent-type and -child_item_type=child-type flags to specify a parent item and child item type pair.

-remove
Removes entries for parent and child pairs. You can specify a parent and child object pair using item IDs or UIDs. You enter the identifiers as parallel comma-separated lists for the parent and child flags.

For long lists of values, you can create parent and child object files that contain a separate identifier on each line. Use the @file-name values to supply the file names on the command line in place of the comma-separated lists.

-list
Lists all entries when used with the -all argument without the optional parent or child object specifications. You can filter the listed entries by specifying parent or child objects using item IDs or UIDs. You can narrow the filter by specifying both parent and child objects to get a list of entries containing the parent objects that have at least one of the specified child objects. You enter the identifiers as comma-separated lists for the parent and child arguments.

Optionally, you can list only those entries associated with one or more specified products using the -product=product-name argument. You can filter the product entries by specifying parent or child objects or both parent and child objects in the same way as the -all argument.

For long lists of values, you can create parent and child object files that contain a separate identifier on each line. Use @file-name values to supply the file names on the command line in place of the comma-separated lists.

**EXAMPLES**

- To add parent-item and child-item pairs pitem1, pitem2 and citem1, citem2, enter the following command on a single line:

```
identify_non_structure_edges -u=infodba -p=infodba -g=dba
-add -parent_item_id=pitem1,pitem2,pitem3
-child_item_id=citem1,citem2,citem3
```
To add parent-item and child-item pairs `puid1`, `puid2` and `cuid1`, `cuid2`, enter the following command on a single line:

```bash
identify_non_structure_edges -u=infodba -p=infodba -g=dba
-add -parent_uid=puid1,puid2,puid3,puid4
-child_uid=cuid1,cuid2,cuid3,cuid4
```

To add parent-item and child-item pairs where the parent item is of type `ItemType1` and the child item is of type `ItemType2`, enter the following command on a single line:

```bash
identify_non_structure_edges -u=infodba -p=infodba -g=dba
-add -parent_item_type=pitemtype
-child_item_type=citemtype
```

**Note** This example uses the parent and child item type, rather than the parent and child item ID.

To list all parent-item and child-item pairs, enter the following command on a single line:

```bash
identify_non_structure_edges -u=infodba -p=infodba -g=dba -list -all
```

To list parent-item and child-item pairs by product, enter the following command on a single line:

```bash
identify_non_structure_edges -u=infodba -p=infodba -g=dba
-list -product=product1
```

To remove parent-item and child-item pairs using item IDs, enter the following command on a single line:

```bash
identify_non_structure_edges -u=infodba -p=infodba -g=dba
-remove -parent_item_id=pitem1,pitem2,pitem3
-child_item_id=citem1,citem2,citem3
```

To remove parent-item and child-item pairs using UIDs, enter the following command on a single line:

```bash
identify_non_structure_edges -u=infodba -p=infodba -g=dba
-remove -parent_uid=puid1,puid2,puid3,puid4
-child_uid=cuid1,cuid2,cuid3,cuid4
```

To remove parent-item and child-item pairs using a file containing the item IDs, create a parent and child file containing a single ID on each line. The pairs are determined by the order of the values in the file, for example:

Create a `parentList.txt` file with the following contents:

```
pitem1
pitem2
:
pitemN
```

Create the `childList.txt` file with the following contents:

```
citem1
citem2
:
citemN
```

Enter the following command on a single line:
identify_non_structure_edges -u=infodba -p=infodba -g=dba
-remov e -parent_item_id=@parentList.txt -child_item_id=@childList.txt
item_to_part_design

Converts instances of the Item class and its subtypes to specified instances of the Part and Design classes or their subclasses or subtypes. Use this utility if you have existing product structure containing items that you want to convert to separate part and design (CAD) objects. You must create a text file that provides the necessary input for the conversion process.

**Note** You must restart the Teamcenter server after running this utility for the new objects to be visible in the rich client.

The utility allows you to:

- Convert all objects in the system or a specified set of objects of a given source type to given target types.

- Specify the source as the Item class or its subtypes and specify the target as the Part and Design classes, their subclasses, or subtypes.

**Caution** After you run this utility, you cannot revert the changes.

You must analyze the impact on business rules (for example, property rules and GRM rules) of the conversion and then plan accordingly. The utility does not check the validity of the business rules.

Performance may be poor if you try to convert the entire database or a large structure. If possible, limit the structure size or the number of objects to convert.

The following conversions are supported by this utility:

- **Item** subtypes to Part subtypes
- **Item** subtypes to Design subtypes
- **Item** subtypes to Part class
- **Item** subtypes to Part subclass
- **Item** subtypes to Design class
- **Item** subtypes to Design subclass
- **Item** class to Part class
- **Item** class to Part subclass
- **Item** class to Design class
- **Item** class to Design subclass

The utility operates in three modes:

- **type_based**
Input from the user is an item class or its subtype, which is a source type. The user specifies a target type. All objects in the database of source type are converted to the target type.

- **item_id_based**
  In this mode, the user specifies a comma-separated list of item IDs, together with the source and the target types. Only the valid item IDs listed in the input file are converted from the source type to the target type.

- **structure_based**
  The user specifies the item identifier of the top-level item in the structure, together with the source and the target types. This mode converts all the valid children of the top-level item to the target type.

The user must create a text file that contains input to the entire conversion process.

**SYNTAX**

```
item_to_part_design [-u=user-id -p=password | -pf=password-file -g=group] [-mode=type_based | item_id_based [-itemid=item-id | -key_property_list=key-id-list] | structure_based [-itemid=item-id | -itemkey=key-id] ] -file=input-file-name [-rf=report-file-name] [-dryRun=true/on | false/off] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.
  If this argument is not used, the system assumes the **user-ID** value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.

For more information about managing password files, see **Manage password files**.

This argument is mutually exclusive with the **-p** argument.
-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-mode
Specifies type_based, item_id_based, or structure_based.

-itemid
Specifies the ID of the item to be exported. Valid only if no input file is specified using the -i option.

-itemkey
Specifies the key of the object. You can use the -itemid argument or the -itemkey argument.
To find the key of an object, use the get_key_string utility.
For more information, see the Business Modeler IDE Guide.

-key_property_list
Specifies the key attributes of the object except the item ID.
To find the key of an object, use the get_key_string utility.
For more information, see the Business Modeler IDE Guide.

-file
This argument is mandatory for all the conversion modes.
Specifies the name of the input file containing conversion parameters, including the full path. The input file is a list of key-value pairs. The keys indicate the source and target item types. The input file has the following format:

```
source_class_name=Item class | SubType
target_class_name=Part/Design class | SubClass | SubType
item_id_list=Name of input file
```
Ensure you use internal names for the source and target.

Note: The list of item IDs must end with a comma (,).

-rf
This optional argument specifies the name and location of the report file. If you do not specify a name and location, the system writes the file to C:\temp on Microsoft Windows systems or /tmp on other systems. It is not applicable in type_based mode.

-dryRun
This optional argument causes the utility to validate if the specified items or structure can be validated, but does not perform the conversion. Valid values are true or on and false or off (case sensitive). It is not applicable in type_based mode.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.
Chapter 3  Product configuration utilities

FILES

As specified in Log files produced by Teamcenter.

RESTRICTIONS

- Execute this utility when no other activity is present on the database.
- This utility changes only the type of item object, its revisions, master form, and revision master form.
- The storage class of source and target master forms is assumed to be same. If the attributes on the source and target form storage class are different, the utility does not know how to map those attributes. Hence the utility does not change the storage class of the form, but converts the form object itself to the target class. For example, while converting the standard Item class to Design, it performs the following conversion:
  - Before conversion, the item master form (a form storage class) is an item master.
  - After conversion, the design master form (a form storage class) is an item master.
- The utility converts objects in a particular database. If the objects being converted are exported to different sites, either the replica of the object must be deleted before conversion or replica objects also need to be converted in a similar fashion. If the replica objects are not converted due to change of type, synchronizing of data does not occur.
- If you use item_id_based mode or structure_based mode, items with export records or conflicting GRM rules are not converted. They are converted if you use type_based mode.
- The conversion of item subclass instances is not supported.
- The utility does not support source and target classes or subtypes other than those listed in the description.
- Any customization of the source object type is not supported after conversion to the target type.
- If the target is a subclass of Part or Design with custom attributes, those custom attributes of the converted instance or object are populated with default values, if any are defined. If none are defined, the custom attributes are null.

EXAMPLES

- The following example uses type_based mode and converts all the objects of a source type to a target type defined in the Sample.txt file:

  ```
  item_to_part_design -u=infodba -p=infodba -g=dba -mode=type_based -file="C:\Sample.txt"
  ```

  The contents of Sample.txt are:

  ```
  source_class_name=Item
target_class_name=Part
  ```
The following example uses **item_id_based** mode and converts all of the **valid** items listed in the **Sample.txt** file from source type to target type. No dry run is performed, but a report is written to the **ReportFile.txt** file.

```bash
item_to_part_design -u=infodba -p=infodba -g=dba
   -mode=item_id_based -rf="C:\temp\ReportFile.txt"
   -file="C:\Sample.txt" -dryRun=false
```

The contents of **Sample.txt** are:

```plaintext
source_class_name=Item
target_class_name=Part
item_id_list=000001,000004,000009,
```

The following example uses **item_id_based** mode and converts all of the **valid** items listed in the **Sample.txt** file from source type to target type. A dry run is performed, and a report is written to the default location.

```bash
item_to_part_design -u=infodba -p=infodba -g=dba
   -mode=item_id_based -file="C:\Sample.txt" -dryRun=true
```

The contents of **Sample.txt** are the same as in the previous example.

The following example uses **structure_based** mode and converts all the **valid** items and children of the specified item identifier from a source type to a target type defined in the **Sample.txt** file. No dry run is performed, but a report is written to the **ReportFile.txt** file.

```bash
item_to_part_design -u=infodba -p=infodba -g=dba
   -mode=structure_based
   -rf="C:\temp\ReportFile.txt" -file="C:\Sample.txt"
   -dryRun=false -itemId=000008
```

The contents of **Sample.txt** are:

```plaintext
source_class_name=Item
target_class_name=Part
```

**Note**  **item_id_list** is not required.

The following example uses **item_id_based** mode with the **key_property_list** argument. Because the multifield key is defined as **item_id,object_type**, only the **object_type** property is given (which is **Mfk2Item**).

```bash
item_to_part_design -u=infodba -p=infodba -mode=item_id_based
   -key_property_list=object_type=Mfk2Item -file=itemlist.txt
```
multiple_svr_variant_configurator

Assists in creating configured structure representations using saved variant rules (SVRs) from unconfigured structure representations.

- Use the **bomwriter** utility to generate an unconfigured PLM XML file containing product structure information, including the variant conditions for child lines.

- Use the **multiple_svr_variant_configurator** utility to read the unconfigured PLM XML file and the specified SVRs.
  
  The utility generates multiple pruned PLM XML files, corresponding to each SVR.

- Optionally, import pruned PLM XML files back into Teamcenter as **DirectModelAssembly** datasets using the **import_file** utility.

- Open the configured PLM XML files or datasets in Lifecycle Visualization.

**Note** Before running this utility, there must be a **DirectModelAssembly** dataset with a **TCEng_rdv_plmxml_unconfigured** relation placed under the product revision containing the unconfigured PLM XML file. Import the dataset using the **import_file** utility, ensuring that the variant XML preexists as a named reference of the unconfigured dataset.

**SYNTAX**

```
```

**ARGUMENTS**

- **-u**
  
  Specifies the user ID.
  
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  
  Specifies the password.
  
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.
  
  If this argument is not used, the system assumes the **user-ID** value to be the password.
-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

-product_id
Specifies the product item ID. Specify the top level of the assembly for which you want to generated configured PLM XML files.

-product_rev
Specifies the product revision ID. Specify the top level of the assembly containing the SVRs.

dataset_name
Specifies the name of the dataset under the product revision containing the unconfigured files. This must be a DirectModelAssembly dataset with a TCEng_rdv_plmxm_xml_unconfigured relation placed under the product revision containing the unconfigured PLM XML file.

-log_file
Specifies the full path to the log file in which activity is recorded. Use this argument only when importing the pruned PLM XML files.

directory_name
Specifies the full path to the directory in which the pruned PLM XML files are stored. The user running the utility must have write access to this directory.

-svr_input_file
Specifies the full path to the file containing the SVRs with which to configure the assembly.

You must specify either the -svr_input_file or the -process_all_svrs argument for the utility to run. If both are specified, -svr_input_file takes precedence.

-process_all_svrs
Specifies that all SVRs are processed. The valid value is Y.

You must specify either the -svr_input_file or the -process_all_svrs argument for the utility to run. If both are specified, -svr_input_file takes precedence.

-is_import_required
Specifies whether the pruned files are imported. Valid values are Y and N. The default setting is N.

If you set this argument to Y, you must set the -import_utility and -import_utility_parameters arguments.

-import_utility
Specifies the full path to the import_file utility, used to import the pruned files.
Chapter 3  Product configuration utilities

If you set this argument, you must set the -import_utility_parameters argument.

**-import_utility_parameters**
Sets the required parameters of the import_file utility. Specify parameters in a single string. Separate each parameter with a hash sign (#). For example:

```bash
-import_utility_parameters=#-u=userID#-p=password#-g=group#-d=ConfiguredAll
#-relation=TCEng_rdv_plmxml_configured#
-use_existing=no#-f=#-item=ABC00004#-revision=001#
```

**-h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
Before running this utility, there must be a DirectModelAssembly dataset with a TCEng_rdv_plmxml_unconfigured relation placed under the product revision containing the unconfigured PLM XML file. Import the dataset using the import_file utility, ensuring that the variant XML preexists as a named reference of the unconfigured dataset.

**EXAMPLES**

- In the following example, all SVRs listed in the input_svr.txt file are used to generate multiple pruned PLM XML files, one file for each SVR. The files are not imported. The pruned PLM XML files are generated from the multi_svr directory.

  ```bash
  multiple_svr_variant_configurator -u=userID -p=password -g=admin -product_id=ABC004
  -product_rev=001 -dataset_name=ABC00004Unconfigured2
  -directory_name=c:\temp\multi_svr -svr_input_file=c:\temp\multi_svr\input_svr.txt
  ```

- In the following example, all SVRs under the ABC004/001 product revision are used to generate multiple pruned PLM XML files, one file for each SVR. The files are not imported. The pruned PLM XML files are generated from the multi_svr directory.

  ```bash
  multiple_svr_variant_configurator -u=userID -p=password -g=admin -product_id=ABC004
  -product_rev=001 -dataset_name=ABC00004Unconfigured2
  -directory_name=c:\temp\multi_svr -process_all_svrs=y
  ```

- In the following example, all SVRs under the ABC004/001 product revision are used to generate multiple pruned PLM XML files, one file for each SVR. The files are then imported back into the Teamcenter database.

  ```bash
  multiple_svr_variant_configurator -u=userID -p=password -g=admin
  -product_id=ABC004 product_rev=001 -dataset_name=ABC00004Unconfigured2
  -directory_name=c:\temp\multi_svr -process_all_svrs=y -is_import_required=Y
  -log_file=c:\temp\multi_svr\log_file.txt
  -import_utility=(TC_ROOT)\bin\import_file -import_utility_parameters=#-u=userID
  #-p=password#-g=admin#-d=ConfiguredAll#-ref=ConfiguredAssembly
  #-type=DirectModelAssembly#-relation=TCEng_rdv_plmxml_configured
  #-desc=ConfiguredAll
  #-use_existing=no#-f=#-item=ABC00004#-revision=001#
  ```
The parameters for the `import_file` utility are set in a single string, each parameter separated by a hash mark (#). The `-d` parameter specifies the prefix to the dataset names created upon import, followed by an underscore. For example:

```
ConfiguredAll_
```

You must include the `-f` parameter in the parameter string for the `import_file` utility. Do not assign it a value. The import utility automatically supplies the pruned PLM XML files.
ps_exportconfignxassembly

Enables a site to export a configured NX assembly. The assembly is configured using
the given revision rule and saved variant rule.

SYNTAX

```
ps_exportconfignxassembly [-u=user-id  -p=password  |
 -pf=password-file  -g=group]  
 -item=top-item-id  |  -key=keyAttr1=keyVal1[,keyAttr2=keyVal2]...[],keyAttrN=keyValN]  
 -rev=top-rev-id  [-revrule=revision-rule]  
 -variant=saved-variant-rule  [-scopeitem=item-id]  
 [-scoperev=rev-id]  [-display]  [-verbose=y | yes | n | no]  
 [-exclude=itemid1,itemid2,itemiid3,...]  
 |  -excludekeys=keyAttr1=keyVal1[,keyAttr2=keyVal2]...[,keyAttrN=keyValN];keyAttr1=keyVal1[,keyAttr2=keyVal2]...[,keyAttrN=keyValN];...] [-h]
```

ARGUMENTS

-`u`
  Specifies the user ID.

  This is a required argument unless the **TC_auto_login** site preference is set.

  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  
  If Security Services single sign-on (SSO) is enabled for your server, the -`u` and -`p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-`p`
  Specifies the password.

  This is a required argument unless the **TC_auto_login** site preference is set.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the -`pf` argument.

  If this argument is not used, the system assumes the user-ID value to be the password.

-`pf`
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see **Manage password files**.

  This argument is mutually exclusive with the -`p` argument.

-`g`
  Specifies the group associated with the user.

  This is a required argument unless the **TC_auto_login** site preference is set.

  If used without a value, the user’s default group is assumed.
-item
Specifies the item ID of the item to be exported. This argument is required unless -key is defined. If both -item and -key are defined, -key takes precedence.

-key
Specifies the key of the item to be exported. This argument is required unless -item is defined. If both -item and -key are defined, -key takes precedence.

To find the key of an object, use the get_key_string utility.
For more information, see the Business Modeler IDE Guide.

-rev
Specifies the revision ID of the top line of the structure to be exported. This argument is optional. If specified, the rest of the structure below the top line is configured by the -revrule argument. If not specified, the entire exported structure is configured by the -revrule argument.

-revrule
Specifies the revision rule to use to configure the structure. This argument is required.

-variant
Specifies the name of the variant rule to apply to configure the structure. This argument is required.

-scopeitem
This is an optional argument. Include this argument if and only if the given variant rule is not attached to the exporting item (top item) but is attached to this scope item's revision. The item revision is specified in the scoperev argument.

-scoperev
This is an optional argument. Include this argument if and only if the given variant rule is not attached to the exporting item (top item) but is attached to this scoperev.

-display
Displays the output folder to the screen. This argument is optional. If this argument is not specified, the output folder is not displayed at the end of the successful operation.

-verbose
Prints the debug statement. This argument is optional. The default value is n.

-exclude
Specifies the list of item IDs to exclude from exporting after the structure is configured using the revision rule and saved variant rule. This argument is optional.

-excludekeys
Specifies the list of keys to exclude from exporting after the structure is configured using the revision rule and saved variant rule. This argument is optional.

-h
Displays help for this utility.

ENVIRONMENT
NX must be installed and configured.
As specified in *Manually configuring your environment for Teamcenter utilities*.

### FILES

As specified in *Log files produced by Teamcenter*.

### RESTRICTIONS

The files are created in the folder specified by the `TC_TMP_DIR` variable. The value of `TC_TMP_DIR` must be set to the desired destination directory temporarily before running the utility.

### EXAMPLES

- **Exports** `TopAssmRevA` after configuring the structure below the top line with the **Latest Working** revision rule and **Tire200** saved variant rule. **SubAssm1** is excluded from the export even though it was configured.

  ```
  ps_exportconfigassembly -u=infodba -p=infodba -g=dba
                    -item=TopAssm1 -rev =TopAssmRevA -revrule=Latest Working
                         -variant=Tire200 -display -verbose=y -exclude=SubAssm1
  ```

- **Exports** `TopAssmRevA` after configuring the structure below the top line with the **Latest Working** revision rule and **Tire200** saved variant rule. There is no exclusion list provided in this example.

  ```
  ps_exportconfigassembly -u=infodba -p=infodba -g=dba
                          -item=TopAssm1 -rev =TopAssmRevA -revrule=Latest Working
                         -variant=Tire200 -display -verbose=n
  ```

- **Exports** `SubAssmRevA` after configuring the structure below the top line with the **Latest Working** revision rule and **Tire200** saved variant rule. The saved variant rule is attached to `TopAssmRevA`.

  ```
  ps_exportconfigassembly -u=infodba -p=infodba -g=dba
                -item=SubAssm1 -rev =SubAssmRevA -revrule=Latest Working
                    -variant=Tire200 -scopeitem=TopAssm1 -scoprev=TopAssmRevA
  ```

- **Exports** revision **A** of the item with key of **CarModel**. The structure below the top line is configured with the **Latest Working** revision rule and **Car1** saved variant rule.

  ```
  ps_exportconfigassembly -u=xxx -p=yyy
             -key=item_id=CarModel -rev=A
                -revrule="Latest Working" -variant=Car1 -verbose=y
  ```
ps_rename_bvrs

Renames BOM views and BOM view revisions using the current naming scheme. The new name can differ from the old name because the naming scheme has changed or because the name of the view type has changed.

By default, the utility runs on all BOM views and BOM view revisions in the database, but it can accept an item ID argument (including wildcards) or a key argument, defining a set of objects to rename.

**SYNTAX**

```
ps_rename_bvrs [-u=user-id -p=password | -pf=password-file -g=group] [-item=item_pattern] [-key=[keyAttr1=keyVal1],keyAttr2=keyVal2]...[keyAttrN=keyValN] [-view=view-type] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  
  This is a required argument unless the `TC_auto_login` site preference is set.
  
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  
  This is a required argument unless the `TC_auto_login` site preference is set.
  
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  
  For more information about managing password files, see `Manage password files`.
  
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  
  This is a required argument unless the `TC_auto_login` site preference is set.
  
  If used without a value, the user’s default group is assumed.
Chapter 3  

Product configuration utilities

- **item**
  Specifies which BOM views or BOM view revisions to rename by a pattern match on the parent item ID.

- **key**
  Specifies which BOM views or BOM view revisions to rename by key. Use the following format:
  
  \[keyAttr1=keyVal1\] ,\[keyAttr2=keyVal2\]...\[keyAttrN=keyValN\]
  
  To find the key of an object, use the `get_key_string` utility.
  
  For more information, see the *Business Modeler IDE Guide*.

- **view**
  Specifies which BOM views or BOM view revisions to rename by BOM view type. The default is to rename BOM views or BOM view revisions of all types.

- **v**
  Verbose mode.

- **h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities* and the following preferences:

  **TC_ignore_case_on_search**

  **TC_pattern_match_style**

  For more information about these preferences, see the *Preferences and Environment Variables Reference*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

Wildcard characters used in the **item** argument may require enclosure in double quotation marks to prevent the shell from expanding them.

**EXAMPLES**

- To update names of all BOM views and BOM view revisions (BVRs) in the database, enter the following command:

  \$TC_ROOT/bin/ps_rename_bvrs

- Consider a site where the **Manufacturing** BOM view type is renamed to **M Site 1**. To rename all BOM views and BOM view revisions with parent item IDs beginning **pbx** to agree with the new name, enter the following command on a single line:

  \$TC_ROOT/bin/ps_rename_bvrs -view=\"M Site 1\" -item=\"pbx\"
ps_traverse

Traverses a product structure and reports BOM line attributes and workspace attribute values in a file in delimited format. It also sets an assembly to precise and releases/transfers ownership of the item revisions that constitute the structure. The inputs for these are taken from a configuration file and the input for product structure configuration are taken from the command line options.

A configuration file for input is mandatory. If the te.cfg file exists in the current directory, it is considered. If not, a configuration file must be specified by the -cfg options. A sample configuration file is provide in the $TC_ROOT directory.

**SYNTAX**

```
ps_traverse [-u=user-id  -p=password  |  -pf=password-file  -g=group]  
-itemid=item-to-traverse  
-rev=revision-for-item-to-traverse  
[-revrulen=revision-rule-to-configure-BOM-window]  
[=viewtype=type-of-item-revision-BVR-to-traverse]  
[-variant=saved-variant-object-to-configure-BOM-window]  
[=packlines=true  |  false]  
[-cfg=configuration-file-for-options]  
[report=report-file-for-output]  
-h
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.
-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-itemid
Specifies the ID of the item for which the associated BOM view revision (BVR) is traversed. (BOM view revisions are associated with revisions corresponding to the specified item.)

-rev
Specifies the revision of the item specified by the -itemid argument. The revision must have an associated BVR.

-viewtype
Specifies the type of the BVR to be traversed.

-revrule
Specifies the revision rule used to configure the BOM window. The default revision rule is Latest Working.

-variant
Specifies the saved variant used to configure the BOM window. If more than one saved variant exists, the first one found is considered.

-log
Specifies the log file to which the output is directed. The default file is te.log.

-report
Specifies the file to which the report is written. The default file is tereport.txt.

-packlines
Indicates whether to pack or unpack BOM lines.

-cfg
Specifies the input configuration file. The default file is te.cfg.

-h
Displays help for this utility.

The configuration file is a text file in which entries must be made under the following separate headings:

  bomreport=
  Valid values for this attribute are the display names of columns in Structure Manager, for example, Rule configured by and Sequence No., and are case sensitive. Values listed in the columns are reported for each node in the BOM.

  woreport=
  The values of these object attributes in workspace listed under this entry are reported.
formattributes=
The form attributes to be reported are listed under this string. These should be in the format Form Type Name:attribute. The form values are truncated to 200 characters.

action=
The actions to be performed while traversing product structure are listed under this heading. The following actions are supported:

- fastrelease
- changeowner
- setprecise

Note When the setprecise action is specified, other actions and reporting inputs are ignored and the utility makes only the specified assembly precise.

relstat=
Specifies the release status to be applied if the specified action is fastrelease.

newowner=
Lists the new owner to whom the object ownership is transferred if the changeowner action is specified.

alternate=
Specifies whether alternates are processed. Valid values are Yes and No.

delimiter=
Specifies the delimiter used to separate attribute values in report generation. The default delimiter is a semicolon (;).

columnwidth=
Specifies the attribute values used in report generation. The default column width is 20 characters.

EXAMPLES
Following is the content of the ps_traverse.cfg sample configuration file, which is located in the $TC_ROOT\sample\examples directory.
### Sample configuration file

```plaintext
alternate=
yes
bomreport=
BOM Line Name
woreport=
Name
Revision
Owner
formattributes=
delimiter=
#
columnwidth=
25
action=
#fastrelease
#changeowner
#setprecise
relstat=
X
newowner=
infodba
group=
dba
```
**ps_upload**

Creates an imprecise product structure based on an input file.

**SYNTAX**

```
```

**ARGUMENTS**

- **-u**  
  Specifies the user ID.  
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**  
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**  
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see *Manage password files.*
  This argument is mutually exclusive with the -p argument.

- **-g**  
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-o**  
  Specifies overwrite mode. Default value is **on**.

- **-f**  
  Displays a help message about the input file format.

- **-c**  
  Specifies the item class name to create. Specify either **Item** or **Architecture**.

- **-t**  
  Specifies the default item type to create.
-v
Displays verbose information.

-i
Specifies the full path to an input file.

-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
The default mode, **overwrite**, replaces any existing structures with the information contained in the input file.

INPUT FILE FORMAT
The input file consists of lines of comments, directives, and items. Each item and key line defines an item that the **ps_upload** utility creates. The comments and directive lines only alter the input file parsing behavior. They have no effect on the created items.

The structure hierarchy is determined by the level column (where the top level is level zero). The textual indentation of the item ID in the example file is only to make it more readable. Each time a level zero item is created, a new structure is started. Therefore, many structures (including single items) can be created from a single input file.

The top-level item in each structure is added to the user’s **Newstuff** folder.

**Note** Do not show more than one occurrence of the same expanded assembly or you duplicate its contents.

The **ps_upload** utility assigns **A** as the initial revision ID.

With the exception of lines beginning with **#DELIMITER**, **#SUB_DELIMITER**, or **#COL**, the pound sign (#) in the first column indicates a comment that is ignored. Completely blank lines are also ignored.

**#DELIMITER** x Specifies the delimiter. Default value is a space.

**#SUB_DELIMITER** x Specifies the sub-delimiter. Default value is a semicolon ;.

**#COL** Specifies the column heading order.

The format is **#COL field field field ....**

The default value is:

```
item arch_element_id name level seq occs qty uom sub
```

**key** Specifies the key. To find the key of an object, use the **get_key_string** utility.

For more information, see the *Business Modeler IDE Guide*.

**item** Specifies the item ID.
rev

Specifies a revision letter other than the default. The default is A.

**Note** You can create multiple revisions of the same item. Do this by first creating the item without specifying a level so that the item is not placed into any structure. Enter a line for each revision required. The rev column can then be left blank in the structure lines for items already created.

arch_element_id

Specifies the architecture element ID.

option

Specifies an option and set of allowed values to be defined and attached to the item being created by that line. The format is:

```
Option-name; Value; Value...
```

**Note** The delimiter must be that defined for substitutes (#SUB_DELIMITER directive). In the previous example, the delimiter was a semicolon (;).

loadif

Specifies a simple variant condition using an option that has been defined in the previously created items. The variant condition is limited to one option/value expression. The format is:

```
Owning-ItemID; Option-name == or != Value
```

**Note** The delimiter must be that defined for substitutes (#SUB_DELIMITER directive). In the previous example, the delimiter was a semicolon (;).

name

Specifies the item name.

revname

Specifies the item revision name.

level

Specifies the structural hierarchy.

seq

Specifies the find number of the item in the BOM view.

occs

Specifies the number of occurrences of the item.

qty

Specifies the quantity of an item in the structure.

uom

Specifies the symbol representing the unit of measure.

sub

Specifies substitutes.

type

Specifies the item type. Note that the type must already exist in the database.

occname

Specifies the occurrence path name.

loadifkey

Specifies the key.
Substitutes

An entry in the substitutes column should consist of a delimiter-separated list of item IDs, where each substitute has been individually defined as a level 0 structure. The default column delimiter is a semicolon (;).

The #SUB_DELIMITER directive tells the system that the next nonspace character on the line is used as a delimiter. If there is no nonspace character after the #DELIMITER directive, the delimiter is set to a blank space (" "). The substitute delimiter cannot be the same as the column delimiter.

EXAMPLES

The following figure illustrates the general file layout and shows the arbitrary use of the #COL and #DELIMITER directives:

```
# Example File for ps_upload
# The product structure for a bicycle.
# Change the delimiter to a comma, so we can use spaces in the name
#DELIMITER ,
# We start off with the default column order, and define a few simple
# parts that can be used as substitutes later. Note that these parts do not
# have a Level defined,
# and so will not be part of any structure.
#    item  name   Level  Seq  Occs  Qty  Uom  Sub
b100,  Bolt type 100
b101,  Bolt type 101
# Now we get on to the main structure
b001,  bicycle, 0,
b002,  frame,  1,  10
b003,  26" Wheel, 1,  20,
b004,  Metal Spoke, 2,  10,  20
b005,  bolt,  2,  20,  - , 2,  - , b100 ; b101
b003,  26" Wheel, 1,  30
# Change the column order to show how its done!
#COL  Level  Seq  item  Uom  Name  Occs  Sub  Qty
1,  40,  b007,  -, Handlebars Assy,  2
2,  10,  b008,  -, Brake Level Assy, 2
2,  20,  b009,  -, Grips,  2
2,  30,  b010,  -, Handlebar Frame,
# Change Substitute Delimiter to /
#SUB_DELIMITER /
2,  40,  b005,  -, bolt,  -, b101 / b100, 2
1,  50,  b011,  -, Saddle,
# Change Delimiter to allow commas in the name
#DELIMITER $
1$  60$ 1001$ ml$ Oil, lubricating$  -$  -$ 100
1$  70$ 1002$ m$ Paint, red$  -$  -$ 2.4
```

Product structure input file
purge_baselined_item_revisions

Purges baseline revisions when the automatic purge process fails.

SYNTAX

```
purge_baselined_item_revisions [-u=user-id -p=password | -pf=password-file
     -g=group]
   [-item_id=item_id
     | -key=/keyAttr1=keyVal1[/,keyAttr2=keyVal2]…[,keyAttrN=keyValN]]
   -status=release-status [-date=yyyy MM dd hh mm ss | now | today] [-h]
```

ARGUMENTS

- **u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  
  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.
  If this argument is not used, the system assumes the **user-ID** value to be the password.

- **pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **item_id**
  Specifies the appearance root item.

- **key**
  Specifies the key of the appearance root item. Use the following format:

  ```
  [keyAttr1=keyVal1] [,keyAttr2=keyVal2]…[,keyAttrN=keyValN]
  ```

  To find the key of an object, use the **get_key_string** utility.
  For more information, see the **Business Modeler IDE Guide**.
-**status**
Purges baselined item revisions of the status specified by this argument.

-**date**
Purges baselined item revisions created before the date/time specified by this argument.

-**h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
None.

**RESTRICTIONS**
None.

**EXAMPLES**
None.
qsearch_process_queue

Updates or queries the spatial indexes used by the cacheless search mechanism. You can also use this utility to modify or query the state of the update queue process that updates these indexes.

**SYNTAX**

```plaintext
qsearch_process_queue [-u=user-id -p=password  | -pf=password-file -g=group]
                      [[-list_queue | -list_all_queue]] [-show_queue_oldest_date]
                      [-process_queue] [-process_queue_repeatedly  [-delay=N] [-repeat=M]]
                      [-clear_queue] [-force_queue_update Objects]
                      [-force_queue_substructure_update=Objects]
                      [-force_queue_all_leaf_item_updates] [-force_queue_all_possible_updates]
                      [-force_queue_all_necessary_updates] [-force_queue_all_inconsistent_updates]
                      [-tolerance=Percentage]] [-ask_global_search_box_delta] [-list_volumes=Objects]
                      [-list_index_boxes=Objects] [-list_structure_index_boxes=Objects]
                      [-clear_index_boxes] [-clear_structure_index_boxes=Objects] [-clear_all_indexes]
                      [-clear_queue_processed] [-clear_all_queue]
                      [-check_indexes=Objects]
                      [-check_structure_index_boxes=Objects]
                      [-list_suggested_updates=[filename]  | -force_queue_suggested_updates |]
                      [-follow_only_check_failures] [-find_cycles]
                      [-count_occurrences=Objects] [-count_substructure=Objects]
                      [-task=task-list] [-verbose] [-print_names] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.

  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-list_queue
Lists all unprocessed entries in the queue.

-list_all_queue
Lists all entries in the queue, including processed entries.

-show_queue_oldest_date
Shows the creation date of the oldest unprocessed entry in the queue.

-process_queue
Processes the unprocessed entries in the queue.

-process_queue_repeatedly
Processes the unprocessed entries in the queue repeatedly. Optionally, you can wait \( N \) seconds between process runs (default delay is 5 seconds). You can also specify a maximum of \( M \) times for the process to repeat (default is forever).

-delay
Specifies a delay of \( N \) seconds between process runs.

-repeat
Specifies a maximum of \( M \) times for the process to repeat (default is forever).

-clear_queue
Clears the unprocessed entries from the queue.

-force_queue_update
Adds an entry to the queue for the specified objects.

-force_queue_substructure_update
Adds a entry to the queue for the leaf items of the assembly beneath the specified objects. This action updates the entire assembly.

-force_queue_all_leaf_item_updates
Adds an entry to the queue for all leaf items. This action updates all assemblies.

-force_queue_all_possible_updates
Adds an entry to the queue for the primary of each TC_bounding_box relation.

-force_queue_all_necessary_updates
Adds an entry to the queue for the primary of each TC_bounding_box relation that lacks an index.

-force_queue_all_inconsistent_updates
Adds an entry to the queue for the primary of each TC_bounding_box relation with an apparently inconsistent index. You can optionally specify the percentage inconsistency to ignore, overriding the default value of 10%.

-tolerance
Specifies the percentage of inconsistency to ignore.
-**ask_global_search_box_delta**
Calculates the current global search box delta.

-**list_volumes**
For each specified object, lists the total volume occupied by all its contributing bounding-boxes and the total volume of all its index-boxes.

-**list_index_boxes**
Lists the index boxes for the specified objects.

-**list_structure_index_boxes**
Lists the index boxes for all possible configured structures for the given objects.

-**list_all_index_boxes**
Lists the index boxes for all objects.

-**clear_indexes**
Removes the indexes from the specified objects.

-**clear_structure_indexes**
Removes the indexes for all possible configured structures from the specified objects.

-**clear_all_indexes**
Removes the indexes from all objects.

-**clear_queue_processed**
Clears the processed entries from the queue.

-**clear_all_queue**
Clears all entries from the queue, that is, both processed and unprocessed entries.

-**check_indexes**
Checks the indexes for the specified objects.

-**check_structure_indexes**
Checks the indexes for all possible configured structures for the specified objects.

- If you specify ***list_suggested_updates***, the utility lists the objects for should be updated to fix any incorrect indexes detected for the structure. The list is written to the specified file or **stdout** if no file is specified. The file is written in a format suitable for **qsearch_process_queue -force_queue_update -uid=@filename**.

- If you specify ***force_queue_suggested_updates***, the utility adds entries to the queue to fix any incorrect indexes detected for the structure.

- If you specify ***follow_only_check_failures***, the utility assumes that if the indexes of the specified object are correct, the indexes for the entire substructure are also correct.

-**find_cycles**
Finds all cyclical structures.

-**count_occurrences**
Counts all occurrences in all structures of all items. Optionally, you can just count all occurrences of specified objects.
Chapter 3  Product configuration utilities

-**count_substructure**
Counts the substructure of all root items. Optionally, you can just count the substructure of specified objects.

-**task**
Specifies a task list of multiple arguments. Omit the leading dashes and separate entries with commas. For example:

  -task=list_queue,process_queue

-**verbose**
Runs the utility in verbose mode to display the maximum amount of information. Typically, nonverbose utility sessions only display error messages.

-**print_names**
Prints item IDs and names as well as UIDs.

-**h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
Where appropriate, objects may be specified as a list of UIDs or a list of item ID patterns, as follows:

- A list of UIDs must be preceded by -**uid**= and entries separated with commas:

  -uid=uid1,uid2,uid3,...

  You can also supply the UIDs in a separate text file, with one UID per line. In this case, use the file name instead of the list of UIDs, preceding it with @:

  -uid=@filename

- A list of item ID patterns must be preceded by -**item_id**= and entries separated with commas:

  -item_id=item-id-pattern1,item-id-pattern2,item-id-pattern3,...

  You can also supply the item ID patterns in a separate text file, with one item ID pattern per line. In this case, use the file name instead of the list of item ID patterns, preceding it with @:

  -item_id=@filename

**EXAMPLES**

The following example lists all unprocessed entries in the queue:

qsearch_process_queue -u=infodba -p=infodba -g=dba -list_queue

The following example adds an entry to the queue for each of the objects listed in the c:\temp\objfile.txt file:

qsearch_process_queue -u=infodba -p=infodba -g=dba -force_queue_update
  -uid=@c:\temp\objfile.txt
The following example checks the indexes for all objects that have an item ID prefixed with 123:

```
qsearch_process_queue -u=infodba -p=infodba -g=dba -check_indexes -item_id=123*
```

The following example lists the unprocessed entries in the queue and then processes them:

```
qsearch_process_queue -u=infodba -p=infodba -g=dba -task=list_queue,process_queue
```

Some assemblies may contain circular references (cycles). If cycles exist in an assembly, you may encounter poor performance when creating indexes and running searches. If so, use this utility with the `find_cycles` argument to identify all such cycles. You should then remove the cycles manually before executing other cacheless search utilities. You should also identify why these cycles are created and establish a process to prevent the creation of more cycles.

You can run the utility with the `find_cycles` argument against a single item or the entire database, as shown in the following examples.

**Processing the entire database:**

```
qsearch_process_queue -u=infodba -p=infodba -g=dba -find_cycles 2>
c:\temp\list_of_cycles.txt
```

**Processing a single item:**

```
qsearch_process_queue -u=infodba -p=infodba -g=dba -find_cycles -item_id=AKT75443
```

**Note**  The utility output is written to standard error and you should redirect it to a file. For example, specify `2> c:\temp\list_of_cycles.txt`, as shown in the first example.

The output format is similar to the following example:

```
Cycle begins ===========
  Y31VRf_FQyYmUC AKY43846-LV2.X 1C PROFILE SECTIONS
  YW7VRf_FQyYmUC AKY43841-LV2.X 1C Y SECTIOINAL VIEW
  f701X0Fgzknc2 ATR04589-T04A WS LWR AT CL
  h38TwmpFQyYmUC AKT75443-TOTAL VEHICLE
  i01NnpCxQyYmUC AKU25433-VEHICLE INTEGRATION MODULE
  ii2NnpCXYmUC AKU25441-COMPARTMENT VEHICLE
  yp2Vwa5kQyYmUC AKY08647-LV2.X HYB CDH 1B GA
  XFwVwmjAQyYmUC AKY10317-LV2.X CDH STRUCTURE REF ASM
  L28WvSFQyYmUC AKY27566-LV2.X HYB CDH MIKE FRAEYMAN PART
  ii1M17dfigzknZC ATR05553-IA-CDH-REAR COMPT-MM
  VH1VB_7QyYmUC AKY41691-CDH RR RAIL U/B SI
  ac6VRf_FQyYmUC AKY43866-LV2.X HYB CDH 1C GA

Cycle ends ===========
```

To report cycles found when you execute an attribute search in Structure Manager or DesignContext, set the `QS_START_CIRCULAR_STRUCTURE_CHECK_SIZE` and `QSEARCH_DEBUG_TEXT` user preferences to 1.

The output report format in this mode is as follows:

```
>>> Found cyclic structure.UnconfiguredStep: STUDY MODULE ( 68342) -- 0 -- 0 - 76915
(VPPS 20 STUDIES CHASSIS) ( zM0BNRX46gzknc2) -- 77314 (E1INRX46gzknc2) -- 0 --- 75941
(STUDY-GMT172/7 SPARE TIRE) ( SQ$Jb7D_QyYmUC) -- 76845 ( z6j37309QyYmUC) -- 0 --- 73558
(TOTAL VEHICLE) ( xTw81mO3gzknc2) -- 75523 ( jh3Jd9asQyYmUC) -- 0 --- 70375
(STUDY MODULE) ( RuEFkrRSgzknc2) -- 71949 ( RuEFkrRSgzknc2) -- 0 --- 68342
(STUDY MODULE) ( TEHNRX46gzknc2) -- 69364 ( U1ONRX46gzknc2) -- 0 --- 67615
```
To clean up the cycles, search for the associated item in My Teamcenter. Do not perform a where used search or browse in Structure Manager because the applied revision rule prevents you from finding the items. When you find the item, send the associated BVR to Structure Manager and manually remove the cycle. In the previous example, look in the My Teamcenter View folder for every revision of item AKY43866-LV2.X HYB CDH 1C GA and remove the cycles in Structure Manager as you find them.
update_bomchanges

Updates BOM change records corresponding to all existing change objects. Only users with DBA permissions can run this utility.

The engineering change objects to be updated are selected based on the values provided by the -c argument.

A log file containing the list of engineering changes and the corresponding affected assemblies that have been successfully updated is created. The log file can be provided using the -l option. If no log file is provided the information is published to the standard output.

SYNTAX

[-u=user-id -p=password  | -pf=password-file -g=group]
- c={0 | 1 | 2} -e=change-id -key=change-key -l=log-file [-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-c
Determines the category of engineering changes for which the affected assemblies must be updated.
Chapter 3  Product configuration utilities

0
Only updates released engineering change objects.

1
Only updates released and in process engineering change objects.

2
Updates all the engineering change objects in the database.

-e
Specifies the change ID, if any.

-key
Specifies the key of the change object whose revisions need to be updated. Either the -c, -e, or -key argument must be provided.

The key represents the multifield key of the object. To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-l
Creates a log file containing the list of engineering changes and the corresponding affected assemblies that have been successfully updated. If no log file is provided, the information is published to the standard output.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
Log file contains the list of engineering changes and the affected assemblies that have been update successfully.

RESTRICTIONS
None.

EXAMPLES
• The following example updates the BOM changes associated with the affected assembly of all the released engineering changes in the database. It also generates a log file named log.txt at the location /tmp/. The log file contains the list of engineering changes and the affected assemblies that update successfully:

  $TC_BIN/update_bomchanges -u=infodba -p=infodba -g=dba
  -c=0 -l=/tmp/log.txt

• The following example updates the BOM changes associated with the affected assembly of all the engineering changes in the database. The information pertaining to the list of engineering changes and the affected assemblies that update successfully is published to the standard output:

  $TC_BIN/update_bomchanges -u=infodba -p=infodba -g=dba -c=2
**update_loggeddatetogmt**

**DESCRIPTION**
Run this utility after you migrate Teamcenter from a version prior to 8.3 to version 8.3 or later. This utility updates the values in the **LoggedDate** column from the local time zone to the GMT time zone.

This utility does a bulk update for Oracle and SQL Server databases. DB2 database is updated record by record.

**Note** Run this utility only once. If you run this utility multiple times, the time zone correction is applied multiple times.

This utility may take a long time to run depending on your data size.

**SYNTAX**
```
update_loggeddatetogmt [-u=user-id [-p=password | -pf=password-file] -g=group] [-h]
```

**ARGUMENTS**
- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument cannot be replaced with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.
-h
Displays help for this utility.
**update_objecttype utility**

Run this utility after you migrate Teamcenter from a version prior to 8.3 to version 8.3 or later. This utility updates the ObjectType column with the correct Teamcenter object type. The default object type is **POM_object**.

**Note**  
This utility may take a long time to run depending on your data size. Running this utility is optional.

**SYNTAX**

```bash
update_objecttype [-u=user-id [-p=password | -pf=password-file] -g=group] [-h]
```

**ARGUMENTS**

- **-u**  
  Specifies the user ID.
  
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note**  
If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**  
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the `user-ID` value to be the password.

  This argument cannot be replaced with the `-pf` argument.

- **-pf**  
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

  For more information about managing password files, see *Manage password files*.  
  
  This argument is mutually exclusive with the `-p` argument.

- **-g**  
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.

- **-h**  
  Displays help for this utility.
**update_project_bom**

Allows you to update all items in a BOM structure within specified projects.

**SYNTAX**

```
update_project_bom [-u=user-id -p=password | -pf=password-file -g=group]  
[-f={add | remove}] [-type={item | rev}] [-item=item-id | -key=key-id]  
[-rev_id=revision-id] [-rev_rule=revision-rule] [-unit_no=unit-number] [-date=date]  
[-end_item=end-item-id | -end_key=end-key-id] [-var_rule=variant-rule]  
[-depth=depth-of-bom] [-level={ 1 | 2 }] [-projects=project-lists] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.
  If this argument is not used, the system assumes the **user-ID** value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-f**
  Specifies one of the following types of operation for this utility:

  **Note**  If this argument is omitted, the default action is to add items to projects.

  - **add**
    Adds item objects to projects.
**remove**
Removes item objects from projects.

**-type**
Specifies one of the following types to be updated for each BOM line:

- **item**
  Updates each child item for the projects.

- **rev**
  Updates only child item revision objects to the projects.

**Note** If this argument is omitted, the default type is **item**.

**-item**
Specifies the ID of the root item of the BOM to update. Use either the **-item** argument or the **-key** argument.

**-key**
Specifies the key of the root item of the BOM to update. Use either the **-item** argument or the **-key** argument.

To find the key of an object, use the **get_key_string** utility.

For more information, see the *Business Modeler IDE Guide*.

**-rev_id**
Specifies the ID of the root item revision. If omitted, the default is the latest revision.

**-rev_rule**
Specifies the configuration rule to be applied to the item revision. If omitted, the default is the **Latest Working** revision rule.

**-unit_no**
Specifies the unit number associated with the revision rule.

**-date**
Specifies the effectivity date associated with the revision rule. The date should be specified in the following format:

```
yyyy MM dd hh mm ss
```

**-end_item**
Specifies the ID of the end item associated with the revision rule. Use with the **-item** argument.

**-end_key**
Specifies the key of the end item associated with the revision rule. Use with the **-key** argument.

To find the key of an object, use the **get_key_string** utility.

For more information, see the *Business Modeler IDE Guide*.

**-var_rule**
Specifies the variant rule to be applied to the BOM structure. If omitted, no variant rule is applied.
Chapter 3  Product configuration utilities

-depth
Specifies to what depth the BOM is traversed. If omitted, the entire BOM structure is traversed.

-level
Indicates the level of propagation. Specify either 1 or 2.

-projects
Lists the projects to which the BOM structure will be added or from which the BOM structure will be removed.

When the -add option is specified, all items in the BOM structure are added to these projects.

When the -remove option is specified, all items currently belonging to the projects are removed from the projects. You can specify more than one project. If there is more than one project in the list, each project name is separated by a comma (,).

-h
Displays help for this utility.

RESTRICTIONS
None.

EXAMPLES

• To display usage help for this utility, enter the following command on a single line:

  update_project_bom -h

• To traverse a BOM structure with the top-level item ABC001, item revision 001, and revision rule Latest Working, and to find all child items and add these items to the following three projects: CusProj1, CusProj2, and CusProj3, enter the following command on a single line:

  update_project_bom -u=user -p=password -g=dba
  -f=add -item=ABC001 -rev_id=001 -rev_rule="Latest Working"
  -projects=CusProj1,CusProj2,CusProj3

• To traverse a BOM structure with the top-level item ABC001, item revision 001, and revision rule Latest Working, and to find all the child revision items and add only these revision items to projects CusProj1 and CusProj2, enter the following command on a single line:

  update_project_bom -u=user -p=password -g=dba
  -f=add -type=rev -item=ABC001 -rev_id=001 -rev_rule="Latest Working"
  -projects=CusProj1,CusProj2

• To traverse the BOM structure starting at the top-level item ABC001 with item revision 001 by applying the revision rule Latest Released and variant rule AlphaRelease, and find all the child revision items and add only these revision items to the projects CusProj1 and CusProj2, enter the following command on a single line:

  update_project_bom -u=user -p=password -g=dba
  -f=add -type=rev -item=ABC001 -rev_id=001 -rev_rule="Latest Released"
  -var_rule="AlphaRelease" -projects=CusProj1,CusProj2

• To traverse the BOM structure of the top-level item ABC002, item revision 001, and revision rule Latest Working and find all the child items and remove these
items from projects CusProj1 and CusProj2, enter the following command on a single line:

```
update_project_bom -u=user -p=password -g=dba 
-f=remove -item=ABC002 -rev_id=001 -rev_rule="Latest Working" 
-projects=CusProj1,CusProj2
```

- To traverse the BOM structure of the top-level item ABC002, item revision 001, and revision rule Latest working and find all the child revision items and remove only these revision items from projects CusProj1 and CusProj2, enter the following command on a single line:

```
update_project_bom -u=user -p=password -g=dba 
-f=remove -type=rev -item=ABC002 -rev_id=001 
-rev_rule="Latest Working" -projects=CusProj1,CusProj2
```

- To traverse the BOM structure in the top three levels with the top-level item ABC002, item revision 001, and revision rule Latest working and find all the child revision items in the top three levels and remove only these revision items from the projects CusProj1 and CusProj2, enter the following command on a single line:

```
update_project_bom -u=user -p=password -g=dba 
-f=remove -type=item -item=ABC002 -rev_id=001 
-rev_rule="Latest Working" -projects=CusProj1,CusProj2 -depth=3
```

- To traverse the BOM structure with the top-level item ABC001 and perform:

  o Level 1 propagation: locate all the child items in the BOM based on item revision 001, revision rule Latest working, and include these items into the CusProj1, CusProj2, and CusProj3 projects.

  o Level 2 propagation: no level 2 propagation.

```
update_project_bom -u=user -p=password -g=dba 
-item=ABC001 -rev_id=001 -rev_rule="Latest Working" 
-level=1 -projects=CusProj1,CusProj2,CusProj3
```

- To traverse the BOM structure with the top-level item ABC001 and perform:

  o Level 1 propagation: locate all the child items in the BOM based on item revision 001, revision rule Latest working, and include these items into the CusProj1, CusProj2, and CusProj3 projects.

  o Level 2 propagation: collect all dataset type objects attached to the BOM line during the BOM traversals. Recursively find all objects that relate to the dataset type objects through the relation specified in the TC_project_propagate_from_dataset preference and propagate all of these level 2 objects into the CusProj1, CusProj2, and CusProj3 projects.

```
update_project_bom -u=user -p=password -g=dba 
-item=ABC001 -rev_id=001 -rev_rule="Latest Working" -level=2 
-projects=CusProj1,CusProj2,CusProj3
```

- To traverse the BOM structure with the top-level item ABC001 and perform:

  o Level 1 propagation: traverse the BOM based on item revision 001, revision rule Latest working, and variant rule AlphaRelease, find all the child revision items and include only these revision items into the CusProj1, CusProj2, and CusProj3 projects.
Chapter 3  Product configuration utilities

- Level 2 propagation: collect all dataset type objects attached to the revision items in the BOM structure during the level 1 propagation. Recursively locate all objects that relate to the dataset type objects through the relation specified in the TC_project_propagate_from_dataset preference and propagate all of these level 2 dependencies into the CusProj1, CusProj2, and CusProj3 projects.

```
update_project_bom -u=user -p=password -g=dba
    -item=ABC001 -rev_id=001 -rev_rule="Latest Working"
    -var_rule="AlphaRelease" -level=2
    -projects=CusProj1,CusProj2,CusProj3
```
upgrade_rev_rules

Upgrades revision rules so that they can safely use the modified revision rule implementation. This is run automatically as part of the upgrade script, but may need to be run again if any locked revision rules are encountered (or if any other error occurs).

SYNTAX

```
upgrade_rev_rules [-u=user-id -p=password | -pf=password-file -g=group][-v][-h]
```

ARGUMENTS

- `u`
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- `p`
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- `pf`
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- `g`
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- `v`
  Verbose mode. Shows additional messages.

- `h`
  Displays help for this utility.

ENVIRONMENT

As specified in `Manually configuring your environment for Teamcenter utilities`.

FILES

As specified in `Log files produced by Teamcenter`.
Chapter 3  Product configuration utilities

RESTRICTIONS
None.

EXAMPLES
None.
upgrade_variants

Use the **upgrade_variants** utility to upgrade an existing Teamcenter system to the new variant model. It allows you to:

- Migrate the variants for one program (product item) at a time or migrate the entire database.
- Migrate only selected variant conditions and named variant expressions.
- Migrate the design structure or the architecture structure.
- Perform a dry run to validate data integrity before migrating production data.
- Generate a report on all named variant expressions that were migrated.

**SYNTAX**

```
upgrade_variants [-u=user-id -p=password | -pf=password-file -g=group]
-product_code=product code -ves_list_file=variant expression uid list file
-top_arch_id=top level architecture item -full_database=yes | no
-lou_holder_id=item id of lou holder -file_path=path name
-dry_run=yes | no [-long] -report_delete_failures=yes | no
-force] -delete_unreferenced_ves_only=yes | no -delete_tree=yes | no
-bulk_delete=yes | no [-parallel] [-h]
```

**ARGUMENTS**

| **Note** | Entries in parentheses are accepted abbreviations for arguments. |

- **-u**
  Specifies the user ID.

  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.

  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see *Manage password files.* This argument is mutually exclusive with the `-p` argument.

_-g_
Specifies the group associated with the user. If used without a value, the user's default group is assumed.

_-product_code_
Specifies the product code from the product definition form.

_-ves_list_file_
Specifies a text file containing the UIDs of the variant expressions to migrate.

_-top_arch_id_
Specifies the item ID of the top level assembly breakdown structure. The named variant expressions for the architecture breakdown are migrated.

_-full_database_
Specify *yes* to migrate all the variant conditions and NVEs in the entire database or *no* to migrate selected data. The default is *no.*

_-lou_holder_id_
Specifies the item ID of the LOU holder item. The variant conditions for the LOUs under this LOU holder are migrated.

_-file_path_
Specifies the path where the migration report should be stored. If no path is specified, the report is stored in the path identified in the `TC_TEMP_DIR` environment variable.

_-dry_run_
If specified as *yes,* the utility performs a dry run. A dry run does not migrate the variant expressions but generate a migration report. You must specifically set this argument to *no* if you do *not* want to perform a dry run.

_-long_
Optionally used when you perform a dry run. If specified, the utility outputs UIDs in addition to the variant expression text and named variant expression names.

_-report_delete_failures_
If specified as *yes,* reports failures encountered while deleting the variant expressions that are not successfully migrated. The default value is *no.*

_-force_
Optionally forces conversion of all variant expressions to the new variant model.

_-delete_unreferenced_ves_only_
Optionally deletes unreferenced variant expressions from the database. The default value is *no.*

_-delete_tree_
Optionally skips deletion of payload trees. The default value is *no.*
-bulk_delete
Optionally performs a bulk deletion of all unreferenced variant expressions. The default value is **no**.

-paralle
Optionally specifies a parallel variant model upgrade session when a session is already in progress.

-h
Displays help for this utility.

ENVIRONMENT
This utility should be run in a shell where the Teamcenter environment is set up.

FILES
A report file is generated in the specified location.

RESTRICTIONS
None.

EXAMPLES
1. To migrate only the assembly structure:

   ```
   upgrade_variants -u=infodba -p=infodba -g=dba -product_code=PLM00001
   -file_path=c:\report.txt -dry_run=no
   ```

2. To migrate the assembly structure and architecture breakdown (NVEs and LOUs):

   ```
   upgrade_variants -u=infodba -p=infodba -g=dba -product_code=PLM00001
   -top_arch_id=PLM0002 -lou_holder_id=PLM00003 -file_path=c:\report.txt -dry_run=no
   ```

3. To migrate only LOUs in the assembly breakdown:

   ```
   upgrade_variants -u=infodba -p=infodba -g=dba -lou_holder_id=GMO00003
   -file_path=c:\report.txt -dry_run=no
   ```

4. To create a variant expressions list file:

   ```
   upgrade_variants -u=infodba -p=infodba -g=dba -ves_list_file=c:\vesList.txt
   -file_path=c:\report.txt -dry_run=no
   ```

5. To perform a dry run of a full database migration:

   ```
   upgrade_variants -u=infodba -p=infodba -g=dba -full_database=yes
   -file_path=c:\report.txt -dry_run=yes
   ```

**Effectivity mode**
Chapter 3  
Product configuration utilities

**effupgrade**

Converts effectivity data created in iMAN versions prior to 7.0 into the effectivity model used in iMAN version 7.0 and later, Teamcenter Engineering and Teamcenter. The new effectivity model allows end item qualification and discontinuous ranges. The upgrade process goes through each unconverted release status and creates a 7.0 effectivity qualified against a null end item from the start date, end date or unit values on the release status.

**SYNTAX**

```
effupgrade [-u=user-id -p=password | -pf=password-file -g=group] [-s] [-i=interval] [-v] [-e] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-s**
  Specifies a single run. Upgrade runs once and ignores locked statuses.

- **-i**
  Specifies multiple runs and an interval between reruns in minutes. The default interval is 60 minutes.
-v
Verbose mode. Shows additional messages.

-e
Displays effectivities of release statuses to be converted. Must be used with the -v argument.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
- For cases where an upgrade is not going to be disruptive (less than 1000 effectivities), make sure all users are logged off, then upgrade with the -s argument. For example:

  effupgrade -u=infodba -p=password -g=dba -s -v

- For extensive upgrades that are likely to take a long time (many thousands of effectivities), especially if statuses are likely to be locked (some users always logged on), run repetitively until complete.

  effupgrade -u=infodba -p=password -g=dba

Product structure clearance analysis
**batchmode_clearance_analysis**

Performs clearance analysis on a product structure and stores all issue and results data in the clearance database. This utility can be run as a CRON job and can be run at different levels using the run level switch.

**SYNTAX**

```
TC_ROOT/clearanceDB/scripts/ [-u=user-id -p=password | -pf=password-file -g=group] -bookmark [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.
  If this argument is not used, the system assumes the **user-ID** value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see *Manage password files*. This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-bookmark**
  Generates a bookmark file of the product.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities* and in the setup document provided in the `TC_ROOT/clearanceDB/scripts` directory.

**FILES**

None.
EXAMPLES

To perform clearance analysis on a product structure and store the results data in the clearance database, enter the following command on a single line:

```
batchmode_clearance_analysis.pl
```

Appearance Configuration
apn_medic

Checks for redundant appearance path nodes (APNs).

SYNTAX

```bash
apn_medic [-u=user-id [-p=password | -pf=password-file] -g=group]
-all [-item=item-id | [-key=[keyAttr1=keyVal1] [,keyAttr2=keyVal2] ...
[ ,keyAttrN=keyValN]]]
-apn=APN-uid -repair -force=option -output=output-file
[-h]
```

ARGUMENTS

-**u**

Specifies the user ID. This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

-**Note**  
If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-**p**

Specifies the user's password.

If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -**pf** argument.

-**pf**

Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -**p** argument.

-**g**

Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-**all**

Traverses the APN structure to find all redundant APNs. If not specified, the utility only checks if there are any redundant root APNs.

-**item**

Starts the utility using the item as the root of the structure. If not specified, the utility searches the entire database.

-**key**

Specifies the key of the item to track. Use the following format:
To find the key of an object, use the **get_key_string** utility.

For more information, see the *Business Modeler IDE Guide*.

- **apn**
  Specifies the UID of an APN. Once used, the **-item** argument is ignored. If the **-all** argument is also specified, the utility gets the root and purges the whole APN structure where the specific APN resides. If the **-all** argument is not specified, only the APN is purged.

  **Note** This argument repairs the structure regardless of whether the **-repair** argument is specified.

- **repair**
  Picks one APN among the duplicate APNs, copies GRM relations to the selected APN from the non-surviving nodes, and purges the children and the redundant nodes.

- **force**
  Forces deletion of duplicate APNs. This argument works in conjunction with the **-repair** argument.
  - Deletes duplicate APNs whether they have **absOccData** objects or not.
  - Deletes all replica duplicate APNs in a multi-site environment.
  - Deletes all duplicate APNs including master APNs.

- **output**
  Specifies the output file containing the information for analyze. If not specified, the default **apn_medic_output.txt** file is used. The following information is placed in the output file: the UID of the redundant APN, the associated item, the parent item, the occurrence thread, the appearance path root, the number of children, the number of relations of the node and the associated absolute occurrence, number of app refs, and the type of the absolute occurrence data.

- **h**
  Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.
appr_update_manager

Launches the Appearance Update Manager. Sets up the Teamcenter runtime environment and launches the Update Manager Supervisor (`appr_update_supervisor`) utility. Also automatically relaunches the supervisor when required.

SYNTAX

```
appr_update_manager
```

ARGUMENTS

None.

ENVIRONMENT

As specified in *Manually configuring your environment for Teamcenter utilities*.

RESTRICTIONS

None.

EXAMPLES

None.
**appr_update_supervisor**

Runs as a background process, invoking Teamcenter processes to perform appearance updates, as required.

**Note** Siemens PLM Software recommends that you use the `appr_update_manager` utility to run this program rather than running it directly.

Because the supervisor is not a Teamcenter process, it does not require a user name or password. However, the processes it spawns do require user name and password; therefore, you should run the program as a privileged user and allow the update processes to log on automatically. If autologin is not supported at your site, you can use the alternative log on mechanism documented in the `$TC_ROOT/data/.appr_update_env.default` file.

**SYNTAX**

```
appr_update_supervisor
```

**ARGUMENTS**

None.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

- `$TC_ROOT/bin/.appr_update_env`
  
  Configuration file for the Appearance Update Manager.

- `$TC_ROOT/bin/.appr_update_env.default`
  
  Example configuration file.

- `$TC_ROOT/bin/appr_update_supervisor*.log`
  
  Supervisor log file.

**RESTRICTIONS**

None.

**EXAMPLES**

None.
Enables users to query the status of the Update Manager and allows administrators to control the Update Manager. Starting the console with no query or control arguments on the command line starts a simple menu system.

SYNTAX

```plaintext
```

ARGUMENTS

- **-u**
  Specifies the user ID.

  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.

  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
For more information about managing password files, see *Manage password files*. This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user. If used without a value, the user’s default group is assumed.

-host
Connects to the supervisor on the specified host. Overrides the setting in the .appr_update_config file.

-port
Connects to the supervisor through the specified communications port. Overrides the setting in the .appr_update_config file.

-menu
Forces the console into interactive mode.

-query
Queries the current Update Manager status.

-query=update UID
Queries the status of a specific update package.

-dump_primary
Prints the primary queue.

-dump_secondary
Prints the secondary queue.

-show_blocked
Shows blocked packages in subsequent queue dumps.

-hide_blocked
Hides blocked packages in subsequent queue dumps.

-log_status
Requests that the Update Manager write a complete status report to the log file.

-log_file
Queries the name of the Update Manager log file.

-log_level
Sets the supervisor logging level. This command is available only to system administrators.

-clear_log
Requests that the Update Manager clear the log file. This command is available only to system administrators.

-shutdown
Requests that the Update Manager shut down as soon as the current task is finished.
-shutdown_now
Requests that the Update Manager shut down immediately. This command is available only to system administrators.

-restart
Requests that the Update Manager restart immediately. This command is available only to system administrators.

-restart_now
Restarts update manager immediately. This command is available only to system administrators.

-prod_queue
Sends the supervisor a dummy update request.

-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter* along with the following files:

- $TC_ROOT/bin/.appr_update_env
  Configuration file for the Appearance Update Manager.

- $TC_ROOT/bin/.appr_update_env.default
  Sample configuration file.

RESTRICTIONS
None.

EXAMPLES
1. To start the Update Manager console menu system, enter the following command at the prompt:
   
   appr_update_console

2. To start the Update Manager console system in administration mode, enter the following command at the prompt:
   
   appr_update_console -u=infodba -p=password -g=dba

3. To query the status and the log file name of the Update Manager on the *my_server.mycompany.com* host, enter the following command at the prompt:
   
   appr_update_console -host=my_server.my_company.com -query -log_file
appearance_updater

Processes appearance updates as part of the Appearance Update Manager. This program should be invoked by the `appr_update_supervisor` program.

**SYNTAX**

```
appearance_updater [-u=user-id -p=password | -pf=password-file -g=group]
[-quiet]
[-nolog]
[-supervisor=host,port1,port2]
[-task=cmd [,cmd...]]
[-show_uids]
[-show_blocked]
[-since=date -item_id=item-id ]
[-at=date]
[-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-login**
  Forces the program to search for the `.appr_update_info` file in the `$TC_DATA`, `$TC_ROOT/data`, or `$HOME` directory. The `.appr_update_info` file must contain
the -u, -p, and -g flags (on separate lines) that are used to log on. This is used primarily by the Update Manager Supervisor.

-supervisor
Identifies the Update Manager Supervisor that supplies tasks for the update process. This is used primarily by the Update Manager Supervisor.

-task
Manually identifies a task, or list of tasks, to be performed by the update process. The task list is a comma-separated list (no spaces) containing one or more of the following tasks:

query_update Queries the POM UID of the current appearance update.

query_primary_size Queries the size of the primary appearance update queue.

query_sets Queries the number of appearance sets, number of processed sets, and number of sets yet to be processed (excluding those currently being processed) for the update.

query_packages Queries the number of update packages in the current update process.

query_unprocessed_packages Queries the number of update packages in the current update that have not yet been processed.

process_primary Requests the processing of the next update in the primary queue. This fails if there is already an update in process.

process_secondary Requests the processing of a single appearance set for the current update. This fails if there are no appearance sets that require processing.

process_all_secondary Requests that the program loops until all appearance sets are processed for the current update.

finish_primary Completes the final processing of an update once all secondary sets have been processed.

dump_primary Dumps information about the primary queue to standard output (stdout).

dump_secondary Dumps information about the secondary queue to standard output (stdout).

-quiet Suppresses the output of diagnostics to standard output (stdout).

-nolog Suppresses diagnostics to the log file.

-show_uids Includes tag/UID information.
-**show_blocked**  
Includes information about blocked, as well as unblocked packages.

-**since= yyyy mm dd hh mm ss**  
Includes information about all packages, processed or unprocessed, since the specified date.

-**item_id**  
Shows only those packages relevant to the release of any revision of the specified item. This argument is only supported for use when the **since** argument is used.

-**at= yyyy mm dd hh mm ss**  
Shows the package that was running on the specified date. This is assumed to be the earliest package with order-by and run dates that straddle the specified date.

-**h**  
Displays help for this utility.

**ENVIRONMENT**  
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**  
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**  
None.

**EXAMPLES**

- Enter the following command at the prompt to query the size of an appearance update queue:
  
  appearance_updater -task=query_primary_size

- Enter the following command at the prompt to query the UID and state of the current update:
  
  appearance_updater -task=query_update,query_set

- Enter the following command at the prompt to process the next complete update in the queue:
  
  appearance_update -task=process_primary,process_all, process_al_secondary,finish_primary
appr_working_scheduler

Provides an update scheduler for *working appearances* (working appearances is a collective name for all appearance sets that have a *working* entry in their context revision rule).

This utility places the ApprUpdWorkingPkg appearance working package on the primary update queue at every user-specified time interval. The ensuing execution of the working appearance package by the appearance supervisor ensures that the appearance working cache is updated. If an existing working update package is already in the updater queue in an unprocessed or processing state, a new package is not created. The scheduler waits until the end of the next elapsed interval before it attempts to put another package on the updater queue.

**SYNTAX**

```
appr_working_scheduler [-u=user-id -p=password | -pf=password-file -g=group] -minutes=minutes-time-interval -hours=hour-time-interval [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  [Note] If Security Services single sign-on (SSO) is enabled for your server, the *-u* and *-p* arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the *-pf* argument.
  
  If this argument is not used, the system assumes the *user-ID* value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.

  For more information about managing password files, see Manage password files.

  This argument is mutually exclusive with the *-p* argument.

- **-g**
  Specifies the group associated with the user.
  
  If used without a value, the user’s default group is assumed.
-minutes
Specifies time interval, in minutes, at which the scheduler creates a working appearance update package. This value is added to the time interval specified by the -hours argument.

-hours
Specifies time interval, in hours, at which the scheduler creates a working appearance update package. This value is added to the time interval specified by the -minutes argument.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities and the Appearance Configuration Guide.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
• Appearances environment must be setup prior to using this utility. For more information, see the Appearance Configuration Guide.

• The appearance supervisor must be up and running, or in exceptional circumstances for troubleshooting, explicitly disabled by the administrator by setting supervisor.enabled to 0 in the .appr_update_env file.

EXAMPLES
• The following example creates an update package every 5 minutes:
  
```bash
appr_working_scheduler -u=infodba -p=infodba -g=dba -minutes=5
```

• The following example creates an update package every 2 hours 30 minutes:
  
```bash
appr_working_scheduler -u=infodba -p=infodba -g=dba -hours=2 -minutes=30
```

• The following example immediately creates one package in the updater queue. This task is achieved when neither the hours or the minutes option is specified.
  
```bash
appr_working_scheduler -u=infodba -p=infodba -g=dba
```

• Executing the examples above generates the following messages on the appearance update supervisor console window:

  Logging in...
  Logged in, waiting for instructions
  Performing general query
  no update in progress
  primary size = 1
  No primary in process
  Sets: 0, Done: 0, Unallocated: 0
  Selecting next primary update
  Checking for update in progress
  no update in progress
  Looking for next update
  Attempting to lock primary
  Locked successfully
  Selected primary update 0GAVPMUCAdRCW
  ApprUpdWorkingPkg: queued on 08-Mar-2007 16:06:43, (no run date), unprocessed (0), unblocked
(no Release Status)
(no cloned-for AppearanceRoot)
0 secondary package(s)
Processing primary update
Attempting to process primary
Processed primary to secondary
Listing secondaries
Secondaries count = 0
Performing general queue query
primary size = 0
Listing secondaries
Secondaries count = 0
Sets: 0, Done: 0, Unallocated: 0
Current primary update appears to be complete
Primary marked as complete
createAppearances

createAppearances [-u=user-id -p=password | -pf=password-file -g=group]
([-item_id=item-id | -key=[keyAttr1=keyVal1] [,keyAttr2=keyVal2]... [,keyAttrN=keyValN]]) -config_rule=config-rule -view_type=view-type
[-in_date=in-date] [-out_date=out-date]
[-in_unit_no=in-unit-no] [-out_unit_no=out-unit-no] [-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-item_id
Specifies the item to track.

-key
Specifies the key of the item to track. Use the following format:
[keyAttr1=keyVal1] [,keyAttr2=keyVal2]... [,keyAttrN=keyValN]
To find the key of an object, use the get_key_string utility.
For more information, see the *Business Modeler IDE Guide*.

**-config_rule**
Specifies the revision rule to use.

**-view_type**
Specifies the view to use.

**-h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
None.

**RESTRICTIONS**
None.

**EXAMPLES**
None.
fix_appearances

Rolls back and deletes appearances to the last point at which the appearance root was marked as consistent, that is, the corruption_status attribute was 0. It also requeues the relevant update packages. When the packages are reprocessed, Teamcenter creates a new set of appearances that more accurately represent the actual structure. This is effectively a partial rollback and does not force recreation of the complete appearance set.

Note An error displays if the input values result in more then one item being found in the database.

SYNTAX

fix_appearances [-u=user-id -p=password | -pf=password-file -g=group]
[-item_id=item-id]
[-key=[keyAttr1=keyVal1][,keyAttr2=keyVal2]...[.keyAttrN=keyValN]]
[-config_rule=config-rule] [-view_type=view-type]
[ -ok_date=ok-date] -force [-v] [-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.
-item_id  
Specifies an item ID for filtering appearance roots.

-key  
Specifies the key for filtering appearance roots. Use the following format:

   [keyAttr1=keyVal1], [keyAttr2=keyVal2]…,[keyAttrN=keyValN]

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-config_rule  
Specifies a configuration rule for filtering appearance roots.

-view_type  
Specifies a view type for filtering appearance roots.

Note You use the item_id, config_rule, and view_type arguments as filters to determine which appearance roots to fix.

-ok_date  
Assert the date when there was no corruption thereby overriding the appearance root’s stored ok_date. The date format is yyyy MM dd hh mm ss. This argument is optional.

By default, the fix_appearances utility uses the date of the ok_date attribute of the appearance root, that is, the date at which the last successful automatic validation occurred. If the validation never occurred, the value of ok_date is the same as the appearance root’s creation date.

However, you can specify a date for roll back with the ok_date argument. This date can be earlier than the last ok-date on the appearance root. If you run the find_appearances utility and set -verbose and -item_id=ID arguments, the utility dumps the last ok-date of the appearance root. You can then use this date and run the fix_appearances utility with the ok-date value immediately before it.

-force  
Force a fix even if appearance root determines it is not corrupt. Use this argument if there are differences between the automatic and the manual checking processes. An error message informs the user whether to use the -force argument.

-v  
Specifies verbose mode.

-h  
Displays help for this utility.

ENVIRONMENT  
As specified in Manually configuring your environment for Teamcenter utilities.

FILES  
As specified in Log files produced by Teamcenter.

RESTRICTIONS  
None.

EXAMPLES  
The following example shows an invocation of the fix_appearances utility:
$TC_BIN/fix_appearances -force -ok_date=2002 -item_id=0150_app_01 -view=view -config_rule=0150_app_context -u=infodba -p=infodba

Found 1 AppearanceRoot

AppearanceRoot[0] = 00003baf = hHVNDf_AAgcRA [Item ID: 0150_app_01 (View: view)

Revision Rule: 0150_app_context (without spatial data, not for pre-release, active, never fixed, never checked, last updated 21-Feb-2007 09:26:31, with 6 appearances), ok at 2007-02-21 09:24:00

At 21-Feb-2007 09:27:25, re-queued cloned primary package:

(00003f5e = h5LNVHQhAAgcRA) ApprUpdChangedRevsPkgs: queued on 21-Feb-2007 06:35:58, (no run date), unprocessed (0),

Release Status: (00003cd7 = x1BV96Y4AAgcRA) Production on 21-Feb-2007 06:35:58 by possum (possum) 0 Effectivities

Cloned-for AppearanceRoot: (00003baf = hHVNDf_AAgcRA)

Item ID: 0150_app_01 (View: view)

Revision Rule: 0150_app_context (without spatial data, not for pre-release, active, never fixed, never checked, never updated, with 0 appearances)

0 secondary package(s)
0 filtered-by AppearanceRoot(s)
1 changed ItemRevision(s):

(00003cd9 = h9JV964zAAgcRA) 0170_01/B-Car owned by possum (possum)

At 21-Feb-2007 09:27:25, re-queued cloned primary package:

(00003f61 = h5PVNHQhAAgcRA) ApprUpdChangedRevsPkgs: queued on 21-Feb-2007 06:36:29, (no run date), unprocessed (0),

Release Status: (00003cd9 = ByKV96Y4AAgcRA) Production on 21-Feb-2007 06:36:29 by possum (possum) 0 Effectivities

Cloned-for AppearanceRoot: (00003baf = hHVNDf_AAgcRA) Item ID: 0150_app_01 (View: view)

Revision Rule: 0150_app_context (without spatial data, not for pre-release, active, never fixed, never checked, never updated, with 0 appearances)

0 secondary package(s)
0 filtered-by AppearanceRoot(s)
1 changed ItemRevision(s):

(00003cd9 = h9JV964zAAgcRA) 0170_01/B-Car owned by possum (possum)

At 21-Feb-2007 09:27:25, re-queued cloned primary package:

(00003f64 = h9DVNHQhAAgcRA) ApprUpdChangedRevsPkgs: queued on 21-Feb-2007 06:37:31, (no run date), unprocessed (0),

Release Status: (00003cdd = xKV96Y4AAgcRA) Production on 21-Feb-2007 06:37:31 by possum (possum) 0 Effectivities

Cloned-for AppearanceRoot: (00003baf = hHVNDf_AAgcRA) Item ID: 0150_app_01 (View: view)

Revision Rule: 0150_app_context (without spatial data, not for pre-release, active, never fixed, never checked, never updated, with 0 appearances)

0 secondary package(s)
0 filtered-by AppearanceRoot(s)
3 changed ItemRevision(s):

(00003cde = hxMV96Y4AAgcRA) 0180_01/B-Car owned by possum (possum)

(00003cdf = xTBV96Y4AAgcRA) 0180_01/A-Axle owned by possum (possum)

(00003ce0 = hxTV96Y4AAgcRA) 0180_03/A-Wheel owned by possum (possum)

At 21-Feb-2007 09:27:25, re-queued cloned primary package:

(00003f67 = h9HVNHQhAAgcRA) ApprUpdChangedRevsPkgs: queued on 21-Feb-2007 06:39:47, (no run date), unprocessed (0),

Release Status: (00003ce3 = xKV964zAAgcRA) Manufacture on 21-Feb-2007 06:39:47 by possum (possum) 0 Effectivities

Cloned-for AppearanceRoot: (00003baf = hHVNDf_AAgcRA) Item ID: 0150_app_01 (View: view)

Revision Rule: 0150_app_context (without spatial data, not for pre-release, active, never fixed, never checked, never updated, with 0 appearances)

0 secondary package(s)
0 filtered-by AppearanceRoot(s)
3 changed ItemRevision(s):

(00003ce4 = xTKV964zAAgcRA) 0200_03/A-0200 1-1 owned by possum (possum)

(00003ce5 = xTBV964zAAgcRA) 0200_02/A-0200 1 owned by possum (possum)

(00003ce6 = h5HV964zAAgcRA) 0200_01/B-0200 tracked item owned by possum (possum)
update_apprpathroot

Creates or updates the appearance path root, or removes the links between appearance path nodes and appearances.

An appearance path maps an occurrence to the corresponding BOM line. It is unique to the context of a specific BOM; different BOMs cannot contain the same appearance paths. An appearance path is also called an appearance path node (APN) or an occurrence path.

SYNTAX

```
update_apprpathroot [-u=user-id [-p=password | -pf=password-file] -g=group] [-item=item-id | -key=key-id] -task=action [-h]
```

ARGUMENTS

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-item**
  Specifies the item to be used as the path root.

- **-key**
  Specifies the key of the item to be used as the path root. You can use the **-key** argument instead of the **-item** argument.
Use the following format:

[ keyAttr1=keyVal1 ] [, keyAttr2=keyVal2 ] ... [ , keyAttrN=keyValN ]

To find the key of an object, use the **get_key_string** utility.

For more information, see the *Business Modeler IDE Guide*.

**-task**

Specifies the task to run:

**update**

 Creates or updates the appearance path root.

**remove**

 Removes the links between appearance path nodes and appearances.

**-h**

 Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

None.
Chapter

4 Teamcenter Rapid Start utilities
smartuibldr_configure

Imports, exports, and updates the Smart Codes configuration text file to and from the Teamcenter Rapid Start database.

**SYNTAX**

\texttt{smartuibldr\_configure \textasciitilde imp=filename [\text{-u=userid \text{-p=password} | \text{-pf=password-file} \text{-g=group}]} \text{-j} \text{-h}}

\texttt{smartuibldr\_configure \textasciitilde exp=filename [\text{-u=userid \text{-p=password} | \text{-pf=password-file} \text{-g=group}]} \text{-j} \text{-h}}

**Note** You can only export the file after it has already been imported.

**ARGUMENTS**

- **-imp**
  Specifies the name of the text file to import.

- **-exp**
  Specifies the name of the text file to export.

- **-u**
  Specifies the user ID.

  This is generally \texttt{infodba} or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the \texttt{-u} and \texttt{-p} arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the \texttt{user-id} value to be the password.

  This argument is mutually exclusive with the \texttt{-pf} argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the \texttt{user-id} value to be the password.

  For more information about managing password files, see \textit{Manage password files}.

  This argument is mutually exclusive with the \texttt{-p} argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.
-h
Displays help for this utility.

-J
Specifies whether the journaling option is enabled or disabled. To enable journaling, set the value to On. To disable journaling, set the value to Off.

ENVIRONMENT
This utility must be run in the Teamcenter Rapid Start shell environment.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
This utility can be run only by users with Teamcenter Rapid Start administrator privileges.

EXAMPLES
None.
Chapter

5  Collaborative Product Development utilities
Generates a collaborative design from an existing product or assembly structure. The collaborative design has the following characteristics:

- A name derived from the name of the source product or assembly.
- A set of physical partitions and optional corresponding functional partitions.
- One or more reuse design elements with names derived from the names of the items from which the reuse design elements are realized.

Transformation data is read from each level of the original product or assembly. The utility concatenates this data and uses it for design element to collaborative design transformations. Consequently, the collaborative design appears the same as the original assembly. If the original assembly includes absolute occurrences, it uses the absolute occurrence transformations. If the source item revision has bounding boxes attached, the same bounding boxes are attached to the new design element.

You can realize an entire assembly as a single reuse design element or, by default, realize each leaf of the assembly as an individual reuse design element. With the exception of the top-level node, a partition is created for all intermediate nodes in the assembly tree. Optionally, you can also create a partition for the top-level node.

By default, the utility configures the assembly with the Latest Working revision rule and the latest revision of the source assembly item. Optionally, you can specify a particular revision rule and a item revision.

The name assigned to the collaborative design is the name of the assembly with _CD appended to it. The name of a reuse design element is the name of the source item with _DE_. An index is appended to the name when leaves are realized as reuse elements. The index differentiates between leaves when the same component appears as a leaf more than once in the source assembly.

The utility places the new collaborative design in the Newstuff folder of the specified user.

**SYNTAX**

```
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.
-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-id value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-id value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-i
Specifies the item ID of the product or assembly to realize.

-rev
Specifies the revision of the specified item.

-rule
Specifies the name of the revision rule to configure the source assembly. If the name of the rule contains spaces, you must enclose it in quotation mark, that is, “rev-rule-name”.

-norelease
If specified, assumes a release status is assigned to all source items and does not assign a release status to realized objects.

-root_partition
If specified, a partition is created for the top node of the assembly.

**Note** This is a yes | no switch.

-top
If specified, the entire assembly is realized as a single reuse design element, rather than as individual leaves. Also, no partitions are created.

-partition_names
Specifies how partitions are named, as follows:

- assy
  If specified, the partition is given the same name as the corresponding BOM line in the source assembly.

- auto
  If specified, the partitions are automatically named Partition1, Partition2, and so on, in the order they are encountered.
name
If specified, the partition is named according to the source item revision and the revision ID.

desc
If specified, the partition is named according to the description of the source item revision.

uid
If specified, the partitions are named using the assembly option with the session UID appended.

If no argument is specified or an invalid argument is specified, the utility uses assy.

-add_functional_partitions
If specified, functional partitions are also created. Their contents are the same as the physical partitions.

-partition_types
If specified, partitions are created only for items of the specified type.

-effectivity_qualification
If specified, the new design elements and features are assigned unit effectivity from the specified unit or units.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

Results are written to the bom_output.txt file in the c:\temp directory on Windows systems or /tmp directory on UNIX systems. It lists the shape and reuse elements that are created, together with the total number of objects created. It also contains the time of the last run and total memory consumed.

RESTRICTIONS
None.

EXAMPLES
4gd_populate_cd -u=adminjones -p=passjones -g=dba -i=engine -rev=B -rule="latest released" -norelease -root_partition=yes -partition_names=auto -add_functional_partitions -effectivity_qualification=unit1, unit2

This example creates a collaborative design from revision B of an item assembly called engine. Before conversion, the latest released revision rule is applied to the source assembly, but no release status is assigned during conversion. A root partition is created for the top node of the assembly, partition names are created automatically, and both physical and functional partitions are created. New design elements and features receive the unit effectivity of units 1 and 2.
manage_effectivity_options

Allows you to manage 4GD effectivity options from a command line.

SYNTAX

manage_effectivity_options [-u=user-id | -p=password | -pf=password-file] -g=group
-contextItemId=ItemID | -contextItemKey=Key -contextRevision=revisionID
-effOpt=option-name-string
[-effValues=valid-values]
-owningItemId=ItemID | -owningItemKey=Key
[-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

[Note] If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-contextItemId
Specifies the item ID to which to attach a new option. This is typically the item ID of the product for which the effectivity option should be added or modified. The effectivity option may be an effectivity stream group such as Engineering Intent or Model Year.
-contextItemKey
Specifies keys and values to pass if the item ID and revision ID are insufficient to uniquely identify the context item revision. You can specify contextItemId or contextItemKey, not both.

-contextRevision
Specifies the item revision for which a new effectivity option should be attached or modified. The item revision represents the product namespace in which the option will be available.

-effOpt
Identifies the effectivity option to create or modify. This option usually represents an effectivity stream grouping such as Engineering Intent or Model Year.

-effValues
 Specifies a list of valid values for the effectivity option. This is an absolute list and all valid values must be passed. Teamcenter treats the absence of valid values when you update existing effectivity options as a request to remove those values from the context revision. Valid values must be given in the context of the context item revision. You can attach the modified item revision to multiple models for which effectivity streams with these valid values are needed.

-owningItemId
Specifies the item that defines the effectivity option to modify. If specified, the effectivity option defined on the owning item is reused on the product item. It is restricted to the set of specified values if -effValues is populated with a list of valid values.

-owningItemKey
Specifies keys and values to pass if the owning item ID is insufficient to uniquely identify the owning item. You can specify owningItemId or owningItemKey, not both.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.
ptrn0_persist_dynamicMembers

Traverses the complete partition breakdown of a collaborative design, executes every partition recipe, and creates static membership objects in the database. Traversal of a large product may take a significant time and Siemens PLM Software recommends you schedule the utility to execute periodically as a cron job. Execute it at a frequency that ensures the saved state of dynamic members is sufficiently up-to-date to produce reliable results from the wherePartitioned service (this service uses static membership objects to identify owning partitions for design elements). When you run this utility, it deletes membership objects it previously created and creates new membership objects, according to the latest recipes on the partitions.

**SYNTAX**

```
ptrn0_persist_dynamicMembers [-u=user-id [-p=password | -pf=password-file] -g=group] -m=model_id -s=partition scheme type name [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
  If this argument is not used, the system assumes the user-id value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-id value to be the password.

  For more information about managing password files, see *Manage password files.*
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-m**
  Specifies the identifier of the collaborative design (model) to traverse.
-s
Specifies the type name of the partition scheme, for example, Ptn0SchemeFunctional, Ptn0SchemePhysical, or Ptn0SchemeSpatial.

-h
Displays help for this utility.

RESTRICTIONS
This utility must be run by a user with DBA permissions, for example, infodba.

EXAMPLES
ptn0_persist_dynamicMembers -u=adminjones -p=passjones -g=dba -m=new_ship_design -s=Ptn0SchemeFunctional
Ptn0_set_is_partition_owned_true

Sets the `ptn0is_partition_owned` property on partition memberships, if you are upgrading to Teamcenter 10.1 or later from an earlier version. This property must be set if you want to export or import partition members using TC XML.

**SYNTAX**

```bash
Ptn0_set_is_partition_owned_true [-u=user-id [-p=password | -pf=password-file] -g=group] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in `Manually configuring your environment for Teamcenter utilities`.

**FILES**

As specified in `Log files produced by Teamcenter`.

**RESTRICTIONS**

This utility must be run by a user with DBA permissions, for example, `infodba`. 

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**PLM00036 J**

**Utilities Reference** 5-9
purge_historical_revisions

Searches the database for historical revisions of any revisable class that are no longer needed. It purges all historical revisions it finds, except for the following:

- All private and latest public revisions.
- Revisions with one or more labels.
- Any revision with a precise reference from another object.
- Any revision with populated attributes that identify it as purge protected or having an ITAR license.
- All revisions that were updated more recently than the interval specified in the `POM_PURGE_AGE_LIMIT` environment variable.

**Note** Set this environment variable to a negative value to disable purging, for example, `-1`.

The utility exits when no candidates for purging remain or if the specified timeout period expires.

You can run the utility periodically using the Dispatcher, for example, overnight or other times when system activity is low. If you do this, ensure you set the value of the `timeout` argument to less than the repeat interval of the periodic runs.

Revisions are purged in batches to reduce impact to users of the system.

**SYNTAX**

```
purge_historical_revisions [-u=user-id] [-p=password | -pf=password-file] [-g=group] [-timeout=timeout_seconds] [-h]
```

**ARGUMENTS**

- `-u`
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- `-p`
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.

  If this argument is not used, the system assumes the `user-ID` value to be the password.
-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-timeout
Specifies the maximum period that the utility runs, in seconds. When the timeout period expires, the utility exits.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
This utility must be run by a user with DBA permissions, for example, infodba. This restriction applies whether you run it manually or periodically using Dispatcher.

EXAMPLES
purge_historical_revisions -timeout=3600 -u=adminjones -p=passjones -g=dba
validate_revrule_effectivity

 Validates the effectivity criteria on one or more specified revision rules, generates validation records, and associates them with the revision rules. Optionally, you can create a text file containing the names of revision rules to validate.

 Validation may take a significant time, depending on the number of constraints and default rules defined in the system. If you have a large number of constraints and rules, consider running the utility during off-peak hours.

 SYNTAX


 ARGUMENTS

 -u
 Specifies the user ID.

 This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

 [Note] If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

 -p
 Specifies the password.

 If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

 If this argument is not used, the system assumes the user-ID value to be the password.

 -pf
 Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

 For more information about managing password files, see Manage password files.

 This argument is mutually exclusive with the -p argument.

 -g
 Specifies the group associated with the user.

 If used without a value, the user's default group is assumed.

 -rule_name
 Specifies the name of the revision rule to validate. If you want to validate more than one revision rule, use this argument once for each revision rule. This argument
is optional if you use the -rev_rules_file_name argument, but takes precedence if both arguments are entered.

-rev_rules_file_name
Specifies the name and full path of a text file containing the names of revision rules to validate. The file must contain the name of one revision rule on each line. This argument is optional if you use the -rule_name argument.

-substitute_dep_vars
Defines if and how the configurator substitutes dependent variables (for example, PlantVacationShutdown) in the effectivity criteria on the revision rules.

Note Teamcenter configurators do not currently support dependent variable substitutions and this argument has no effect.

0
Dependent variables are not substituted.

1
Dependent variables are substituted and all modifiers are off. Forward and reverse substitutions are applied as follows:

• Forward substitutions
  Dependent variable substitution are defined by:
  o A dependent variable, for example, D.
  o A master variable, for example, M.
  o Formula describing how D depends on M.

When these definitions have been made, the system can accept effectivity conditions such as \( M = D, M \neq D, M > D, \) and \( M \leq D \).

For example:

- \( \text{Vacation} \) depends on \( \text{Date} \).
- \( \text{Date} \) determines the state of the variable \( \text{Vacation} \).

\[ \text{Vacation} := \text{Jul-1} \leq \text{Date} < \text{Aug-1} \]

A forward substitution dynamically complements criteria containing statements about \( \text{Vacation} \) with statements about \( \text{Date} \). For example, a criterion “\( \text{Date} \geq \text{Jul-1} \& \& \text{Date} < \text{Aug-1} \)” is added for the criterion “\( \text{Vacation}=\text{Date} \)”. This enables users to author effectivity criteria in May in terms of the dependent variable \( \text{Vacation} \) whose state is set dynamically at the time the configuration criteria are applied. This time may be later than when you author the effectivity criteria. If the definition of \( \text{Vacation} \) changes in June, the effectivity criteria that were authored in May still evaluate correctly.

Forward substitutions are defined from a dependent to a master. Users who provide solve criteria in terms of the dependent correctly evaluate effectivity statements that were made in terms of the master. In the previous example,
forward substitution ensures that date conditions are substituted for all date-dependent conditions.

- Reverse substitutions
  Date-dependent conditions such as **PlantVacationShutdown** are derived from date conditions. In the following example of a dependent variable substitution:
  o **Vacation** depends on **Date**
  o **Date** determines the state of the variable **Vacation**
  o **Vacation** := Jul-1 <= **Date** < Aug-1

A reverse substitution dynamically complements criteria containing statements about **Date** with statements about **Vacation**. For example, you can add a **Vacation Date** criterion to criteria like **Date**>=Sep-1". (You can control the detailed behavior of this substitution with modifiers). This enables users to author effectivity conditions in May that respond to a **Vacation** variable whose state is dynamically set at the time a configuration filter is applied. This may be set later than you author the effectivity condition. If the definition of **Vacation** changes in June, effectivity conditions that were authored in May still evaluate correctly.

Reverse substitutions are defined from a master to a dependent. Users who provide solve criteria in terms of the master correctly evaluate effectivity statements that were made in terms of the dependent. In the previous example, reverse substitution ensures that date-dependent criteria such as **Vacation** are derived from the date ranges specified in the solve criteria.

3
Forward substitution is suppressed, if modifier 2 is on.

5
Reverse substitution is suppressed, if modifier 4 is on.

9
Reverse substitution uses a set-based substitution mode. For example consider the following definition of a dependent variable substitution.

- **Vacation** depends on **Date**.
- **Date** determines the state of the variable **Vacation**
- **Vacation** := Jul-1 <= **Date** < Aug-1

A set-based reverse substitution complements solve criteria of Jul-1 <= **Date** <= Dec-31 with **Vacation** <= **Date**. Equality is given because the substituent (Jul-1 <= **Date** < Aug-1) is a subset of the criteria, while precedency is given because the criteria also contain dates that compare greater than the substitutent.

If modifier 8 is off, the system uses the default reverse substitution mode, which is vertex based. This mode would complement solve criteria Jul-1 <= **Date** <= Dec-31 with **Vacation** < **Date** | **Vacation** = **Date** | **Vacation** > **Date**. It does this because the criteria contain dates that compare to at least one vertex of the substituent (Jul-1 <= **Date** < Aug-1) with each comparison operator ("<", "=", ">").
Reverse substitution uses universal quantification. If modifier 16 is off, the system uses the default of existential quantification. While existential quantification searches for at least one match, universal quantification attempts to prove the absence of a violation. Both modes should produce the same results, though the required effort could be substantially different.

**Note** The following values are not permitted and may give incorrect results: any even number, 7, 13, 21, and 29.

- **apply_constraints**
  Specifies whether the system applies constraints.
  - 0
    The system does not apply constraints.
  - 1
    The system applies constraints.

- **apply_defaults**
  Specifies whether the system applies defaults.
  - 0
    The system does not apply defaults.
  - 1
    The system applies defaults.

- **model_id**
  This is an optional argument and is specified only if you connect to an external configurator. Specifies the identifier of the 4GD model object in the context of which the revision rules should be validated. CPD model objects define the appropriate external configurator using the `EffectivityInModel` object.

- **product_name**
  Specifies the name of the product, for example, the item ID. Teamcenter uses this value in conjunction with the `product_namespace` argument to resolve any ambiguities in effectivity option value names. If you do not specify a value, Teamcenter deduces the product name from the `EffectivityInModel` object associated with the model.

- **product_namespace**
  Specifies the namespace of the product in which the product name has unique semantics, for example, the item revision ID, model year, and product type. Teamcenter uses this value in conjunction with the `product_name` argument to resolve any ambiguities in effectivity option value names. If you do not specify a value, Teamcenter deduces the product namespace from the `EffectivityInModel` object associated with the model.

- **h**
  Displays help for this utility.

**Environment**

As specified in *Manually configuring your environment for Teamcenter utilities*. 
As specified in *Log files produced by Teamcenter*.

Consider the following two products that are configured with effectivity:

<table>
<thead>
<tr>
<th>Product</th>
<th>Default</th>
<th>Rule checks</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>WHILE Unit &gt; 5 DEFAULT Date &gt;= 2012-01-01</td>
<td>WHILE Unit &lt;= 5 RAISE ERROR “message” IF Date &lt; 2012-01-01</td>
</tr>
<tr>
<td>P2</td>
<td>RAISE ERROR “message” Unit &gt; 5</td>
<td></td>
</tr>
</tbody>
</table>

If you validate a specified revision rule with an effectivity criteria of **Unit=7**, you obtain the following results:

<table>
<thead>
<tr>
<th>Revision rule effectivity criteria</th>
<th>Product</th>
<th>Result</th>
<th>Violations</th>
<th>Applied default</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit=7</td>
<td>P1</td>
<td>Unit=7, Date=2012-01-01..</td>
<td>None</td>
<td>Date &gt;= 2012-01-01</td>
</tr>
<tr>
<td></td>
<td>P2</td>
<td>Unit =7</td>
<td>Unit &gt; 5: “message”</td>
<td>None</td>
</tr>
</tbody>
</table>

These validation results are persisted in records that are attached to the revision rule. If a client queries the revision rule effectivity criteria in the context of product P1 or P2, the server response includes the corresponding validation records. This allows sites to run this utility to perform potentially CPU intensive criteria validation once for each revision rule during off-peak hours, while permitting the system to deliver an acceptable validation service to hundreds of users during working hours.

There are two limitations to this practice:

- In this version of Teamcenter, you cannot create, view, or change defaults and rule check constraints in the user interface. You can create them only with ITK APIs.

- In this version of Teamcenter, you cannot review validation results in the user interface when asking the server for revision rule effectivity criteria. You can view results only with the **validate_revrule_effectivity** utility.

Also, when you validate the effectivity criteria of a revision rule, the criteria are sent to a configurator service for validation. These criteria may be sent to external or remote configurator services in a future version of Teamcenter (this capability is not supported in the current version). In this case, the construction of the validation records is subject to any limitations of the external or remote configurator service.

**Examples**

- This example validates a revision rule called **My Latest Released** in the context of a model whose ID is **ship123**. It does not substitute dependent variables, and does not apply constraints or default rules. It creates a validation record and associates it with the revision rule.
validate_revrule_effectivity -u=infodba -p=password -g=dba
-rule_name=My Latest Released -model_id=ship123

- This example validates revision rules called **My Latest Working** and **My Latest Released** which are listed in the file `C:\xyz\revrule.txt` in the context of a model whose ID is **Malibu_V6_2010**. It enables forward and reverse substitution of dependent variables (modifiers are off) and applies defaults and constraints. It creates validation records for each revision rule and associates them with the relevant revision rules.

validate_revrule_effectivity -u=infodba -p=password -g=dba
-rev_rules_file_name=C:\xyz\revrule.txt -substitute_dep_vars=1
-apply_constraints=1 -apply_defaults=1 -model_id=Malibu_V6_2010
Chapter

6  Workflow utilities
clear_process_stage_list

Clears the `process_stage_list` field of the workspace object.

**Note** Running this utility changes the date and time stamp of the objects that it is run against.

**SYNTAX**

```
clear_process_stage_list [-u=user-id [-p=password | -pf=password-file] -g=dba] -folder [-h]
```

**ARGUMENTS**

- `-u`
  Specifies the user ID.
  If this argument is used without a value, the operating system user name is used.

- `-p`
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- `-pf`
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the `-p` argument.

- `-g`
  Specifies the group associated with the user. The group value must be `dba` to run this utility.

- `-folder`
  Specifies the folder name where the target workspace objects should be placed whose process stage lists are to be cleared. The folder must be a single folder directly inside the executing user's *Home* folder.

- `-h`
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

You must be logged on as a member of the `dba` group.

**EXAMPLES**

To clear the `process_stage_list` fields of all the objects in the `my_folder` object, enter the following command on a single line:
$TC_ROOT/bin/clear_process_stage_list -u=user-id -p=password -g=dba
-foldern=my_folder
Chapter 6  Workflow utilities

global_transfer

Transfers all tasks of one user ID or resource pool to another user ID or resource pool. This utility provides the capability to transfer tasks, as follows:

- Users can transfer their own tasks to another user.
- Users can transfer the tasks of other users.
- Users with group administrator privileges can transfer tasks assigned to members of their group.
- System administrators can transfer tasks belonging to any user to a different user.

When transferring tasks, such as do tasks or select-signoff-team tasks, the responsible party for each task is transferred to the new resource pool or user.

When transferring perform-signoff tasks, the tasks of the current resource pool or current user are delegated to a new resource pool or user if the new resource pool or user meets the same requirements as if the task were delegated using the delegate feature in the Teamcenter interface. If the signoff task is associated with a signoff profile, the delegation is constrained to another user or resource pool of the group/role specified by the signoff profile and the list of users to select from is filtered. If the signoff task is not associated with a signoff profile, delegation to any user or resource pool is possible, and the list of users to select from is not filtered.

SYNTAX

global_transfer [-u=user-id | -p=password | -pf=password-file] [-g=group-name] [-f=user-ID] [-t=user-ID] [-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the user's password.

If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see *Manage password files*.

This argument is mutually exclusive with the `-p` argument.

-`g`

Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

-`f`

Specifies the ID of the user whose inbox tasks are being transferred or the group/role resource pool inbox tasks of a specified group/role. **Group/Role** transfers resource pool inbox tasks for a specified group/role. **Group/*** transfers resource pool inbox tasks of a specified group and any role. ***/Role** transfers resource pool inbox tasks of a specified role and any group.

-`t`

Specifies the ID of the user to whom the tasks are being transferred, or the group/role transfers resource pool inbox tasks of a specified group/role. **Group/*** transfers resource pool inbox tasks of a specified group and any role. ***/Role** transfers resource pool inbox tasks of a specified role and any group.

-`h`

Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

The `gtransfer_xxxxx.log` file provides a listing of selected tasks, whether they have been transferred (Y/N), to whom they were transferred, and if there were any errors in the transfer.

**RESTRICTIONS**

None.

**EXAMPLES**

To transfer all tasks from user Mike to user Kevin, enter the following command on a single line:

```bash
global_transfer -f=mike -t=kevin
```
install_handlers

Defines action handlers. It can also configure new action handlers and modify the definition of existing handlers.

**SYNTAX**

```
install_handlers [-u=user-id | -p=password | -pf=password-file] -g=group-name
-f= [install | create | modify | delete | listall] -id=handler-ID
[-funcname=function-name] -funcType=1 | 2
-execmode=1 | 2 -desc=handler-description
[-retrycount=retry-count] [-retryinterval=retry-interval-in-minutes]
[-exectime=time-of-the-day-in-24-hour-format] -override=true | false [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-f**
  Specifies the mode in which the utility must execute. The mode must be one of the following:
  - install
  - create
  - modify
• delete
• listall

-id=
Specifies the handler ID.

-funcname
Specifies the name of the library function. Use this argument when the -funcype argument is set to 1.

-functype
Specifies whether the handler is a library function or a stand-alone executable. The value for this argument must be one of the following:

  1
  Library function

  2
  Stand-alone executable

-execmode
Specifies the handler's execution mode. The value for this argument must be one of the following:

  1
  Executes the handler in the calling process.

  2
  Executes the handler as a separate process.

-desc
Specifies the handler description.

-override
Specifies if the handler execution time can be overridden. The value for this argument must be one of the following:

  true
  Allows override.

  false
  Disables override.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.
Chapter 6  Workflow utilities

EXAMPLES

• To install the default action handlers, enter the following command on a single line:

  `install_handlers -f=install`

• To create an action handler with the specified attribute values to set the execution time for the handler to 6.00 p.m., enter the following command on a single line:

  `install_handlers -f=create -id=MyActionHandler -funcname=Myfunc -functype=1 -execmode=1 exectime=1800`

• To set the retry count value to 5 for the **MyActionHandler** action handler, enter the following command on a single line:

  `install_handlers -f=modify -id=MyActionHandler -retryCount=5`

• To delete the **MyActionHandler** action handler, enter the following command on a single line:

  `install_handlers -f=delete -ID=MyActionHandler`

• To list all the action handlers defined in the database, enter the following command on a single line:

  `install_handlers -f=listall`
**migrate_ecm_ids**

Allows users to create Change Viewer objects with a new naming rule that changes the name length in a database originally created in Teamcenter engineering process management. This utility must be run in the Teamcenter environment after upgrading from a Teamcenter engineering process management.

**SYNTAX**

```
migrate_ecm_ids [-u=user-id -p=password | -pf=password-file] -g=group-name
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  [Note] If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in Manually configuring your environment for Teamcenter utilities.

**FILES**

As specified in Log files produced by Teamcenter.

**RESTRICTIONS**

None.

**EXAMPLES**

None.
migrate_wf_handlers

Transforms the name and/or arguments of workflow handlers from one format to another. Task templates may have one or more workflow handlers associated with them. This utility transforms the handlers associated with templates that are active, as well as template versions that are obsolete but that are still referenced by uncompleted workflow processes or jobs.

This utility uses an XML mapping file to migrate handlers and their arguments. The mapping file top-level nodes define an action (rule or transform) to perform, such as Replace, Remove, or Update, on the individual handler specified within them.

**SYNTAX**

```
migrate_wf_handlers [-u=user-id [-p=password | -pf=password-file] 
-g=group-name] [-report=report-file-name [-dryrun] [-listonly] 
[-templates=template-to-migrate, ...] [-templates_file=path-and-name-of-csv-file] 
```

**ARGUMENTS**

Entries in parentheses are accepted abbreviations for arguments.

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user's password.

  If used without a value or if neither the -pf nor the -p argument is used, the system displays an error and asks for a username and password interactively.

  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file.

  If used without a value or if neither the -pf nor the -p argument is used, the system displays an error and asks for a username and password interactively.

  For more information about managing password files, see *Manage password files.*

  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.
-report
Specifies the output file. If this argument is not specified, the output is written to the standard output.

-dryrun
Runs the command without making any changes. Actions that would have been performed are displayed instead.

-listonly
Lists the handlers and arguments it would have migrated, but makes no changes.

-templates
Limits the migration of handlers to ones owned by the specified templates. If you use more than one template name, separate them with a comma. If a template name has spaces in it, quotes are required around the name. Mutually exclusive with the -templates_file argument.

-templates_file
Limits the migration of handlers to ones owned by the templates specified in the named file. The file contains a comma-delimited list of one or more template names. Mutually exclusive with the -templates argument.

-mapping_file
Specifies the path and file name of the XML mapping file containing transforms or rules with the old and new names for handlers and arguments. The mapping file provided by Siemens PLM Software to convert handler names and arguments from versions prior to Teamcenter 10.1 is TC_DATA\wf_handler_migration.xml.

-v
Displays verbose output and its use is recommended if you are running this utility manually. If this argument is not specified, nothing is displayed when the utility is run.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
- After replacing one handler with two or more new handlers using the Replace rule in the map file, the new handlers are not available for further processing during the same run of the utility in subsequent mapping file elements. However, the handlers would be available for processing when you run the utility again.

- The Replace rule cannot replace an action handler with a rule handler and vice versa.

EXAMPLES
- The following example does not migrate handlers, it only performs a dry run in verbose mode, with the output information sent to the standard output. The
Chapter 6  Workflow utilities

`TC_DATA` variable is specified for Windows systems. Because `-u` and `-p` are not specified, the user's operating system credentials are used.

```
migrate_wf_handlers -v -dryrun -mapping_file= %TC_DATA%\wf_handler_migration.xml
```

- The following example migrates the handlers using the `tcadmin` user with verbose output to the standard output. The `TC_DATA` variable is specified for UNIX/Linux systems.

```
migrate_wf_handlers -v -u=tcadmin -p=tcadmin -mapping_file= $TC_DATA/wf_handler_migration.xml
```

- The following example migrates the handlers using the `tcadmin` user and a password file with verbose output to the specified report file (`rpt_file`):

```
migrate_wf_handlers -v -u=tcadmin -pf=pswd_file -report=rpt_file -mapping_file=./map.xml
```

- The following example migrates in silent mode only the handlers used by the specified workflow template:

```
migrate_wf_handlers -templates="Authorization WF Template" -mapping_file=D:\Temp\MyMigrationMappingFile.xml
```
purge_processes

Purges completed processes based on the last-modified date of the process. Objects such as e-mail messages that reference the process are not deleted. Use the \(-f\) argument to delete both in-process and completed processes and sever the references between objects and the processes.

SYNTAX

\texttt{purge\_processes [-u=\textit{user\_id} (-p=\textit{password} | -pf=\textit{password\_file}) -g=\textit{group\_name}] -d=MM-DD-YYYY [-force] [-r] [-h]}

ARGUMENTS

Entries in parentheses are accepted abbreviations for arguments.

\textbf{-u}

Specifies the user ID.

This is generally \textit{infodba} or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

\textbf{Note} If Security Services single sign-on (SSO) is enabled for your server, the \textbf{-u} and \textbf{-p} arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

\textbf{-p}

Specifies the user’s password.

If used without a value, the system assumes a null value. If this argument is not used, the system assumes the \textit{user\_ID} value to be the password.

This argument is mutually exclusive with the \textbf{-pf} argument.

\textbf{-pf}

Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the \textit{user\_ID} value to be the password.

For more information about managing password files, see \textit{Manage password files}.

This argument is mutually exclusive with the \textbf{-p} argument.

\textbf{-g}

Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

\textbf{-d}

Specifies the cut-off date for processes to be purged. This is the last-modified date of the process. All processes with a last-modified date equal to or before the specified date are purged.

\textbf{-f}

Deletes in-process and completed processes specified by the \textbf{-d} argument from the system and sever references between objects and the processes being
deleted. If this argument is not specified, only completed processes that have no referenced objects are purged.

-\texttt{r}
Generates a report of the number and names of processes to be purged without purging the processes.

-\texttt{h}
Displays help for this utility.

\textbf{ENVIRONMENT}
As specified in \textit{Manually configuring your environment for Teamcenter utilities}.

\textbf{FILES}
As specified in \textit{Log files produced by Teamcenter}.

\textbf{RESTRICTIONS}
None.

\textbf{EXAMPLES}
To remove all processes that have been modified on or before 15th April 1998, enter the following command on a single line:

\begin{verbatim}
    purge_processes -u=user-id -p=password -g=dba -d=04-15-1998
\end{verbatim}
release_man

Releases objects in batch mode without creating workflow processes or audit files.

SYNTAX

```
```

ARGUMENTS

- **-u**
  Specifies the user ID.
  If this argument is used without a value, the operating system user name is used.

- **-p**
  Specifies the user’s password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group. Must be the **dba** group.
  See restriction #1.

- **-spec**
  Indicates that specifications and BOM view revisions of an item revision in the release folder are released along with the item revision.

- **-unrelease**
  Removes the specified status type. See restrictions #2 and #5.

- **-retain_release_date**
  Specifies that if the object to be released is already released, the original release date is retained. See restriction #5.

- **-status**
  Specifies the status type to be applied to all objects.
  See restriction #2.

- **-folder**
  Specifies the name of the release folder. Place the objects whose status you want changed into the release folder. See restriction #3.
Status is changed only on the objects one level down within the folder. For example, if you place an item in the folder that contains multiple item revisions, and these item revisions contain multiple datasets, only the status of the item is changed. The status of the item revisions and their datasets is not changed. To change the status of the item revisions, each item revision must be individually placed in the folder at the same level as the item.

Use the -spec argument to change the status of specifications and BOM view revisions of item revisions.

-**dataset**
  Specifies that a dataset is released.

-**item**
  Specifies the item ID of the dataset to be released. Use with the -**dataset** argument.

-**key**
  Specifies the key of the dataset to be released. Use with the -**dataset** argument.

Use the following format:

```
[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]
```

To find the key of an object, use the **get_key_string** utility.

For more information, see the Business Modeler IDE Guide.

-**rev**
  Specifies the revision ID of the dataset to be released. Use with the -**dataset** argument.

-**relation**
  Specifies the relation of the dataset to be released. Use with the -**dataset** argument.

-**datasetName**
  Specifies the name of the dataset to be released. Use with the -**dataset** argument.

-**datasetType**
  Specifies the type of dataset to be released. Use with the -**dataset** argument.

-**force**
  Forces the specified release status to be unreleased, even if there is no release type associated with the status. Must be used with the -**unrelease** argument.

-**h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in Manually configuring your environment for Teamcenter utilities.

**FILES**

As specified in Log files produced by Teamcenter.

**RESTRICTIONS**

1. The user must be a member of the **dba** group.
2. The status type must be a valid status type defined for your site.
3. The release folder must be a single folder directly inside the executing user’s workspace **Home** folder.
4. The **release_man** utility does not release invalid objects or objects locked by other processes.

5. The **-retain_release_date** and **-unrelease** arguments cannot to be used together.

**EXAMPLES**

- To apply the **Released** status type to all objects in the **my_folder** folder (including ItemRevision specifications and BOM view revisions), enter the following command on a single line:

  ```
  $TC_ROOT/bin/release_man -u=user-id -p=password -g=dba -spec
  -status=Released -folder=my_folder
  ```

- To remove the **Released** status type from all objects in the **my_folder** folder (including ItemRevision specifications and BOM view revisions), enter the following command on a single line:

  ```
  TC_ROOT/bin/release_man -u=user-id -p=password -g=dba -spec
  -unrelease -status=Released -folder=my_folder
  ```
Socket-based server application that receives requests from the `RDV-add-released-parts-queue` workflow handler using the Teamcenter server. Upon receiving the request, it opens the file that contains the list of parts to be processed, locks the file, appends the newly released IA information to the file, and unlocks the file. This application can be used in two modes. When using the `-S` option, it works as a server, and when using the `-C` option, it works as a client application.

**SYNTAX**

Server mode:
```
released_parts_collector_server S host-name:port-number master-file
```

Client mode:
```
released_parts_collector_server C host-name:port-number
[-u=user-id {-p=password | -pf=password-file} -g=dba]Command 1: Cf host
-name:port-number client-IA-file
```

Command 2: `C host-name:port-number stop`

Command 3: `C host-name:port-number empty-master-list`
```
[-h]
```

**ARGUMENTS**

- `-u`
  Specifies the user ID.
  If this argument is used without a value, the operating system user name is used.

- `-p`
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- `-pf`
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- `-g`
  Specifies the group. Must be the `dba` group.
  See restriction #1.

- `-S`
  Specifies that the application functions as a server.
  `host-name:port-number`
  Indicates the port number at which this server should listen for incoming requests.
master-file
Specifies the absolute path to the master XML file to be created/updated with the released parts information. The released parts information is received from either the RDV-add-released-parts-queue workflow handler or the released_parts_collector command line utility in client mode.

-C
Specifies that the application functions as a client.

host-name:port-number
Specifies the name and port number of the server. This is required when running the utility in client mode.

client-IA-file
Defines the absolute path of an XML file containing the list of released parts. This option must be specified only when running the utility in client mode. When this option is used, the client application sends the list of parts in the specified file to the server, which appends the new parts to the master list.

stop
Sends a message to stop the server.

empty_master_list
Sends a message to the server to empty the master released parts list.

-h
Displays help for this utility.

FILES
None.

RESTRICTIONS
None.

EXAMPLES
• To start the server on the trysun12 machine at port 5567 and create the file master_list.xml file, enter the following command on a single line:

  released_parts_collector -S trysun12:5567 /tmp/master_list.xml

• To send the contents of the file /tmp/my_released_list.xml to the server running on trysun12 at port 5567 and add the new list of parts to the master list of released parts, enter the following command on a single line:

  released_parts_collector -Cf trysun12:5567 /tmp/my_released_list.xml

• To stop the server running on trysun12 at port 5567, enter the following command on a single line:

  released_parts_collector -C trysun12:5567 stop

• To empty the released parts list XML file on the server running on trysun12 at port 5567, enter the following command on a single line:

  released_parts_collector -C trysun12:5567 clear_master_file
**tc_workflow_postprocess**

Executes a specific action on a specific task in the workflow process from which the related background process was initiated.

For example, you can use this utility to evoke the **complete** action on the **Review** task in the workflow process from which a background tessellation process was initiated. This utility then prompts the workflow task to either execute an action (defined with the **-action** argument) or submit a decision (defined with the **-signoff** argument). This can be useful when the conditions to execute the action are not met until the background process completes. In these cases, the user has typically moved on to other tasks or ended the session.

Use the **-member_group** and **-member_role** arguments to define the group/role used for the background process. This is useful at sites where users have multiple groups/roles and the user has changed to a group/role that is different from his default login group/role while initiating the background process. These arguments allow the **tc_workflow_postprocess** utility to assume the same group/role the user was using at the time the workflow process was initiated. It is expected that the same group/role is required to execute any action in that workflow process on behalf of the user.

**SYNTAX**

```
.tc_workflow_postprocess [-u=user-id {p=password | pf=password-file] -g=group-name] -status_xfer_type=transfer-type [itemid=item-id | -key=[keyAttr1=keyVal1][,keyAttr2=keyVal2]...[,keyAttrN=keyValN]} -revid=rev-id -dsname=dataset-name -dataset_tag=dataset-tag -task_tag=tag [-member_group=group] [-member_role=role] [-action=action-name] [-trigger_comment=comment] [-signoff=decision] [-signoff_comment=comment] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally a **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

- **-p**
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

If the utility is called using the EPM-invoke-system-action or EPM-invoke-system-rule handlers, the utility inherits the session authentication and the -u/p switches are not needed, irrespective of the autologin setting.

-status_xfer_type
Indicates the type of status transfer to perform. An argument value of cae_mesh transfers the release status to an associated CAEMesh dataset. Any other value, or not supplying the argument, transfers the release status to an associated DirectModel dataset. This argument and value are valid only if the -dataset_tag argument is specified; otherwise, this argument is ignored.

-itemid
Identifies the item under which to locate the CAEMesh dataset. The utility transfers the release status to the CAEMesh dataset at the location indicated by this argument, the -revid, and the -dsname arguments. This argument and value must be supplied only if the argument/value -status_xfer_type=cae_mesh is specified; otherwise, it is ignored.

-key
Specifies the key of the item under which to locate the CAEMesh dataset. The utility transfers the release status to the CAEMesh dataset at the location indicated by this argument, the -revid, and the -dsname arguments. This argument and value must be supplied only if the argument/value -status_xfer_type=cae_mesh is specified; otherwise, it is ignored.

Use the following format:

[keyAttr1=KeyVal1] [,keyAttr2=KeyVal2]...[,keyAttrN=KeyValN]

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-revid
Identifies the item revision under which to locate the CAEMesh dataset. The utility transfers the release status to the CAEMesh dataset at the location indicated by this argument, the -itemid, and the -dsname arguments. This argument and value must be supplied only if the argument/value -status_xfer_type=cae_mesh is specified; otherwise, it is ignored.

-dsname
Identifies the name of the CAEMesh dataset to which to transfer the release status. The utility transfers the release status to the CAEMesh dataset at the location indicated by this argument, the -itemid and the -revid arguments. This argument and value must be supplied only if the argument/value -status_xfer_type=cae_mesh is specified; otherwise, it is ignored.

-dataset_tag
Specifies the tag of the dataset to which the release status is transferred. The release status of the primary object (target object of the workflow process) is applied to the specified dataset.
-**task_tag**
Provides a text representation of the tag of the workflow task. The value can be extracted from the XML file provided by either the `EPM-invoke-system-action` or `EPM-invoke-system-rule` handler.

-**member_group**
Assumes the defined group name before executing an action on the workflow process.

Use when users have multiple groups/roles and the user is expected to change to a group different from their default login group while initiating the background process.

This argument allows the utility to assume the same group the user was using at the time the workflow process was initiated. It is expected that the same group is required to execute any action in that workflow process on behalf of the user.

-**member_role**
Assumes the defined role name before executing an action on the workflow process.

Use when users have multiple groups/roles and the user is expected to change to a role different from their default login role while initiating the background process.

This argument allows the utility to assume the same role the user was using at the time the workflow process was initiated. It is expected that the same role is required to execute any action in that workflow process on behalf of the user.

-**action**
Defines which action to trigger in the workflow task specified with the `-task_tag=tag` argument.

Valid actions are: `assign`, `start`, `complete`, `skip`, `suspend`, `resume`, `undo`, `abort`, and `demote`. These action values are not case sensitive.

-**trigger_comment**
Provides the comment when triggering the action specified in the `-action=action-name` argument.

-**signoff**
Specifies the utility will perform a signoff with the specified decision.

Valid signoff values are: `approve`, `reject`, `nodecision`. These signoff values are not case sensitive.

-**signoff_comment**
Provides the comment for the signoff specified with the `-signoff=decision` argument.

-**h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.
EXAMPLES

- The following example checks the group/role defined by the -member_group and -member_role arguments (Body/Designer) against the group/role the user is currently logged on with. If they do not match, the group/role of the background processes group/role is changed to Body/Designer.

  The complete action is then invoked for the task specified by the -task_tag argument and the comment **Tessellation completed successfully** is displayed.

  ```
  $TC_ROOT/bin/tc_workflow_postprocess
  -member_group=Body -member_role=Designer
  -task_tag=AZwszeagnHvpDAAAAA
  -action=Complete
  -trigger_comment="Tessellation completed successfully"
  ```

- The following example checks the group/role defined by the -member_group and -member_role arguments (Body/Designer) against the group/role the user is currently logged on with. If they do not match, the group/role of the background processes group/role is changed to Body/Designer.

  The signoff decision **No Decision** is then made for the task specified by the -task_tag argument.

  ```
  $TC_ROOT/bin/tc_workflow_postprocess
  -member_group=Body -member_role=Designer
  -task_tag=AZwszeagnHvpDAAAAA
  -signoff=NoDecision
  -signoff_comment="Tessellation failed - disk full"
  ```

- The following example illustrates the use of the -dataset_tag argument to apply the release status of a rendering parent object to the related child object.

  ```
  $TC_ROOT/bin/tc_workflow_postprocess
  -dataset_tag=AXwszeagnHvpDAAAAA
  ```

- The following example transfers the release status from a UGMASTER dataset to its corresponding CAEMesh dataset:

  ```
  $TC_ROOT/bin/tc_workflow_postprocess
  -dataset_tag=QZPBK4_6x45kbDAAAAA
  -status_xfer_type=cae_mesh -itemid=000266
  -revid=A -dsname=000266/A
  ```
verify_tasks

Finds all corrupted Change Viewer tasks, jobs, and other associated internal task model objects in order to delete them from the database. If a corrupted object, such as a job, is referenced in a folder, the reference is removed and the job is deleted.

**SYNTAX**

```
verify_tasks [-u=user-id [-p=password | -pf=password-file] -g=group-name]
[-m={list | delete}] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

- **-p**
  Specifies the user's password.

  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see *Manage password files*.

  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.

- **-m**
  Sets mode to one of the following:

    - **list**
      Lists corrupted jobs and tasks without deleting them.

    - **delete**
      Lists and deletes corrupted jobs and tasks.

- **-h**
  Displays help for this utility.
ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.

EXAMPLES
None.
Chapter

7  Data sharing utilities
attribute_export

Queries for the objects that satisfy the conditions specified by condition property name/property value pairs, sets new values for the properties to be updated on the found objects, and exports the data to a TC XML file. You then must use the txml_import utility to import the TC XML file containing the updated values back into the database.

Caution Using the bulk load feature (-bulk_load argument) of the txml_import utility to import a TC XML file requires the SITCONS_AUTH_KEY environment variable be set to a valid license key value. Due to the potential for data integrity issue if this feature is used improperly, you must meet specific criteria before you can obtain the required key from GTAC.

For more information about loading bulk data, see the Data Exchange Guide.

For more information about loading bulk data, see the Data Exchange Guide.

You can use these two utilities in conjunction to update the properties of numerous objects at once. The update process allows you to update one or more attributes of an object. When a specified object contains multiple attributes, only the specified attributes are exported and updated.

For complex update operations, you can create an input XML file containing instructions on which objects to update and the new values to apply. The file is constructed as a series of UpdateSet entries; each entry must contain type, where, and update components.

Before performing lengthy update operations, you can use the utility to determine the number of objects affected by a specified update operation.

For more information about the bulk update process, including instructions on creating the input file, examples of different update operations, performance statistics, and methods for managing the operation’s duration, see the System Administration Guide.

SYNTAX

attribute_export
-u=UserID
[-p=password | -pf=password-file]
[g=group]
[-inputfile=path-to-input-XML-file | -type=type-name]
-cond_prop=property-name
-cond_value=value-name
-update_prop=property-name
-update_value=property-value
[-cond_operator=operator]
[performSchemaValidation]
[-queryonly]
[-log=log-file-path]
[-outdir=output-XML-file-directory]
[-batchsize=number-of-objects-to-update-per-batch]
[-islandsize=number-of-objects-to-update-per-island]
ARGUMENTS

[-untransformed]
[-uidfile]
[-h]

-u
Specifies the user ID. The user must have administrative privileges.
If this argument is used without a value, the operating system user name is used.

-p
Specifies the user's password.
If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user. The group value must be dba to run this utility.

-inputfile
Specifies the full path to the input XML file containing instructions on which objects to update and the new values to apply. The file is constructed as a series of UpdateSet entries; each entry must contain type, where, and update components.
For more information about creating the input file, see the System Administration Guide.
Use the input file for complex updates. (For simpler instances, you can use the following arguments.)

You must use either this argument, or the -type, -cond_prop, -cond_value, -update_prop and -update_value arguments.

-type
Specifies the type of objects to be updated. For example, item or dataset or StructureContext, and so on.
This argument accepts a single value, which must be a valid Teamcenter object. Use multiple instances of this argument to specify multiple object types.
You must either use this argument in conjunction with the -cond_prop, -cond_value, -update_prop and -update_value arguments, or use the -inputfile argument.

-cond_prop
Specifies the name of the property to be queried for and updated during export.
This argument accepts multiple values in a comma-separated list. Each value must be a valid property on a Teamcenter object. For example:

- `cond_prop=object_name, last_mod_date`

You can use multiple instances of this argument. Each instance of this argument must be paired with the `cond_value` argument.

You must either use this argument in conjunction with the `-type`, `-cond_value`, `-update_prop` and `-update_value` arguments, or use the `-inputfile` argument.

- `cond_value`

Specifies the new value for the property specified by the `cond_prop` argument.

This argument accepts multiple values in a comma-separated list. Each value must be a valid property on a Teamcenter object. For example:

- `cond_value=TextData_es_ES, "01-DEC-2011 00:00"`

You can use multiple instances of this argument. Each instance of this argument must be paired with the `cond_value` argument.

You must either use this argument in conjunction with the `-type`, `-cond_prop`, `-update_prop` and `-update_value` arguments, or use the `-inputfile` argument.

- `update_prop`

Specifies the internal name of the property to be updated (as opposed to the display name). For example `object_desc`, `char VLA`, and so on.

This argument accepts multiple values in a comma-separated list. Each value must be a valid property on a Teamcenter object. For example:

- `update_prop=object_name, object_desc`

You can use multiple instances of this argument. Each instance of this argument should be paired with the `-update_value` argument.

You must either use this argument in conjunction with the `-type`, `-cond_prop`, `-cond_value`, and `-update_value` arguments, or use the `-inputfile` argument.

- `update_value`

Specifies the new value for the property specified by the `update_prop` argument.

This argument accepts multiple values in a comma-separate list. For example:

- `update_value=folder, "Home folder"`

You can use multiple instances of this argument. Each instance of this argument must be paired with the `-update_prod` argument.

You must either use this argument in conjunction with the `-type`, `-cond_prop`, `-cond_value`, and `-update_prop` arguments, or use the `-inputfile` argument.

- `cond_operator`

Specifies the operator to be used with the condition arguments. Valid operations are: `equal`, `not equal`, `greater than`, `greater than and equal`, `less than`, `less than and equal`.

When setting the value for this argument in the command window, the format for these operations are: `EQ`, `NE`, `GT`, `GE`, `LT`, and `LE`. 
When setting the value for this argument in the input file, you can use the above format, or the following characters: =, !=, >, >=, <, <=.

This argument is optional and is only valid when used with, and placed after, the -cond_prop and -cond_value arguments. For example:

- cond_prop=object_name -cond_value="My obj #1"
- cond_prop="last_mod_date" -cond_value="01-DEC-2011 00:00"
- cond_operator="LE" -cond_prop="last_mod_date"
- cond_value="01-DEC-2010 00:00" -cond_operator="GE"

-performSchemaValidation
Enables schema validation of the XML input file.

-queryonly
Outputs the number of target objects affected by the specified update parameters to a log file. If the number of objects is less than 100, the object UIDs are included in the log file.

When you specify this switch, the utility does not perform the update, it merely reports the number of affected objects.

Use this switch in conjunction with either the input file or the condition and update arguments to determine how many objects are affected by specified update operation. You can use the resulting information to determine batch size, and to estimate the duration of the update operation.

For more information about update duration, see the System Administration Guide.

-log
Specifies the path to the log file. By default, this is the current directory.

-outdir
Specifies the directory to which the TC XML file is generated. The file name is automatically generated, using the following naming convention:

BulkAttrOut_1.xml, BulkAttrOut_2.xml, BulkAttrOut_3.xml

This argument is optional. If not specified, the current directory is used.

-batchsize
Specifies the number of objects to update per TC XML file.

This argument is optional. The default value is 800.

-islandsize
Specifies the number of objects to update per island. An island ties logically related objects together.

For example, a simple island is:

[Item, ItemRev, MasterForm]

The data in low level TC XML is grouped into islands by closure rules, in which the root objects are assigned island IDs and the traversed objects are assigned new island IDs when an INTER_ISLAND clause is evaluated.
The following example illustrates an assembly in which every child component is placed in a separate island. The I at the end is the predicate for the INTER_ISLAND clause.

```
[TYPE.PSOccurrence:CLASS.WorkspaceObject:ATTRIBUTE.child_item:
  PROCESS+TRAVERSE:$opt_entire_bom==&quot;true&quot; &amp;&amp; $opt_hl_tie==&quot;false&quot;:I]
```

An example of how island IDs are written in low level TC XML is:

```xml
<ItemRevision elemId="id7" island_id="4" item_revision_id="A"
  items_tag="Q9L5sgK14ghudD" last_mod_date="2011-11-15T07:57:46Z" object_desc="new desc"
  owning_user="#id2" parent_uid="Q9L5sgK14ghudD" puid="gBB5sgK14ghudD" />
<Item elemId="id7" island_id="4" puid="asd876jerTf"
  last_mod_date="2011-11-15T16:03:30Z" object_desc="new description" item_id="003293"/>
<Item elemId="id8" island_id="4" puid="xgr23hgfgh43"
  last_mod_date="2011-11-15T16:03:30Z" author="John Yates" item_id="003423"/>
```

This argument is optional. The default value is 100.

-**untransformed**
Exports the original values of the specified attributes.

This argument is optional.

-**uidfile**
Specifies the full path to the input XML file containing a list of object UIDs.

This argument is optional. If specified, it suppresses the function of the -**cond_prop**
argument.

-**h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Configuring utilities* in the *Utilities Reference*.

**FILES**
As specified in *Log files* in the *Utilities Reference*.

**RESTRICTIONS**
The IDSM server must be running when you use this utility.

You must use either the -**inputfile** argument, or the -**type**, -**update_prop**, -**update_value**, -**cond_prop** and -**cond_value** arguments.

**Note** The condition arguments are the equivalent of the where clause in an SQL phrase. Running this utility without specifying the -**cond_prop** and -**cond_value** arguments it technically possible, but impractical.

**EXAMPLES**

- To update the attributes of certain properties as specified in the *propFile.xml* file, enter the following command on a single line.

  ```bash
  attribute_export -u=infodba -p=infodba -g=dba-inputfile=d:\propFile.xml -log=logFile.txt
  ```
• To update prop3 to value3 and prop4 to value4 for type1 objects, when prop1 equals value1 and prop2 is greater than value2, enter the following command on a single line.

```
attribute_export -u=infodba -pf=d:\password.txt -g=dba
-<type>=type1 -<cond_prop>=prop1 -<cond_value>="value1" -<cond_prop>=prop2
-<cond_value>="value2" -<cond_operator>="GT" -update_prop=prop3 -<update_value>=
"value3" -update_prop=prop4 -<update_value>="value4"
```

• To update prop3 to value3 and prop4 to value4 for type1 objects, when prop1 equals value1 and prop2 is greater than value2 in batches of 400, enter the following command on a single line.

```
attribute_export -u=infodba -pf=d:\password.txt
-g=dba -<type>=type1 -<cond_prop>=prop1 -<cond_value>="value1" -<cond_prop>=prop2
-<cond_value>="value2" -<cond_operator>="GT" -update_prop=prop3 -<update_value>=
"value3" -update_prop=prop4 -<update_value>="value4" -<batchsize>=400
```

• To update an object description to red Desc and the object name to This is a new object name for all items where the object_name property is my object and the str_attr property is red,white,yellow, enter the following command on a single line.

```
attribute_export -u=infodba -p=infodba -g=dba
-<type>=Item -update_prop=object_desc -<update_value>="red Desc"
-<update_prop=object_name -<update_value>="This is a new obj name"
-<cond_prop=object_name -<cond_value>="my obj" -<cond_value>="str_attr"
-<cond_value>="red,white,yellow"
```

• To update an object description to blue Desc and the int_VLA to 10,3,0,99 for all datasets where the object_name property is TextData_es_ES and the last_mod_date property is 01-DEC-2011 00:00 or greater, enter the following command on a single line.

```
attribute_export -u=infodba -p=infodba -g=dba
-<type>=Dataset -update_prop=object_desc -<update_value>="blue Desc"
-<update_prop=object_name -<update_value>="10,3,0,99" -<cond_prop=object_name
-<cond_value>="TextData_es_ES" -<cond_prop=last_mod_date -<cond_value>=
"01-DEC-2011 00:00" -<cond_operator>="GE"
```

• To update the char_VLA to w,y,d,k,a for all items where the owning_user property is AsL5bfuW4ghuD, enter the following command on a single line.

```
attribute_export -u=infodba -p=infodba -g=dba -<type>=Item -update_prop=
"char_VLA" -<update_value>="w,y,d,k,a" -<cond_prop=owning_user
-<cond_value>="AsL5bfuW4ghuD"
```
Chapter 7  Data sharing utilities

batch_export_translate_import

Exports, translates, and/or imports the named reference of a given type attached to the specified dataset type that is attached to a specified item revision with the given relation type. For example, this utility could be used to export .wire files (named references) from the ALIAS_PROJECT dataset attached to a specified CORP_CriteriaRevision item revision with an IMAN_specification relation to the directory specified by the -output_path directory.

This utility works in one of the following modes:

- Export mode (-e)
  Exports datasets from Teamcenter.

- Import mode (-i)
  Imports datasets to Teamcenter.

- Export, translate, import mode (-eti)
  Exports, translates, and imports the dataset back in to Teamcenter.

SYNTAX

batch_export_translate_import [-u=user-id [-p=password | -pf=password-file] -g=group] -infile=input-file -output_path=output-path -translator=translator-executable -e -i -eti -nolog [-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note: If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-infile
Specifies the input file for exporting, translating, and importing a list of datasets.

-i
Specifies that the utility performs only the batch import. The input file format is as follows:
```
item-id|rev-id|dataset-type|relation|reference-type|dataset-uid
new-dataset-name|path-of-file-to-be-imported
```

-e
Specifies that the utility performs only batch export. The file format for exporting a given list of datasets is as follows:
```
item-id|rev-id|dataset-type|relation|reference-type|dataset-uid
```

-eti
Specifies that the utility export, translate, and import a list of datasets.

-translator
Specifies the translator executable or batch file used to translate the exported files.

-nolog
Specifies that a log file will not be generated when the utility is run.

-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*. In addition, the log file is created in the local directory specified by either the TMP or TEMP environment variable.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.

EXAMPLES

- To export the list of given datasets to the C:\temp directory, enter the following command on a single line:

```
batch_export_translate_import -u=user-name -p=password -g=group-name -e
-infile=input-file-with-dataset-details -output_path=c:\temp
```

- To import the list of given datasets, enter the following command on a single line:

```
batch_export_translate_import -u=user-name -p=password -g=group-name -i
-infile=input-file-with-dataset-details -output_path=c:\temp
```

- To translate the list of given datasets, enter the following command on a single line:

```
batch_export_translate_import -u=user -p=password -g=group-name
-eti -infile=input-file-with-dataset-details
```
Chapter 7  Data sharing utilities

-translator=input-translator-file -output_path=c:\temp
Reverts changes made to an assembly as part of an incremental change (IC) object. This utility analyzes the incremental change object and cleans up the database to nullify the impact of the IC changes. For example, if a PLM XML file that is updating an existing structure in the database is imported using an IC object, this utility can be used to revert the effect the import. This can be very helpful in cases where the PLM XML import failed and the data is not in a consistent state.

**Note** This utility does not restore the database to its original state before the import.

This utility can revert the following changes:

- Adding, removing, or modifying a BOM line.
  - Add an existing item as a BOM line.
  - Add an existing item as a BOM line and occurrence group child.
  - Add an existing item with GDE children as a BOM line and occurrence group child.
  - Add an existing connection as a BOM line and occurrence group child and connect it to GDE BOM lines.
  - Modify a BOM line property.
  - Remove an item BOM line.
  - Remove an item BOM line with GDE children.
  - Remove a connection BOM line.

- Adding, removing, or modifying a GDE line.
  - Add a GDE line.
  - Modify a GDE line property.
  - Remove a GDE line.

- Adding, removing, or modifying attachments (forms/datasets).
  - Attach a form/dataset to an item BOM line.
  - Attach a form/dataset to an item BOM line in absolute occurrence context.
  - Attach a form to a GDE line in absolute occurrence context.
  - Attach a form to a connection BOM line in absolute occurrence context.
  - Modify a BOM line form/dataset.
  - Modify a BOM line form/dataset in absolute occurrence context.
Chapter 7  
Data sharing utilities

- Remove a BOM line form/dataset.
- Remove a BOM line form/dataset in absolute occurrence context.

A given IC object may contain many ICES (incremental change elements). Each ICE specifies the change type that was made (add/remove) and the affected object of the change.

For add scenarios, the change type is **IC_add**.

- When adding a BOM line/GDE line, the affected object is **PSOoccurrence/GDEOccurrence**. This utility deletes the ICE and **PSOoccurrence/GDEOccurrence**.

- When attaching a dataset/form to a BOM line, the affected object is **ImanRelation**. This utility deletes the ICE and **ImanRelation**. The secondary objects of the relation are not deleted.

For modify scenarios, the change type is **IC_add**.

- When modifying a BOM line property, the affected object is **AbsOccData**. This utility deletes the **AbsOcc** data.

- When modifying a BOM line attachment, the affected object is a copy of the attachment (dataset/form) with the modifications. This utility deletes the modified copy.

For remove scenarios, the change type is **IC_remove**.

- The affected objects point to the objects that are removed from the structure. This utility deletes the ICE. It automatically restores the removed objects.

**SYNTAX**

```
cleanup_ic_objects [-u=user-id [-p=password | -pf=password-file] -g=group]
[ [-ic Id=IC-object-item-ID] [-key=IC-object-search-key]
[-end_date=end-date]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  
  If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

-ic_id
Specifies the item ID of the incremental change object whose associated data will be deleted.

-key
Specifies the search key of the incremental change object. Use the following format:

[keyAttr1=keyVal1], [keyAttr2=keyVal2]…[,keyAttrN=keyValN]

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-ic_rev_id
Specifies the revision ID of the incremental change object whose associated data will be deleted.

If this argument is not specified, the latest revision will be used.

-dryrun
Deletes nothing. Objects are searched and a report is created.

-verbose
Prints extra information about the objects being deleted.

You can combine the -dryrun and -verbose options as follows:

- No option: Prints errors only.

- -verbose option only: Prints maximum information, such as what is being searched, how many objects were found, type of objects being deleted, and success/failure message after deletion.

- -dryrun option only: Prints the number of objects found and the type of objects that will be deleted in a normal run.

- Both options: Prints all of the information from the -verbose option except the success/failure message.
Chapter 7  Data sharing utilities

-start_date
Changes made after the specified date and time are reverted. Use the format DD-MMM-YYYY HH:MM:SS. For example, 01-Jan-1970 00:00:00 is January 1, 1970.

If no time is specified, 00:00:00 is used.

-end_date
Changes made after the specified date and time are reverted. Use the format DD-MMM-YYYY HH:MM:SS. For example, 01-Jan-1970 00:00:00 is January 1, 1970.

If no time is specified, 00:00:00 is used.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.
**convert_replica_files_to_stubs**

Converts existing replica Teamcenter file (ImanFile objects) to pom_stub objects at the specified remote site, all remote sites, or specified objects at all remote sites; it purges the corresponding operating system volume files to conserve space. It can also populate the file server cache (FSC) with replica files.

**SYNTAX**

```
convert_replica_files_to_stubs [-u=admin-id {[-p=password | -pf=password-file]} -g=dba]
([[-by_site_name=remote-site-id | ALL] | [-by_plmxml=file-name]] [-verbose]
[-populate_cache] [-query] [-batch_size=size-value] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID. The user must have administrative privileges.
  If this argument is used without a value, the operating system user name is used.

- **-p**
  Specifies the user’s password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user. The group value must be *dba* to run this utility.

- **-by_site_name**
  Specifies the name of the remote site where replica files are replaced with stubs. If *ALL* is specified, replica files at all remote sites are replaced. This argument cannot be combined with the **-by_plmxml** argument.

- **-by_plmxml**
  Specifies the name of a PLM XML file that contains replica objects to be replaced by stubs. Only the objects listed in the file are replaced.
  You must generate the PLM XML file specified in this argument using the **ConfiguredDataExportDefault** or **justDatasetsOut** transfer modes. Other transfer modes are not supported.
  This argument cannot be combined with the **-by_sitename** argument.
-verbose
Includes additional information about the process in the utility's output.

-populate_cache
Populates the FSC with replica files at the sites where replica objects are replaced with stub objects.

-query
Returns the number of objects that will be converted to stubs.

-batch_size
Specifies the number of objects in each batch that is processed. If this argument is omitted, all objects are processed in a single batch.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Configuring utilities in the Utilities Reference.

FILES
As specified in Log files in the Utilities Reference.

RESTRUCTIONS
The IDSM server must be running when you use this utility.

EXAMPLES
- Replace all replica objects at all sites with stub objects:
  ```shell
  convert_replica_files_to_stubs -u=infodba -p=password -g=dba -by_site_name=ALL
  ```

- Replace replica objects at the cologne site and populate the site's FSC:
  ```shell
  convert_replica_files_to_stubs -u=infodba -pf=pwfile -g=dba -by_site_name=cologne -populate
  ```

- Determine the number or replica objects that will be replaced at a site:
  ```shell
  convert_replica_files_to_stubs -u=infodba -p=password -by_site_name=cologne -query
  ```

- Replace all replica objects at all sites with stub objects processed in batches of 200 objects:
  ```shell
  convert_replica_files_to_stubs -u=infodba -pf=pwfile -g=dba -by_site_name=ALL -batch_size=200
  ```

- Replace replica objects in the stub_replicas.xml file at all sites with stub objects processed in batches of 200 objects:
  ```shell
  convert_replica_files_to_stubs -u=infodba -pf=pwfile -g=dba -by_plmxml=stub_replicas.xml -batch_size=200
  ```
database_verify

Compares database schema, Teamcenter types, tools, release statuses, and units of measure between two specified Multi-Site Collaboration sites and generates a report of any database discrepancies.

You can use this utility to query types and classes from a specified remote site and create a local dataset named TCTYPES_SITE siteid containing those mappings. There is one dataset for each remote site defined with the -site argument. You can also create and update the local dataset of remote class and types mappings for a specified remote site. Run this utility whenever there are changes for the POM transmit file of a specified site.

SYNTAX

database_verify [-u=user-id [-p=password | -pf=password-file] -g=group]
-from=site-name1 -to=site-name2
[-site=site-name] -force -offline [-filename=file-name] [-v] [-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-from
Specifies a Teamcenter database site to be verified.
-to
Specifies a Teamcenter database site to be verified.

-output
Specifies the output format. The report is output to a file if a file name is specified. If not, the report is displayed in a shell.

-schema
Compares schema between the two sites.

-type
Compares types between the two sites.

-tool
Compares tools between the two sites.

-status
Compares release status types between the two sites.

-uom
Compares units of measure between the two sites.

-notetype
Compares note types.

-all
Compares classes, types, tools, status types and units of measures between the two sites. This is the default if no argument is supplied.

-site
 Specifies the site name where types and classes would be persisted locally. If the value of this argument is set to ALL, the utility generates these datasets for all sites in the database.

-force
Generates the type-class mappings file even when the POM transmit files for the remote and local sites have not changed.

-offline
Specifies the site identified with the -site argument is offline. If you specify this argument, you must also specify the -filename argument.

-filename
Specifies the file name generated by this utility from the -site argument. This argument is required if the -offline argument is specified.

-v
Runs utility in verbose mode. Displays maximum amount of information. Typically, nonverbose utility sessions only display error messages.

-h
Displays help for this utility.

ENVIRONMENT
As specified in the Manually configuring your environment for Teamcenter utilities.
Data sharing utilities

FILES
As specified in the Log files produced by Teamcenter.

RESTRICTIONS
• To use this utility, you must be a user with system administration privileges or be granted authorization by a user with system administration privileges.
• The -from and -to arguments must be specified.

EXAMPLES
None.
data_share

Used for various Multi-Site Collaboration operations, such as publishing and unpublishing objects collectively and sending objects to remote sites. It can be used as a deployment tool during the initial Multi-Site Collaboration implementation phase or as a day-to-day tool for performing functions that previously were available only through the user interface. This utility is especially helpful in setting up and maintaining a hub configuration.

The behavior of this utility is controlled by the `TC_force_remote_sites_exclude_files` preference. If this preference is set to `true`, the replica files are stored in the remote site FMS server cache (FSC); otherwise, the replica files are stored in the remote system volume.

The utility also supports TC XML transfers for of 4th Generation Design (4GD) data. The 4GD relation data mapping is controlled by the `TC_cms_relation_optset_map` preference. You use this preference when you want to control the relations that are included or excluded when replicating a 4GD object.

For more information about controlling relations using this preference, see the Preferences and Environment Variables Reference.

This utility supports part family templates and part family members.

Use this utility to:

- Mass publish objects to one or more Object Directory Services (ODS) sites.
- Mass unpublish objects from one or more ODS sites.
- Publish or unpublish an entire assembly.
- List ODS sites currently defined in the local database and authorized for publication.
- Send objects to other sites.
- Delete obsolete publication records at the ODS.
- Check current status of authorized publication sites.
- List ODS sites to which an object is published.
- Import an item from a remote site.
- Export 4GD data in low-level TC XML format.

Data can be input to this utility in the following forms:

- Input file
- Folder name
- Object ID template
When sending objects to a specific user and/or group at a remote site using the `-owning_user` and `-owning_group` arguments, the following rules apply:

- If both the specified user and group exist at the importing site, the imported objects are owned by the user and group regardless of whether or not the user is a member of the group.

- If only the user is specified or if the group is specified but does not exist at the importing site, the user’s default group at the importing site is the owning group of the imported objects.

- If only the group is specified or if the user is specified but does not exist at the importing site, the user context of the remote IDSM process is the owning user of the imported objects.

**SYNTAX**

```plaintext
data_share [-u=user-id [-p=password | -pf=password-file] -g=group] 
-f=[function] [-site=remote-site-name1 -site=remote-site-name2... ] 
[[-owning_user=remote-user] [-owning_group=remote-group] 
[-item_id=item-id | template] [-folder=folder-name] 
[-name=workspace-object | -filename=input-file] 
[-key=keyAttr1=keyVal1,keyAttr2=keyVal2...,keyAttrN=keyValN] 
[-itemKeyFile=file-name] [-itemRevisionKeysFile=file-name] 
[-class=uso-class-name | -classoffile=class-name] 
[-include=relation-type1 -include=relation-type2...] 
[-exclude=relation-type1 -exclude=relation-type2...] 
[-revision-selector | -rev=rev-id] 
[-include_bom] [-transfer] [-attach] [-exclude_files] [-latest_ds_version] 
[-exclude_folder_contents] [-include_bc] [-include_supercedes] 
[-include_pmembers] [-include_ptemplates] [-pf_bom_treatment=option] 
[-continue_on_error] [batch_size=number-objects-per-batch] 
[-report=report-file-name] [-user=user-id] [-group=group-name] 
[-error_file=error-file-name] [-exclude_variant_options] 
[-batch_variant_options] [-batch_objects=class-for-deferred-objects] 
[-batch_file=file-name-for-deferred-objects] 
[-include_dist_comp] [-log] 
[-checkpoint [-compress_ind_files=S | I | N]] [-transaction_id=transaction-id] 
[-status] 
[-cleanup_transaction [-transaction_id=transaction-id] 
[-before_last_process_date=date] ] 
[-start] [-commit_iwr] [-list_transactions] 
[-low_level [-optionset] | -optionset=optionset-name] [-de_incl_rlz_bom] 
[-workset_include_relz_de] [-4gd_id=object-id -class=4gd-class-name] ] 
[-all_roles] [-all_subgroups] [-all_groupmembers] [-h] 
```

**ARGUMENTS**

**Note** Entries in parentheses are accepted abbreviations for arguments.

- **-u**
  Specifies the user ID.

  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

Caution
For HTTP enabled sites, remote site operations log on using the default group for the user supplied with the -u argument. Any value supplied with the -g argument is ignored.

-f
Specifies the function to be performed; you must specify one of the following:

  send
Sends objects to the specified remote sites.

  The objects to send are determined by the -item_id, -folder, -filename, -4gd_id, -all_subgroups, -all_roles, or -all_groupmembers arguments.

  publish (pub)
Publishes objects to the given ODS sites. The objects to publish are determined by the -item_id, -folder, or -filename arguments. Cannot be used with the -all_subgroups, -all_roles, or -all_groupmembers arguments.

  unpublish (unp)
Unpublishes objects from the given ODS sites. The objects to unpublish are determined by the -item_id, -folder or -filename arguments. Cannot be used with the -all_subgroups, -all_roles, or -all_groupmembers arguments.

  delete_pubrec (dpr)
Deletes obsolete publication records for the specified object from the local database. This must be run at the ODS site containing the publication record to be deleted. Only privileged users may use this function. Requires the -item_id
argument with specific item ID; no wildcards or other arguments are supported with this function.

**Note** To be used only if the master object has been deleted but publication records still exist at the ODS site.

**register (reg)**
Registers item IDs to the central item ID registry.

**unregister (unreg)**
Unregisters item IDs from the central item ID registry. The register and unregister functions must be supplied with the **-item_id** or **-filename** argument.

**delete_exprc (dxr)**
Deletes export records for the specified sites for objects listed in the text file identified by the **-filename** and **-classoffile** arguments. It does not traverse item structure. Only privileged users may use this function.

**Note** To be used only as a last resort after attempting to delete export records using the **-verify** argument of the **data_sync** utility.

**list_ods (lo)**
Lists the authorized ODS sites, which consist of the default ODS site and the sites specified by the **ODS_publication_sites** preference.

**check_ods (co)**
Lists the availability of authorized ODS sites.

**list_pub_info (lpi)**
Lists publication information about objects. Must be run at the owning site.

**find_duplicates (fd)**
Compares all of the item IDs at the remote site specified by the **-site** argument. The item IDs searched for may be filtered with the **-item_id**, **-created_before**, and **-created_after** arguments. The output may be directed to a file using the **-report** argument. The output is formatted to **csv** style, using comma-separated values.

- **-created_before**
  Restricts searches for duplicate items to those created at the target site before the specified date.

- **-created_after**
  Restricts searches for duplicate items to those created at the target site after a specified date.

**list_remote_co (lremco)**
Lists master objects that are checked out by remote users based on the specified user ID, group name, and site name.

**list_replica_co (lrepco)**
Lists replica objects that are checked out from a remote site based on the specified user ID, group name, and site name.
cancel_remote_co (cremco)
Cancels all remote checkouts based on the specified user ID, group name, and site name.

cancel_replica_co (crepco)
Cancels replica checkouts based on the specified user ID, group name, and site name. Canceling a replica checkout also cancels the remote checkout at the owning site.

remote_import (ri)
Imports the item specified by the -item_id argument from the owning site or the site specified by the -site argument. If the item is a replica at the local site, it is imported from the owning site and any site specified in the command is ignored.

Note Wildcard characters cannot be used in the -item_id argument.

You can also use this argument to import a list of items from an input file designated by the -filename argument. The input file must contain UIDs for the items to be imported, and the -classoffile argument value must be set to Tagstring when using an input file. You can use the sync_on_demand utility to generate a file that contains UIDs of items of an assembly enclosed within square brackets ([ ]) or other designated separator. You can then write a script to collect the UIDs into the input file.

The data_share arguments related to variants and line of usage (LOU) cannot be used with the remote_import argument.

-site
Specifies the name of the site to which objects are published or from which they are unpublished. It can be given multiple times in a command line.

-owning_user (ou)
Specifies the user ID of the user at the remote sites to which the objects are sent. The specified user owns the objects being sent. See Restrictions.

-owning_group (og)
Specifies the name of the group at the remote sites to which the objects are sent. The group owns the objects being sent. See Restrictions.

-item_id (item)
Specifies the item ID or template of items to process. It is mutually exclusive with the -folder, -filename, -keyFileName, -name and -key arguments. It is required for the -delete_pubrec argument.

-folder (fl)
Specifies the name of a Teamcenter folder containing the list of objects to process. It is mutually exclusive with the -name, -filename, and -item_id arguments.

Note If the -include_bom argument is used with the -folder argument, only the ItemRevision objects (and objects related to them) in the folder are replicated. The folder itself is not replicated.
-name
Specifies the name of a single workspace object to be precessed. If not an item, use the -class argument to specify the class of the object. It is mutually exclusive with the -folder, -filename, and -item_id arguments.

For organization objects, this argument accepts the following attributes:

- **User** objects require a **user_ID** attribute.
- **Role** objects require a **role_name** attribute.
- **Group** objects require the groups full name that uniquely identifies the group.
- **Person** objects require a **user_name** attribute.

- **Note**
  You can use a text file containing a list of all organization objects of the same type that you want to export using the **classoffile** and **filename** arguments.

-filename (fn)
Specifies the name of the input file containing the list of IDs or names of objects to process. File entries are treated as IDs for **Items** and **ItemRevisions** objects and as names for other classes of objects. It is mutually exclusive with the -name, -folder, -item_id, -key, -itemKeysFile, and -itemRevisionKeysFile arguments.

If the input file contains names, the **classoffile** argument is required.

-key
Specifies the keys of the items to process, the template of the item keys, or the 4GD object key. It is mutually exclusive with the -item_id argument. Use the following format:

```
keyAttr1=keyVal1, keyAttr2=keyVal2, ..., keyAttrN=keyValN
```

To find the key of an object, use the **get_key_string** utility.

For more information, see the **Business Modeler IDE Guide**.

-itemKeyFile
Specifies the name of the input file containing the list of item key strings of the items you want to update. The following listing shows sample content of a file for updating a list of items:

```
item_id=export_001
 item_id=M2Item1_001,object_name=M2Item_name1,object_type=M2Item1
```

If the item key file has 4GD object key strings, the corresponding 4GD class must be supplied using the **classoffile(cof)** argument. The following listing shows sample content of a file for updating 4GD data:

```
4gd_id=DE.Export_001
4gd_id=DE00001_ID,object_name=DE00001_Name,object_desc=DE00001_Desc
```

The **4g_id** entry maps to the corresponding unique ID of the 4GD class, for example:

```
Class=Cpd0DesignElement, 4gd_id=cpd0_design_element_id
```

-itemRevisionKeysFile
Specifies the name of the file containing the keys of the item revisions to process. It is mutually exclusive with the **item_id** argument.
-class (cl)
Specifies the Teamcenter class of the object specified by the -name or -4gd_id argument. This argument is valid only with the -name or, when the -low_level argument is specified, with the -4gd_id argument. The default class is Item.

For organization objects, this argument accepts Role, User, Group, and Person classes.

-classoffile (cof)
Specifies the class of the objects listed in the input text file given with the -filename argument. If not defined, the default class is Item. It is required if the input file has names instead of IDs.

For organization objects, this argument accepts Role, User, Group, and Person classes.

-include
Specifies a relation type to include. This can be specified multiple times in a command line. The database name (not the display name) of the relation type must be used.

-exclude
Specifies a relation type to be excluded from the operation. This can be specified multiple times in a command line. The database name (not the display name) of the relation type must be used.

**Note**
The list of relation types to be included is determined by either the TC_relation_required_on_export (export without transferring ownership) or TC_relation_required_on_transfer (export with transfer of ownership) preferences.

For more information about Multi-Site Collaboration preferences, see the Preferences and Environment Variables Reference.

The IMAN_master_form relation cannot be used as an argument for the -exclude argument. The following relations cannot be used as an argument for the -exclude argument unless they are not included as a value in the preference for the location:

- IMAN_requirement
- IMAN_specification

-revision-selector
**Note** If no revision selector is specified, the default selector is all_revisions.

Identifies the item revisions to send. It is also used as the revision rule for identifying components when processing assemblies. When used with the -include_bom argument while publishing or unpublishing, it determines which revisions’ BVR to follow in traversing the assembly tree. The valid revision selectors are as follows:

**all_revisions**
Sends all revisions. It is not valid when publishing.
**latest_revision**
Processes only the latest revision regardless of release status. This is the default if no revision selector is given when publishing or unpublishing.

**selected_revision**
Process only the selected revision.

**latest_working**
Processes only the latest working revision.

**latestReleased**
Processes only the latest released revision with any release status.

**latest_working_or_any**
Sends only the latest working revision. If none, the latest released revision is processed.

**release_status**
Processes only the latest released revision with the given release status.

**all_released_revs**
Sends all revisions with a release status; it is not valid when publishing.

**-rev**
Specifies the ID of a specific item revision to be sent to a remote site. It is valid only with the **-item_id** argument and with the **-send** function, and is mutually exclusive with revision selectors.

**-include_bom (bom)**
Includes assembly components when sending, publishing, or unpublishing. A revision selector is required when publishing or unpublishing an assembly; if no revision selector is given, the **latest_revision** selector is used as the default. When sending, the default selector is **all_revisions**.

If not specified, this argument defaults to **off**.

This argument does not traverse the component relationships of subassemblies. This allows you to send the subassemblies is separate transactions. Using multiple, simultaneous transactions to transfer very large assemblies and their subassemblies separately provides improved scalability and performance.

**Note** This argument, although similar to the rich client **Include Entire BOM** remote export option, may not export the same set of objects. The **Include Entire BOM** option traverses all components, subassemblies, and subassembly component relationships that can result in unacceptable performance for very large assemblies.

**-transfer (tf)**
Transfers site ownership when sending objects. Site ownership is not transferred by default.

**-attach (att)**
Attaches an object to the appropriate parent item or revision at the receiving site when sending an attachment with transfer of site ownership. Use this for situations in which you attach a dataset to a replica, such as a JT file, and you want to send
the JT file to the owning site with transfer of site ownership and attached to the appropriate parent item or revision.

-exclude_files (exf)
Excludes dataset files.

-latest_ds_version (ldv)
Sends only the latest dataset version. Unless this argument is specified, all dataset versions are sent.

-exclude_folder_contents (efc)
Excludes the contents of folders being exported.

-include_bc (ibc)
Identifies the BomChange objects associated with the affected assemblies to send. If not specified, BomChange objects are not sent.

-include_supercedures (isc)
Identifies the supercedure objects associated with the BomChange objects to send. If not specified, supercedure objects are not sent.

-include_pfmembers
Identifies the related part family members to be exported when handling part family templates.

-include_pftemplates
Identifies the related part family template to be exported when handling part family members.

-pf_bom_treatment
Identifies the part family objects associated with the assemblies to be exported. The argument must be used in conjunction with the -include_bom argument. Valid arguments are:

-members
Includes part family member components present in the assembly.

-templates
Includes part family template rather than part family member components.

-all
Includes both the part family member components and templates.

-none
Includes neither the part family member components nor the templates.

-continue_on_error (con)
Specifies processing is continue if there is an error on an optional object such as a reference or manifestation. This argument is not valid when transferring site ownership.

Outputs the error in a report file and continues processing the other items. The -report argument must be specified to see the error.
-**batch_size** (bs)
  Specifies the number of objects per batch; a new process is created per batch. The default batch size is 1000. It must be a positive integer. This is useful when processing thousands of objects, because it helps avoid memory and disk space shortage problems.

-**report** (rep)
  Specifies to output a report to the specified file.

-**user**
  Specifies the user ID.

-**group**
  Specifies the group name.

-**error_file** (err)
  Specifies the name of the output error report when sending assemblies.

-**exclude_variant_options** (evo)
  Indicates all variant options are to be excluded during a send operation.

-**batch_variant_options** (bvo)
  Indicates all variant options are sent separately in batch mode.

-**batch_objects** (bo)
  Indicates all objects of the given classes are sent separately in batch mode. Separate each class name with a comma. The list cannot contain spaces. The following table is a list of supported classes for this argument:

<table>
<thead>
<tr>
<th>Dataset</th>
<th>ImanRelation</th>
<th>PSOccurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Folder</td>
<td>MEAppearancePathNode</td>
<td>VariantExpression</td>
</tr>
<tr>
<td>Form</td>
<td>NamedVariantExpression</td>
<td>VariantExpressionBlLock</td>
</tr>
</tbody>
</table>

-**batch_file** (bof)
  Indicates all objects of the classes in the specified file are sent separately in batch mode. List each class name separately on a line in the file. For a list of supported classes for this argument, see the table for the description of the **batch_objects** argument.

-**include_dist_comp**
  Includes distributed components during import. This argument is valid only in conjunction with the **remote_import** argument.

-**log**
  Specifies detailed log information is written to the log file.

-**checkpoint** (cp)
  Initiates a checkpoint transaction; that is, a transaction that can be restarted at the point of failing.

  This argument is valid only with **send** function. It is not valid with the **transfer** argument.

  If a noncheckpoint operation is initiated for multiple target sites and some target sites are not currently available based on a preliminary availability check,
Teamcenter sends a message to **stdout** to notify the user about unavailable sites, removes unavailable sites from the target site list, and then performs the operation for the available sites.

**compress_ind_files (cif)**
Specifies compression mode to use to compress files in the export directory during a checkpoint transaction. If not specified, it creates a single large ZIP file. This argument is valid only with the **-checkpoint** argument. Valid values are:

- **S**
  Creates a single large ZIP file.

- **I**
  Creates a ZIP file for each individual file, resulting in multiple ZIP files.

- **N**
  No files are compressed.

**-transaction_id (trid)**
Specifies a 14-character transaction ID for a given checkpoint-related operation or for a fast sync transaction if used with the **-low_level** argument. A fast sync transaction provides improved performance when synchronizing data using the **data_sync** utility.

**-status (stat)**
Displays the status of a given transaction ID.

If the **-site** switch is given, only status of the given sites are displayed. If no **-site** switch is given, the status returned depends on whether the command is given at the site that initiated the checkpointed transaction or the site is the receiving end of the transaction. If the command is given at the initiating site and no **-site** switch is given, the status of the local site and all target sites is returned.

**-cleanup_transaction (ct)**
Removes transient data generated during a checkpoint transaction or fast sync transactions if use with the **-low_level** argument.

For checkpoint transactions, the transient data consists of the export data and supporting directories and files used to manage the transaction. You must execute this function at a node or host that has direct access to the transfer area where the export was performed (if at initiating site) or where the data was transmitted to by the owning site (if at receiving site). You must also have delete access to the operating system directory where the export data is placed within the transfer area. If these conditions are not met, an error message is displayed to **stdout** and the utility returns a nonzero value.

For fast sync transactions, you must specify either the **-transaction_id** or **-before_last_process_date** argument.

**-before_last_process_date (blpd)**
Specifies the date used to determine which fast sync transactions to clean up. The date must be supplied in the following format:

`YYYY-MM-DD:HH:NN:SS`
YYYY represents the four-digit year value. MM represents the two-digit month value. DD represents the two-digit day of the month. HH represents a two-digit hour value from 0 to 23. NN represents a two-digit minute value from 0 to 59 and SS represents a two-digit second value from 0 to 59. The DD:HH:NN:SS are optional. If they are not specified, the utility uses 12:00 AM of the specified date.

Valid only with the -cleanup_transaction argument.

-restart (rs)
Restarts a given transaction at the point of failure.
Valid only with the -f=send function.

-commit_ixr (emi)
Updates the export records at the owning site once the data is known to have been successfully imported at a target site.

Under normal conditions, the update of the export records are performed automatically by each subprocess that succeeds in completing the send operation to its assigned site. Use this function only if either of the following conditions occur:

- The failure occurs at the importing site, and the user performs the restart using the item_import utility.

- The failure occurs after the data is successfully imported by a target site, but a failure occurs just before or during the updating of the export records.

You must use at least one -site argument to identify the site or sites for which export records are to be updated.

You must execute this function at a node or host that has direct access to the transfer area where the export was performed (if at initiating site) or where the data was transmitted to by the owning site (if at receiving site). You must also have read access to the operating system directory where the export data is placed within the transfer area. If these conditions are not met, an error message is displayed to stdout and the utility returns a nonzero value.

-list_transactions (lt)
Lists all uncleaned checkpoint transactions or fast sync transactions if used with the -low_level argument. An uncleaned transaction is one in which its transient data has not been deleted from the transfer area using the cleanup_transaction function.

- Active transactions can only be detected at the site that initiated it. The receiving end of a transaction is not able to determine if a transaction is active or not.

- The list of inactive transactions initiated by the local site and the list of transactions initiated by remote sites are based only on the contents of the transfer area of the node where this command is executed.

- The list of active transactions initiated by the local site is always complete because it is based on data stored in the local database.

You must execute this function at a node or host that has direct access to the transfer area where the export was performed (if at initiating site) or where the data was transmitted to by the owning site (if at receiving site). You must also have read access to the operating system directory where the export data is placed within
the transfer area. If these conditions are not met, an appropriate error message is displayed to stdout and the utility returns a nonzero value.

-all_subgroups
Exports all subgroups of the selected group. Parent groups are always exported. This argument is valid only when the -class or -classoffile argument is set to Group.

-all_roles
Exports all roles associated with the selected group. All roles for subgroups are included if the -all_subgroups argument is also specified. If not specified, only the default role is exported.

This argument is valid only when the -class or -classoffile argument is set to Group.

-all_groupmembers
When exporting a User object, exports all GroupMember objects related to the selected user. When exporting groups or groups and subgroups (-all_subgroups argument), exports all GroupMember objects related to any role that is exported.

You must specify one of the following arguments to use this argument:

- -class= User
- -classoffile= User
- -class= Group
- -classoffile= Group

If this argument is not specified when exporting User class objects, only the default group related to the user is exported.

If this argument is not specified when exporting Group class objects, no GroupMember objects are exported.

-low_level
Exports the data using the low-level TC XML functionality. This provides better performance for large data transfers and must be used when exporting 4GD data.

You can replicate 4GD objects to a remote site when you specify the -low_level argument with the send function. Specify the objects to replicate using the -class and -4gd_id arguments. You can specify the transfer option set used for the export in the -optionset argument. If you do not specify an option set, the utility uses MultiSiteOptSet as the default transfer option set value. For 4GD objects, you can also specify the -de_incl_rlz_bom and -workset_incl_relz_de arguments only when you specify the -optionset argument.

-4gd_id
Specifies a 4GD object identifier or 4GD object pattern. The -class=class-name argument must be specified with the -4gd_id argument.

The utility maps the -4gd_id argument to the corresponding unique ID of the 4GD class, for example:

Class=Cpd0DesignElement, 4gd_id=cpd0design_element_id

A 4GD partition object and 4GD subset definition objects do not have a unique 4GD class ID. Therefore, using -4gd_id for partition objects or subset definition objects or may result in transfer of multiple objects.
To export unique partition object use multifield key attributes supplied in the -key argument, see Examples.

-optionset
Specifies the name of the transfer option set when sending objects using low-level TC XML functionality (-low_level argument). Values of the options listed in the option set govern the object export. The option set must exist at the exporting site. If you do not specify this argument, the utility uses the MultiSiteOptSet option set.

-de_incl_rlz_bom
Exports the source objects of a design element (Type:Cpd0DesignElement). You must specify the -low_level argument and specify a 4GD object using the -4gd_id, -key, or -itemKeyFile argument.

-workset_incl_relz_de
Exports the source objects of a design element (Cpd0DesignElement) in a workset (Cpd0Workset). You must specify the -low_level argument and specify a 4GD object using the -4gd_id, -key, or -itemKeyFile argument.

-h
Displays help for this utility.

ENVIRONMENT
As specified in the Manually configuring your environment for Teamcenter utilities.

FILES
As specified in the Log files produced by Teamcenter.

REstrictions
1. When sending objects to a specific user and/or group at a remote site using the -owning_user and -owning_group arguments, the following rules apply:
   • To use this utility, you must be a user with system administration privileges or be granted authorization by a user with system administration privileges.
   • If both the specified user and group exist at the importing site, the imported objects are owned by the user and group regardless of whether or not the user is a member of the group.
   • If only the user is specified or if the group is specified but does not exist at the importing site, the user's default group at the importing site is the owning group of the imported objects.
   • If only the group is specified or if the user is specified but does not exist at the importing site, the user context of the remote IDSM process is the owning user of the imported objects.

2. If variant options are excluded using the -exclude_variant_options argument, it is implied that they cannot be sent separately in batch mode. Therefore, the -exclude_variant_options argument cannot be used with either -batch_variant_options, -batch_objects=variant-expression, or with the -batch_file arguments when the given file includes the class name variantexpression.

3. Any number of objects can be sent separately in batch mode. Class names of objects can be given in a comma-delimited list with the -batch_objects argument or listed in a file whose name is specified in the -batch_file argument.
4. The \texttt{-item\_id}, \texttt{-name}, \texttt{-filename}, \texttt{-folder}, \texttt{-key}, \texttt{-itemKeyFile}, \texttt{-itemRevisionKeysFile}, and \texttt{-4gd\_id} arguments are mutually exclusive.

**EXAMPLES**

\textbf{Note} Required logon information is omitted from the following examples.

- To send a list of items specified in a text file to two sites:
  \begin{verbatim}
  data_share -f=send -filename=my_item_list.txt -site=Site1 -site=Site2
  \end{verbatim}

- To send a list of items specified in a text file and output a report; continue processing if a nonfatal error is found:
  \begin{verbatim}
  data_share -f=send -filename=my_list.txt -site=Site1 -report=rep.txt -coe
  \end{verbatim}

- To transfer ownership of a given item:
  \begin{verbatim}
  data_share -f=send -transfer -item\_id=item123 -site=Site1
  \end{verbatim}

- To publish an assembly item and all its components using the latest revision rule to determine components:
  \begin{verbatim}
  data_share -f=publish -item\_id=Engine100 -site=Ods1 -include\_bom
  \end{verbatim}

- To publish an assembly item and all its components using the latest released revision rule to determine components:
  \begin{verbatim}
  data_share -f=publish -item\_id=Item1 -site=Ods1 -include\_bom
  \end{verbatim}

- To unpublish an assembly item and all its components from multiple ODS sites using the default revision rule \textbf{latest revision}:
  \begin{verbatim}
  data_share -f=unpublish -item\_id=Item1 -site=Ods1 -site=Ods2 -include\_bom
  \end{verbatim}

- To delete a publication record in the local database:
  \textbf{Note} Use this only if the master object has been deleted, but the publication record still exists.

  \begin{verbatim}
  data_share -f=delete\_pubrec -item\_id=ObsoleteItem1
  \end{verbatim}

- To list the authorized ODS sites:
  \begin{verbatim}
  data_share -f=list\_ods
  \end{verbatim}

- To check availability of the authorized ODS sites:
  \begin{verbatim}
  data_share -f=check\_ods
  \end{verbatim}

- To get publication information about a list of objects in a folder:
  \begin{verbatim}
  data_share -f=list\_pub\_info -folder=myFolder
  \end{verbatim}

- To send an item to a specific remote user and group:
  \begin{verbatim}
  data_share -f=send -item\_id=xyz -site=Site1 -owning\_user=joe
  \end{verbatim}

- When publishing thousands of items and you get errors after publishing several hundreds or even thousands of items, reduce the batch size:
data_share -f=publish -item_id=A* -site=Site1 -batch_size=200

- To publish an engineering change object and all its associated change objects:
  data_share -f=publish -item_id=CR0001 -site=Ods1 -include_bom
  -include_bc -include_supercedures

- To register an item ID with the central item ID registry:
  data_share -f=register -item_id=myItem

- To find duplicate item IDs at another site:
  data_share -f=find_duplicates -item_id=00* -site=Site1

- To list all objects that are checked out by remote users:
  data_share -f=list_remote_co

- To list all objects that are checked out by user justin at Site2:
  data_share -f=list_remote_co -user=justin -site=Site2

- To cancel check out of all objects by user joseph at Site2:
  data_share -f=cancel_remote_co -user=joseph -site=Site2

- To list all replica objects that are checked out by local group engg from remote site Site1:
  data_share -f=list_replica_co -site=Site1

- To cancel all replica objects that are checked out by user davis from Site1:
  data_share -f=cancel_replica_co -user=davis -site=Site1

- To cancel remote checkout on a given item:
  data_share -f=cancel_remote_co -item_id=item123

- To cancel remote checkouts on the datasets listed in the dataset.lst file:
  data_share -f=cancel_remote_co -filename=dataset.lst -class=Dataset

- To cancel replica checkouts on the datasets in uniquely named folder:
  data_share -f=cancel_replica_co -folder=unique_folder_xyz

- To exclude all variant options during a send operation:
  data_share -f=send -item_id=CR0002 -site=remotel
  -exclude_variant_options

- To batch send all variant options during a send operation:
  data_share -f=send -item_id=CR0002 -site=remotel
  -batch_variant_options -batch_size=10000

- To batch send one or more classes of objects during a send operation:
  data_share -f=send -item_id=CR0002 -site=remotel
  -batch_objects=class1,class2 -batch_size=10000

- To batch send one or more classes of objects given in a text file during a send operation:
To import an item from a remote site (Site2):
```
data_share -f=remote_import -site=Site2 -item_id=xyz
```

To import the objects of an assembly using a file (UIDs_list.txt) containing a list of UIDs:
```
data_share -f=ri -filename=UIDs_list.txt -classoffile=Tagstring
```

To import an item from its owning site that is published to an ODS site (Site3):
```
data_share -f=ri -ods_site=Site3 -item_id=xyz
```

To initiate a checkpoint transaction at three specified sites:
```
data_share -f=send -checkpoint -item_id=item123 -site=Site2 -site=Site3 -site=Site4
```

To export a role that does not have any group members from the TopGrp1 group:
```
data_share -class=group -name=TopGrp1 -f=send -all_groupmembers -site=Site2
```

To return status for a transaction ID of AhEZaOnRAAAMfd and no -site argument is specified:
```
data_share -f=status -trid=AhEZaOnRAAAMfd
```

The output is similar to the following:
```
Site1: sending export data to all target sites  (06-Nov-2007.14:31:28)
Site4: error 100107 - site not currently available (06-Nov-2007.14:32:26)
Site5: transaction complete  (06-Nov-2007.14:40:10)
```

The time stamp represents the last time the status was updated.

To return status at a receiving site and no -site argument is specified:
```
Site3: importing batch 5 out of 50  (06-Nov-2007.14:34:29)
```

At a receiving site, only the status of the local site is obtained; the status of other sites involved in a transaction are not available.

To restart a given transaction for a given site:
```
data_share -f=send -transaction_id=AhEZaOnRAAAMfd -restart -site=Site3
```

To update export records at site Site4 using a transaction ID of AhEZaOnRAAAMfd:
```
data_share -f=commit_ixr -trid=AhEZaOnRAAAMfd -site=Site4
```

To clean up records with a transaction ID of AhEZaOnRAAAMfd:
```
data_share -f=cleanup_transaction -trid=AhEZaOnRAAAMfd
```

To list checkpoint transactions:
```
data_share -f=list_transactions
```
The output is similar to the following:

Transactions initiated by local site:
AhEzaOnRAAAMfD - active
BxyzZaOnRAAXYZ - inactive

Transactions initiated by remote sites:
ZaOnRAAAYXCD - Site3

• To send the casCD001 collaborative design object to the site2 site:
  
  data_share -f=send -4gd_id=casCD001 -class=Cpd0CollaborativeDesign -site=site2

• To use the data_share utility to transfer architecture breakdown structures between sites, you must execute the following four steps sequentially:

  1. Push the design assembly.
  
  data_share -f=send -item_id=<Design Assembly ITEM_ID> -site<REMOTE_SITE>  
  -exclude=IMAN_reference -exclude=IMAN_based_on -exclude=IMAN_snapshot  
  -exclude=IMAN_3D_snap_shot -exclude=IMAN_external_object_link  
  -exclude=TC_Generic_Architecture -bo=VariantExpression, MEAppearancePathNode  
  -bs=1000 -ldv

  2. Push the LOUHOLDER object and synchronize the BOM view revision.
  
  data_share -f=send -item_id=<ITEM_ID> -site<REMOTE_SITE> -include_bom  
  -exclude=IMAN_reference -exclude=IMAN_based_on -exclude=IMAN_snapshot  
  -bvo -bo=PSOccurrence -bs=20 -bvrsync -report=<IMAN_TMP_DIR>/rpt

  3. Push the architecture breakdown structure excluding the NVEs.
  
  data_share -f=send -item_id=<ITEM_ID> -rev=001 -site<REMOTE_SITE>  
  -exclude=IMAN_3D_snap_shot -exclude=IMAN_reference -exclude=IMAN_external_object_link  
  -exclude=IMAN_based_on -evo -bo=MEAppearancePathNode -bs=2000 -ldv

  4. Push the NVEs.
  
  data_share -f=send -item_id=<ITEM_ID> -rev=001 -site<REMOTE_SITE>  
  -exclude=IMAN_3D_snap_shot -exclude=IMAN_external_object_link -exclude=IMAN_based_on  
  -evo -bo=MEAppearancePathNode -bs=2000 -ldv

• To use the data_share utility to transfer architecture breakdown structures between sites, you must execute the following four steps sequentially:

  1. Push the design assembly.
  
  data_share -f=send -item_id=<Design Assembly ITEM_ID> -site<REMOTE_SITE>  
  -exclude=IMAN_reference -exclude=IMAN_based_on -exclude=IMAN_snapshot  
  -exclude=IMAN_3D_snap_shot -exclude=IMAN_external_object_linkK  
  -exclude=TC_Generic_Architecture -bo=VariantExpression, MEAppearancePathNode  
  -bs=1000 -ldv

  2. Push the LOUHOLDER object and synchronize the BOM view revision.
  
  data_share -f=send -item_id=<ITEM_ID> -site<REMOTE_SITE> -include_bom  
  -exclude=IMAN_reference -exclude=IMAN_based_on -exclude=IMAN_snapshot  
  -bvo -bo=PSOccurrence -bs=20 -bvrsync -report=<IMAN_TMP_DIR>/rpt

  3. Push the architecture breakdown structure excluding the NVEs.
  
  data_share -f=send -item_id=<ITEM_ID> -rev=001 -site<REMOTE_SITE>  
  -exclude=IMAN_3D_snap_shot -exclude=IMAN_reference -exclude=IMAN_external_object_link  
  -exclude=IMAN_based_on -evo -bo=MEAppearancePathNode -bs=2000 -ldv

  4. Push the NVEs.
Chapter 7  
Data sharing utilities

data_share -f=send -item_id=<ITEM_ID> -rev=001 -site=<REMOTE_SITE>
-exclude=IMAN_3D_snap_shot -exclude=IMAN_external_object_link -exclude=IMAN_based_on
-bo=MEAppearancePathNode -bs=2000 -ldv

• To send a list of 4GD objects specified in a text file and output a report:
  data_share -f=send -filename=my_4GD_list.txt -cof=Cpd0DesignElement
  -site=Site1 -low_level -report=rep.txt

• To send a list of 4GD objects specified in a text file and output a report:
  data_share -f=send -filename=my_4GD_list.txt -cof=Cpd0DesignElement
  -site=Site1 -low_level -report=rep.txt

• To send a list of 4GD objects specified in a text file and output a report:
  data_share -f=send -filename=my_4GD_list.txt -cof=Cpd0DesignElement
  -site=Site1 -low_level -report=rep.txt

• To send a specific 4GD partition object and output a report:
  data_share -f=send class=Cpd0DesignElement
  -key=ptn0partition_id=CD001_id,ptn0partition_scheme_type=SchemeFunctional_CD001,
  partitionptn0source_object=partition_source_CD001,mdl0model_object=model_CD001,
  mdl0revision_id=model__id=001/A site=Site1 -low_level -report=rep.txt

• To clean up fast sync transactions prior to specific last process date, list the
  available transactions to get the last process dates:
  data_sync -low_level -lt

Clean up the transactions:

data_sync -low_level -ct -blpd=2012-12-18:20:10:00

• To use the TC_cms_relation_optset_map preference to include or exclude
  relations:
  1. Add the relation and option set to the TC_cms_relation_optset_map
     preference, for example:
     
        IMAN_rendering, opt_rel_rendering

  2. In the PLM XML/TC XML Export Import Administration application,
     expand the TransferOptionSet, click MultiSiteOptSet, and add the
     opt_rel_rendering option with the default value set to false.

  3. Expand ClosureRule, click MultiSiteDefaultCR, and add the following clause:

     CLASS:WorkspaceObject:CLASS:Dataset:RelationP2S:IMAN_rendering:
     SKIP:$opt_rel_rendering==false;

    [Note]  This clause states, from any WorkspaceObject, find the dataset
             using IMAN_rendering relation, and when the relation is
             opt_rel_rendering, skip the dataset during export. It means the
             default is to always exclude the IMAN_rendering relation for an
             exported object.

  4. To include the IMAN_rendering in the export using the data_share
     utility, type:

     data_share -include=IMAN_rendering -low_level
**data_sync**

Synchronizes copies of objects at remote sites with the latest version of the object master. It also updates publication records when republishing objects. In `verify` mode, the utility checks the existence of exported objects at the remote sites; if a copy no longer exists at the remote site, the corresponding import export record is deleted from the owning site.

The behavior of this utility is controlled by the `TC_force_remote_sites_exclude_files` preference. If this preference is set to `true`, the replica files stored in the remote site file server cache (FSC), otherwise the replica files are store in the remote system volume.

The `data_sync` utility uses import export records (IXRs) and publication audit records (PARs), which are attached to the master copy of an object, to determine whether or not to synchronize a copy or the publication record in the ODS. These records contain information on when the object was last sent to a particular site or last published to an ODS. It then compares these dates with the object’s last-modified date and decides whether or not to synchronize the object. Thus, only those objects that were modified since the last successful run of the utility are updated.

When updating multiple sites and not all sites operational, the `data_sync` utility updates the sites that are available but remembers, using the IXRs and the PARs, which ones were unavailable so they can be updated next time.

Once the utility determines which objects and sites to synchronize, it uses the basic Multi-Site Collaboration mechanisms (export, import, IDSM, and ODS) to accomplish its task. For this reason, Siemens PLM Software recommends that the `data_sync` utility be run in batch mode during off hours so that it does not compete for computing and network resources during business hours.

The utility also supports TC XML transfers for 4th Generation Design (4GD) data. The 4GD relation data mapping is controlled by the `TC_xml_relation_optset_map` preference. You use this preference when you want to control the relations that are included or excluded when a 4GD object is replicated.

For more information about controlling relations using this preference, see the `Preferences and Environment Variables Reference`.

The `data_sync` utility supports part family templates and members. It also supports organization classes, specifically, `Role`, `User`, `Group`, and `Person` classes.

Siemens PLM Software recommends the following practices when using the `data_sync` utility. The term `one at a time` means one command line invocation. This implies that your script for running `data_sync` consists of several lines invoking the `data_sync` utility.

- Synchronize one site at a time and use the default revision selector of `-same_as_last_export`. This allows you to use the Smart Sync capability which synchronizes only the revisions and attachments that the remote user specified when replicating an item.

- Synchronize one class at a time starting with the largest unit, which is `Item`, and down to the smallest units such as `Dataset` and `Form`.

- Always use the `-since` switch with the `-class` switch. This results in improved memory efficiency because replicated objects that have not been modified for
some time are excluded from the initial search for objects to be synchronized. Ideally, the date given to the -since switch should be the exact date and time of the last successful run of data_sync. However, if you are not sure about the date and time, use a date and time that you know is prior to the last successful run.

- When dealing with thousands of objects, data_sync tends to slow down as it loads more and more objects in memory. It handles this problem by cascading its work over several sub-processes. When the original process reaches its batch size, it starts another process and then terminates itself; the sub-process continues where its parent process left off. When it reaches its own batch size, it creates another sub-process, and so on. The optimum batch size varies for each installation depending primarily on the memory (both main memory and virtual memory), so you must determine the optimum batch size for your installation.

One tool that can help you do this is the use of the -log switch that records all significant events in the data_sync log file, the file with the .log extension. By analyzing the log file, you can detect at what point data_sync begins to slow down so you can then adjust the batch size accordingly. Note that the use of the -log switch itself can affect the overall efficiency of data_sync so you should turn off the switch once you have determined your optimum batch size.

- The synchronization process can put a heavy load on the network and the systems so data_sync should be scheduled during non-busy hours such as nights and weekends. Typically, you should run the synchronization script run as a cron job to be started at night.

- It is not necessary to have a separate verify run before synchronization because data_sync always performs a verification before synchronization. View a separate verification run as a cleanup procedure and run it only when the network and the systems are not busy, such as on weekends.

- Do not use the -disable_modified_only switch unless there is a known problem with the default modified-only mode.

- If you typically share whole assemblies with a site, it is best to use the -filename switch to synchronize specific assemblies and use the -include_bom switch to synchronize any modified components. Note that you may have to use the -force switch in the event the item itself was not modified but you want to synchronize modified components.

SYNTAX

ARGUMENTS

Note Entries in parentheses are accepted abbreviations for arguments.

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

Caution For HTTP enabled sites, remote site operations log on using the default group for the user supplied with the -u argument. Any value supplied with the -g argument is ignored.
-pull
Specifies synchronization starts in pull mode, that is, from a replica site.

-class
Specifies the class of objects to be searched to determine what objects need synchronization. This does not mean that all objects of the given class are synchronized; only those that were modified since the last time they were exported to the given site(s) are synchronized. See restrictions 1 and 2.

-filename (fn)
Specifies the name of the input file containing IDs or names of objects to update. See restriction 1.

-itemKeyFile
Specifies the name of the input file containing the list of item key strings of the items you want to update. The following listing shows sample content of a file for updating a list of items:

```
item_id=export_001
item_id=M2Item1_001,object_name=M2Item_name1,object_type=M2Item1
```

If the item key file has 4GD object key strings, the corresponding 4GD class must be supplied using the -classoffile(cof)= argument. The following listing shows sample content of a file for updating 4GD data:

```
4gd_id=DE_Export_001
4gd_id=DE00001_ID,object_name=DE00001_Name,object_desc=DE00001_Desc
```

The 4g_id entry maps to the corresponding unique ID of the 4GD class, for example:

```
Class=Cpd0DesignElement, 4gd_id=cpd0_design_element_id
```

-item_id (item)
Specifies the ID or template of items to update. See restriction 1.

-key
Specifies the item keys of the items to update, the template of the item keys, or the 4GD object key. It is mutually exclusive with the -item_id argument. Use the following format:

```
[keyAttr1=keyVal1] [,keyAttr2=keyVal2]…[,keyAttrN=keyValN]
```

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-OnlyVIS
Specifies synchronization of only visualization datasets attached directly or indirectly to a replicated item revision with status. See restriction 8.

**Note** If you use the -OnlyVIS argument the -batch_size value defaults to 500.

-f
Specifies the function to be performed; define one of the following functions:

```
 sync
```

Initiates the update process. See restrictions 2 and 4.
**Data sharing utilities**

**repub (repub)**

Republishes objects that have been modified since last published. See restriction 2.

**verify (veri)**

Note Siemens PLM Software recommends that you always use the -item_id=* argument with the verify function. If you use the -class=item argument with the verify function, it processes only the items that have been modified after their last export.

When used with the -update argument, deletes the IXRs of objects for which replicas do not exist at the remote sites.

When used without the -update argument, generates a report. See restriction 2.

The report returns the following verification verdict codes:

- **0** Object does not exist.
- **1** Object exists as a master copy.
- **2** Object exists as a replica.
- **3** Object was replaced by a POM stub.

**status (stat)**

Displays the status of a given transaction ID. If the -site argument is given, only status of the given sites is displayed. If no -site argument is given, the status returned depends on whether the command is given at the site that initiated the checkpointed transaction or the site is the receiving end of the transaction. If the command is given at the initiating site and no -site argument is given, the status of the local site and all target sites is returned.

**commit_ixr (cmi)**

Updates the export records at the owning site once the data is known to have been successfully imported at a target site.

Under normal conditions, the update of the export records are performed automatically by each subprocess that succeeds in completing the send operation to its assigned site. Use this function only if either of the following conditions occur:

- The failure occurs at the importing site, and the user performs the restart using the item_import utility.

- The failure occurs after the data is successfully imported by a target site, but a failure occurs just before or during the updating of the export records.
Chapter 7  Data sharing utilities

You must use at least one -site argument to identify the site or sites for which export records are to be updated.

You must execute this function at a node or host that has direct access to the transfer area where the export was performed (if at initiating site) or where the data was transmitted to by the owning site (if at receiving site). You must also have read access to the operating system directory where the export data is placed within the transfer area. If these conditions are not met, an error message is displayed to stdout and the utility returns a nonzero value.

cleanup_transaction (ct)

Removes transient data generated during a checkpoint transaction or fast sync transactions if use with the -low_level argument.

For checkpoint transactions, this transient data consists of the export data and supporting directories and files used to manage the transaction. You must execute this function at a node or host that has direct access to the transfer area where the export was performed (if at initiating site) or where the data was transmitted to by the owning site (if at receiving site). You must also have delete access to the operating system directory where the export data is placed within the transfer area. If these conditions are not met, an error message is displayed to stdout and the utility returns a nonzero value.

For fast sync transactions, you must specify either the -transaction_id or -before_last_process_date argument.

-before_last_process_date (blpd)

Specifies the date used to determine which fast sync transactions to clean up. The date must be supplied in the following format:

    YYYY-MM-DD:HH:NN:SS

 YYYY represents the four-digit year value. MM represents the two-digit month value. DD represents the two-digit day of the month. HH represents a two-digit hour value from 0 to 23. NN represents a two-digit minute value from 0 to 59 and SS represents a two-digit second value from 0 to 59. The DD:HH:NN:SS are optional. If they are not specified, the utility uses 12:00 AM of the specified date.

Valid only with the -cleanup_transaction argument.
list_transactions (lt)

Lists all uncleaned checkpoint transactions. An uncleaned transaction is one in which its transient data has not been deleted from the transfer area using the cleanup_transaction function.

- Active transactions can only be detected at the site that initiated it. The receiving end of a transaction is not able to tell if a transaction is active or not.

- The list of inactive transactions initiated by the local site and the list of transactions initiated by remote sites are based only on the contents of the transfer area of the node where this command is executed.

- The list of active transactions initiated by the local site is always complete because it is based on data stored in the local database.

You must execute this function at a node or host that has direct access to the transfer area where the export was performed (if at initiating site) or where the data was transmitted to by the owning site (if at receiving site). You must also have read access to the operating system directory where the export data is placed within the transfer area. If these conditions are not met, an appropriate error message is displayed to stdout and the utility returns a nonzero value.

-assert_extinct_odc (aeo)

Deletes all publication audit record (PAR) objects from the local database for an ODS that no longer exists. This removes any record about objects previously published to the ODS and makes it possible to delete the published objects at a later time. Only the -site and -login switches are required. This is valid only with the -f=verify argument. See restriction 5.

-assert_extinct_site (aes)

Deletes all import export record (IXR) objects from the local database for a site that no longer exists. This removes any record of objects previously exported to the site and makes it possible to delete the exported objects at a later time. Only the -site and -login arguments are required. This is valid only with the -f=verify argument. See restriction 5.

replacement_site (rs)

Specifies the name of the site that replaces the site to be extinct. This argument is valid only with the -assert_extinct_site argument. All objects owned by the extinct site are redirected to the replacement site.

stubs_only

Specifies that stubs are processed only when the replacement_site argument is specified. This argument is valid only with the assert_extinct_site argument.
Chapter 7  Data sharing utilities

-sync_file_stubs
Processes dataset files excluded from export and updates remote stubs if needed. This argument is valid only when the -class=ImanFile argument is specified.

-update (upd)
Performs a database update. Must be given in order for the -f=sync, -f=republish, or -f=verify to occur; otherwise, it only does a dry run and generates a report. See restriction 4.

-report
Generates a synchronization report. If a file name is not supplied, the report is displayed in a shell.

-site
Specifies the Teamcenter site to update. This argument can be used multiple times in the command line to synchronize with multiple name-identified sites.

-exclude_files (exf)
Excludes dataset files. See restriction 6.

-exclude
Excludes the specified relation type. This argument may be given multiple times and must use the database name (not the display name) of the relation type. See restriction 6.

-include
Includes the specified relation type. This argument may be given multiple times and must use the database name (not the display name) of the relation type. Use this argument to force the inclusion of a relation type that may have been excluded during the last export.

-exclude_folder_contents (efc)
Excludes the contents of a folder. Intended for use with NX part families where family members are stored in a folder that is related to the item.

-include_bom (bom)
Synchronizes all components of an assembly. This synchronization includes any newly added components to the existing assembly. See restriction 6.

-disable_modified_only (dmo)
Disables the default behavior of synchronizing subobjects inside an item only if they were modified since the last time the item was exported.

Normally, this argument is not used. See restriction 6.

For more information, see Multi-Site Collaboration Guide.

-revision-selector
Valid only if both the -f=sync and -update arguments are specified. Choose one of the following revision selectors:

-all_revisions
Synchronizes all revisions.
**-latest_revision**
Synchronizes only the latest revision, regardless of the release status. This is the default if no revision selector is specified and more than one site is to be synchronized. If synchronizing only one site, the default selector is **same_as_last_export**.

**-latest_working**
Synchronizes only the latest working (unreleased) revision.

**-latest_released**
Synchronizes only the latest released revision with any release status.

**-latest_working_or_any**
Synchronizes the latest working revision; if no working revision, synchronizes the latest released revision of any release status.

**-release_status = release-status-type**
Synchronizes only the latest released revision with the specified release status type.

**-all_released_revs**
Synchronizes all revisions with a release status including in-process item revisions.

**-same_as_last_export**
Synchronizes using the options used the last time the item was exported. This is the default if no revision selector is specified and only one site is being synchronized. If synchronizing multiple sites, the default selector is **latest_revision**.

**Note** If the item was not exported in Teamcenter Engineering 7.0 (that is, the item was last exported or synchronized prior to 7.0), the latest revision used is the default.

**-include_pfmembers**
Identifies the related part family members to be exported when handling part family templates.

**-include_pftemplates**
Identifies the related part family template to be exported when handling part family members.

**-pf_bom_treatment**
Identifies the part family objects associated with the assemblies to be exported. The argument must be used in conjunction with the **-include_bom** argument. Valid arguments are:

- **-members**
  Includes part family member components present in the assembly.

- **-templates**
  Includes part family template rather than part family member components.

- **-all**
  Includes both the part family member components and templates.
**Checkpoint (cp)**

Initiates a checkpoint transaction, that is, a transaction that can be restarted at the point of failing. This argument is valid only when both -f=sync and -update are specified. If specified without the -update argument, this argument is ignored.

Valid only with -f=sync.

If a noncheckpoint operation is initiated for multiple target sites and some target sites are not currently available based on a preliminary availability check, Teamcenter sends a message to stdout to notify the user about unavailable sites, removes unavailable sites from the target site list, and then performs the operation for the available sites.

**compress_ind_files (cif)**

Specifies compression mode to use to compress files in the export directory during a checkpoint transaction. If not specified, creates a single large ZIP file. This argument is valid only with the -checkpoint argument. Valid values are:

- **S**
  
  Creates a single large ZIP file.

- **I**
  
  Creates a ZIP file for each individual file, resulting in multiple ZIP files.
• N  
  No files are compressed.

-transaction_id (tid)  
  Specifies a 14-character transaction ID for a given checkpoint-related operation or fast sync transaction.

-4gd_id  
  Specifies a 4GD object identifier or 4GD object pattern. The -class=class-name argument must be specified with the -4gd_id argument.

The utility maps the -4gd_id argument to the corresponding unique ID of the 4GD class, for example:

Class=Cpd0DesignElement, 4gd_id=cpd0design_element_id

A 4GD partition object and 4GD subset definition objects do not have a unique 4GD class ID. Therefore, using -4gd_id for partition objects or subset definition objects may result in the update of multiple objects.

To export unique partition object use multifield key attributes supplied in the -key argument, see the -key argument description.

-optionset  
  Specifies the name of the transfer option set when sending objects using low-level TC XML functionality (-low_level argument). Values of the options listed in the option set govern the object export. The option set must exist at the exporting site. If you do not specify, this argument, the utility uses the MultiSiteOptSet option set.

-de_incl_rlz_bom  
  Sends the source objects of a design element (Type:Cpd0DesignElement). You must specify the -low_level argument and specify a 4GD object using the -4gd_id, -key, or -itemKeyFile argument.

-workset_incl_relz_de  
  Sends the source objects of a design element (Cpd0DesignElement) in a Workset (Cpd0Workset). You must specify the -low_level argument and specify a 4GD object using the -4gd_id, -key, or -itemKeyFile argument.

-restart (rs)  
  Restarts a given transaction at the point of failure.

Valid only with the -f=send function.

-batch_objects (bo)  
  Specifies a list of comma-separated deferred classes. The list must not contain spaces.

-batch_file (bof)  
  Specifies the file name of a text file containing a list of deferred classes. Each class name is contained on a separate line.

-batch_size (bs)  
  Specifies the number of objects per batch. A new process is created for each batch. All workspace objects (not just items) that are synchronized are considered part of a batch. The default batch size is 2000. The maximum value you can specify is 99999. If you enter a value greater than 99999, the utility sets the value of -batch_size to the default.
-**deferred_batch_size (dbs)**
Specifies the number of objects per batch; a new process is created per batch. The default value is 2000. This value must be a positive integer. Use this argument to process thousands of objects to avoid memory and disk shortage problems.

The following classes are supported for deferred objects:

- Dataset
- Folder
- Form
- ImanRelation
- MEAppearancePathNode
- NamedVariantExpression
- PSOccurrence
- VariantExpression
- VariantExpressionBlock

-**h**
Displays help for this utility.

**ENVIRONMENT**
As specified in the *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in the *Log files produced by Teamcenter*.

**RESTRICTIONS**
1. One of the following arguments must be supplied: -class, -filename, or -item_id.

2. One of the following arguments must be supplied: -f=sync, -republish, or -f=verify.

3. The -force argument can only be used along with the -filename or the -item_id argument. It does not function when used in combination with the -f=verify argument.

4. Unless the -update argument is given, the data_sync utility generates only reports.

5. The -assert_extinct_site and -assert_extinct_ods options can only be used with the -f=verify argument.

6. The -exclude_files, -exclude=, -include_bom, -disable_modified_only and -latest_ds_version options can be used if both the -f=sync and -update arguments are supplied.

7. The -classoffile argument currently supports only the Item, ItemRevision, Dataset, Form, Folder, Role, User, Group, and Person classes.
8. The **-include** and **-update** arguments must be supplied with the **-OnlyVIS** switch.

9. To use this utility, you must be a user with system administration privileges or be granted authorization by a user with system administration privileges.

**EXAMPLES**

Required logon information is omitted from the following examples.

1. To generate a report of items that must be synchronized for a given site:
   ```bash
   data_sync -class=Item -site=Site1 -f=sync
   ```
   The report is output to **stdout**. No synchronization is performed.

2. To synchronize all items copied to a site and output a report to a file:
   ```bash
   data_sync -class=Item -site=Site1 -f=sync -update -report=report.lst
   ```
   The default revision selector, **-same_as_last_export**, is used.

3. To synchronize the latest released revisions of items:
   ```bash
   data_sync -class=Item -site=Site1 -f=sync -update -latest_released
   ```

4. To synchronize all forms and datasets:
   ```bash
   data_sync -class=Form -class=Dataset -site=Site1 -f=sync -update
   ```

5. To republish all previously published items to the **Mfg_ODS** ODS:
   ```bash
   data_sync -class=Item -site=Mfg_ODS, -f=republish -update
   ```

6. To check if datasets copied to the **Design Center** site still exist and delete the IXR from the master if a copy is no longer there:
   ```bash
   data_sync -class=Dataset -site=Design Center -f=verify -update
   ```

7. To force synchronization of a list of items specified in a text file copied to a site and output the report to a file:
   ```bash
   data_sync -filename="/myhome/itemlist.txt" -classoffile=Item
   -site=Site1 -f=sync -update -force -report=report.lst
   ```

8. To force synchronization of a single item or items that match a template:
   ```bash
   data_sync -item_id=Eng* -site=Site1 -f=sync -update -force
   -report=rep.lst
   ```

9. To destroy all the export records to a known extinct site:
   ```bash
   data_sync -u=infodba -p=infodba -site=XSite -f=verify
   -update -assert_extinct_site
   ```

10. To destroy all the publication records to a known extinct ODS site:
    ```bash
    data_sync -u=infodba -p=infodba -site=XSite -f=verify
    -assert_extinct_ods
    ```

11. To destroy export records, BVRs, and attachments of specific deleted replica item revisions:
    ```bash
    data_sync -site=S1 -f=verify -update -fn=mylist -cof=ItemRevision
    ```
Chapter 7  

Data sharing utilities

The **mylist** file has item revision names in the following format: **item123/A**

12. To destroy export records of specific deleted replica datasets:

   ```
   data_sync -site=S1 -f=verify -update -filename=mylist
   -classoffile=Dataset
   ```

   The **mylist** file has dataset names in the following format: **dataset123**

13. To start synchronization in **pull** mode:

   ```
   data_sync -pull -class=Item -site=S1 -update -report=report.lst
   ```

14. To force synchronize a list of items specified in a text file in **pull** mode:

   ```
   data_sync -pull -filename="/myhome/itemlist.txt" -force
   -update -report=report.lst
   ```

15. To generate a report of which items must be synchronized in **pull** mode:

   ```
   data_sync -pull -filename="/myhome/itemlist.txt" -site=S1
   -f=sync -report=report.lst
   ```

16. To synchronize visualization datasets that are under replicated Item Revision having status:

   ```
   data_sync -OnlyVIS -since=2005-01-01:01:01 -site=Site1 -f=sync -update
   -report=report.lst -include=IMAN_Rendering -include=IMAN_specification
   ```

17. To check if items copied to the **Design_Center** site still exist and delete the IXR from the master if a copy is no longer there, enter the following command on a single line:

   ```
   data_sync -item_id=* -site=Design_Center -f=verify -update
   ```

18. To delete the IXRs of objects whose replicas do not exist at the remote sites, enter the following command on a single line:

   ```
   data_sync -item_id=* -site=Site1 -f=verify -update -report=rep.lst
   ```

19. To generate a report of the IXRs, enter the following command on a single line:

   ```
   data_sync -item_id=* -site=Site1 -f=verify -report=rep.lst
   ```

   Both this and the previous example generate reports listing all objects including those that are no longer at the remote site.

20. To synchronize all items copied to a site and output a report to a file with newly added components to existing assembly:

   ```
   data_sync -class=Item -site=Site1 -f=sync -update
   -include_bom -report=report.rpt
   ```

21. To synchronize any particular item transferred to a replica site and output a report to a file with newly added components to existing assembly:

   ```
   data_sync -u=infodba -p=infodba -g=dba -item_id=Item1
   -site=Site1 -f=sync -update -include_bom -report=report.rpt
   ```

22. To synchronize all **imanfile** objects copied to a site and output a report to a file:

   ```
   data_sync -class=imanfile -site=Site1 -f=sync -update -report=report.lst
   ```
23. To force synchronization of **imanfile** objects for all datasets specified in a text file copied to a site and output the report to a file:

```
data_sync -filename=/myhome/datasetlist-for-imanfiles.txt
         -classoffile=imanfile -site=Site1 -f=sync -update -report=report.lst
```

24. To synchronize files and initiate a checkpoint for three sites:

```
data_sync -f=sync -checkpoint -item_id=item123
         -site=Site2 -site=Site3 -site=Site4 -update
```

25. To force synchronization of files and initiate a checkpoint for three sites:

```
data_sync -f=sync -update -checkpoint -item_id=item123
         -site=Site2 -site=Site3 -site=Site4
```

26. To check the status of a given transaction:

```
data_sync -f=status -transaction_id=AhEZaOnRAAAMfD
```

27. To restart a given transaction for a given site:

```
data_sync -f=sync -transaction_id=AhEZaOnRAAAMfD
         -restart -site=Site3
```

28. To synchronize all 4th Generation Design (4GD) objects copied to a site and output report to a file:

```
data_sync -class=Cpd0DesignElement -site=Site1
         -sync -update -report=report.lst
```

29. To synchronize specific 4GD objects copied to a site and output report to a file:

```
data_sync -4gd_id=DE000001 -class=Cpd0DesignElement
         -site=Site1 -sync -update -report=report.lst
```

30. To clean up fast sync transactions prior to specific last process date, list the available transactions to get the last process dates:

```
data_sync -low_level -lt
   Clean up the transactions:
```

```
data_sync -low_level -ct -blpd=2012-12-18:20:10:00
```

31. To use the **TC_cms_relation_optset_map** preference to include or exclude relations:

   a. Add the relation and option set to the **TC_cms_relation_optset_map** preference, for example:
      
      ```
      IMAN_rendering, opt_rel_rendering
      ```

   b. In the PLM XML/TC XML Export Import Administration application, expand the **TransferOptionSet**, click **MultiSiteOptSet**, and add the **opt_rel_rendering** option with the default value set to false.

   c. Expand **ClosureRule**, click **MultiSiteDefaultCR**, and add the following clause:
      
      ```
      CLASS:WorkspaceObject:CLASS:Dataset:RelationP2S:IMAN_rendering:
      SKIP:$opt_rel_rendering==false;
      ```
Chapter 7  
Data sharing utilities

**Note**  
This clause states, from any WorkspaceObject, find the dataset using IMAN_rendering relation, and when the relation is opt_rel_rendering, skip the dataset during export. It means the default is to always exclude the IMAN_rendering relation for an exported object.

d. To include the IMAN_rendering in the synchronization using the data_sync utility, type:

```
data_sync -include=IMAN_rendering -low_level
```

**IMPORTANT NOTES**

1. When synchronizing items, all item revisions, BOM view revisions, BOM views, forms, and datasets associated with the item will also be synchronized. However, in some cases the item itself is not modified, so the last modification date is not updated and, therefore, cannot be used as the sole basis for synchronization. In most cases, it is necessary to specify all classes associated with an item to guarantee that complete synchronization is accomplished. This means that the command to run the data_sync utility should include several class switches, for example:

```
data_sync -class=Item -class=ItemRevision -class=PSBOMViewRevision
```

**Note**  
If your database contains a large number of replicated items (more than 10,000), you should synchronize one class at a time. When doing so, you should begin with the Item class, and then the ItemRevision class, followed by the PSBOMViewRevision class, and continue down the schema to dataset and forms classes.

2. The PSBOMViewRevision class must be specified instead of the PSBOMView class so that changes to the structure is synchronized.

3. When synchronizing an assembly, the data_sync utility does not automatically traverse the assembly tree. Rather, it synchronizes each subassembly or component individually on an as-needed basis. If you want the utility to traverse the assembly tree, use the -include_bom argument.

4. When synchronizing an assembly, data_sync transfers new components that are part of the assembly, when sending an assembly with the -include_bom argument set to true.

5. Because the data_sync utility never involves any transfer of ownership, there is no need to perform export recovery if the utility terminates prematurely.

6. When synchronizing, the utility performs an automatic verification. It checks if the object being synchronized still exists at the remote site prior to synchronizing it. If a replica no longer exists, the utility deletes the corresponding IXR.

7. The -verbose argument can be used to analyze the performance of the data_sync utility. The -verbose argument prints the system times at important stages during the process of synchronization.

8. Siemens PLM Software recommends that you synchronize only one site at a time rather than synchronizing multiple sites in a single run of the data_sync utility. This allows you to use the -same_as_last_export revision selector that uses the
same import/export options used to replicate the item. If you must synchronize multiple sites, create a script that loops through sites but only invokes the data_sync utility with only one site at a time.

Folders can be used with the data_sync utility, as shown below:

data_sync -filename=/tmp/folderlist -classoffile=Folder...

If the content of the folder has changed since the last export, if references have been added or removed, the data_sync utility updates the remote copy to reflect the current state of the folder.

If no references have been added or removed from a folder since the last export, it is not considered to have been modified. Therefore, if the objects referenced in the folder have changed and need to be updated at the remote site using the -classoffile=Folder argument, use the -force argument.

This example shows how to generate a report called data_sync.rpt against the Detroit site:

Enter the following command on a single line:

data_sync -class=Item -verify -report=data_sync.rpt -site="Detroit"

The results are as follows:

<table>
<thead>
<tr>
<th>Object</th>
<th>Date</th>
<th>Last Modified</th>
<th>Site</th>
<th>Date</th>
<th>Last Exported</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>DS_0401_02A</td>
<td>1997-04-03</td>
<td>15:13:50</td>
<td>Detroit</td>
<td>1997-04-03</td>
<td>12:47:45</td>
<td>Text (Dataset)</td>
</tr>
<tr>
<td>DS_0401_02A;1</td>
<td>1997-04-03</td>
<td>15:13:40</td>
<td>Detroit</td>
<td>1997-04-03</td>
<td>12:47:48</td>
<td>Text (Dataset)</td>
</tr>
<tr>
<td>DS_0401_02A;2</td>
<td>1997-04-03</td>
<td>15:13:43</td>
<td>Detroit</td>
<td>1997-04-03</td>
<td>12:47:52</td>
<td>Text (Dataset)</td>
</tr>
<tr>
<td>0320_01/A</td>
<td>1997-03-24</td>
<td>15:34:44</td>
<td>Detroit</td>
<td>1997-03-24</td>
<td>15:33:57</td>
<td>Text (Dataset)</td>
</tr>
<tr>
<td>0320_01/A;1</td>
<td>1997-03-24</td>
<td>15:34:33</td>
<td>Detroit</td>
<td>1997-03-24</td>
<td>15:34:00</td>
<td>Text (Dataset)</td>
</tr>
<tr>
<td>0320_01/A;2</td>
<td>1997-03-24</td>
<td>15:34:38</td>
<td>Detroit</td>
<td>1997-03-24</td>
<td>15:34:04</td>
<td>Text (Dataset)</td>
</tr>
<tr>
<td>0320_01/A;3</td>
<td>1997-03-24</td>
<td>15:34:42</td>
<td>Detroit</td>
<td>1997-03-24</td>
<td>15:34:06</td>
<td>Text (Dataset)</td>
</tr>
</tbody>
</table>

Error code 100228 indicates that a Multi-Site Collaboration file transfer operation has failed. The most likely causes are a network connection failure or an abort (crash) of the IDSM process at the remote site. For the former, retry the operation. For the latter, examine the IDSM system log files at the remote site.
diff_xml

Uses the bomwriter-generated output files with the grdvua_on option specified at two days, compares the PLM XML files, and generates a difference XML file. This difference XML file contains all of the changes performed on the assembly structure. This XML file is then used to update the audit log file dataset.

SYNTAX

diff_xml -u= user-name [-p=password | -pf=password-file] [-g=group]
-item=item-id -rev=revision-id -key=key-id [-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-item
Specifies the item ID of the top node of the assembly structure.

-rev
Specifies the revision ID of the top node of the assembly structure.

-key
Specifies the key of the object. The -key argument can be used instead of the -item argument.
To find the key of an object, use the `get_key_string` utility.

For more information, see the *Business Modeler IDE Guide*.

`-h`
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
Open the Teamcenter menu shell with the database connection variables set and then execute the following command:

```
diff_xml -u=infodb -p=infodb -g=dba -item=000125 -rev=001
```
**Chapter 7  Data sharing utilities**

---

**distributed_execute**

Executes the `item_report` utility, both locally and remotely, and generates reports.

You can specify any command line parameters required for the `item_report` utility on the `distributed_execute` command line, and those arguments are passed to the `item_report` utility.

**Note** This utility does not support individual item ID input. You must use the `-itemidsfile=file` argument.

Siemens PLM Software recommends you first perform the `-distributed_func=traverse_items` step. This accumulates all traversed items from all specified sites and collects them in an output file (BOM traversal). You can use this file as input argument in subsequent steps, for example, report.

This utility does not collect logs at remote sites and return them to the local machine.

Siemens PLM Software also recommends you test this utility with emphasis on:

- Verifying the utility performs the same way locally and remotely.
- Receiving required report files and test miscellaneous combinations of command line parameters; any additional parameters specified are passed to the calling program.

**SYNTAX**

```
distributed_execute [-u=user-id [-p=password | -pf=password-file] -g=group] -distributed_func=traverse_items -itemidsfile=datafile -distributed_sites=site1,site2,site3 -outfile=file-name [-delimiter=delimiter-character] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  If this argument is not used, the system assumes the `user-ID` value to be the password.
-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-distributed_func
Specifies one of the following functions:

- traverse_items: Traverse BOM on all specified sites and produce union of all traversed IDs, argument maps to the item_report utility argument -traverseditemfile.

- report: Generates a distributed IDSM-based report based on list of items input from an ID file, argument maps to item_report utility, generate the reports, and merger reports.

-itemidsfile
Specifies a data file containing comma-separated values (CSVs) or carriage return/line feed separated item IDs. This argument is required.

-outfile
Specifies the output file. This argument is required.

-distributed_sites
Specifies a list of sites, both local and remote, on which this command is executed. This argument is required.

-delimiter
Specifies a delimiter character for the output file. The default value is the vertical bar (|). Ensure the delimiter in the site-based file and merge file input match.

-h
Displays help for this utility.

RESTRICTIONS
None.

EXAMPLES

- To execute item_report to generate a list of traversed objects for three sites (user, password, and group arguments are not shown in the example):

  distributed_execute -distributed_sites=Site1,Site2,Site3
  -outfile=trav.out -distributed_func=traverse_items -itemidsfile=item_id.txt

- To execute item_report to generate report files and merge file (user, password, and group arguments are not shown in the example):

  distributed_execute -distributed_sites=Site1,Site2,Site3
  -outfile=merge.out -distributed_func=report -itemidsfile=item_id.txt
Distributes system administration data, such as users and groups, from one site to another. When adding a new site, this allows you to enter the site information of all sites in the network so the new site can exchange data with them.

**Caution**  Do not use this utility to share organization objects between sites if the same organization objects are shared through a global organization.

**Note**  This utility should be used only for the initial migration of system objects. Siemens PLM Software recommends that you do not use this utility to maintain system objects.

Propagates Teamcenter administration data among multiple sites and allows administrators to:

- Manage system data from a central site.
- Support non-networked sites.
- Create reports of the results of a distribution operation.

**SYNTAX**

```
dsa_util [-u=user-id [-p=password | -pf=password-file] -g=group]
    [-f=distribute | export | import | list_classes | list_sites | check_sites]
    set_logging_level -level=[FATAL | ERROR | WARNING | INFO | DEBUG | TRACE | OFF])
    [-site=remote-site1-name -site=remote-site2-name...]
    [-class=class1-name -class=class2-name...]
    [-filename=file-path-name]
    [-report=report-file-name]
    [-email=email-address]
    [-attr1-name=attr1-value -attr2-name=attr2-value]
    [-attr-name-listfile=file-path-name]
    [-h=[topics | topic-name] | -h [-f=function-name | -class=class-name]]
```

**ARGUMENTS**

**Note**  Entries in parentheses are accepted abbreviations for arguments.

**-u**

Specifies the user ID.

This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note**  If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.
-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

Caution  For HTTP enabled sites, remote site operations log on using the default group for the user supplied with the -u argument. Any value supplied with the -g argument is ignored.

-f
Identifies the function to perform. Must be one of the following functions:

distribute (dist)  Sends system objects to the given sites.

export (exp)  Outputs system object information to the text file identified by the -filename argument. The output file can be edited and used with the distribute function in conjunction with the -filename argument. Equivalent to exporting system objects.

import (imp)  Imports system object information from the text file identified by the -filename argument and updates system objects in the local database. Equivalent to importing system objects.

list_classes (lc)  Lists the name of all classes supported by this utility.

list_sites (ls)  Lists all the sites that are defined in the local database.

check_sites (cs)  Checks the availability of all sites defined in the local database. A site is considered available for Distributed System Administration purposes if its IDSM server is ready.

set_logging_level (sll)  Sets the logging level at the remote site indicated by the -site argument to the level indicated by the -level argument. See restrictions 5 and 6.

-level
Specifies the logging level for a given remote site in a remote procedure call (RPC)-based Multi-Site environment. Valid values are:

• FATAL  Logs only severe errors that cause premature program termination.
• **ERROR**
  Logs other run-time errors or unexpected conditions.

• **WARNING**
  Logs run-time situations that are undesirable or unexpected, such as use of deprecated APIs.

• **INFO**
  Logs informational messages that highlight the progress of the application at a coarse-grained level, such as startup and shutdown events.

• **DEBUG**
  Logs detailed information on the flow through the system. This information is useful for debugging an application.

• **TRACE**
  Logs the most detailed information on system events and operation.

• **OFF**
  Turns off logging.

See restrictions 5 and 6.

Set the logging level at the local site in the `logger.properties` file in the `TC_DATA` directory.

- **site**
  Identifies the remote sites to which system objects are distributed. May be given multiple times in the same command line to distribute to multiple sites.

- **class (cl)**
  Identifies the system class or classes to be processed. This argument can be given multiple times in the command line but only if the entire class is to be processed. No attribute switches are allowed when multiple classes are given.

  **Note** All class names are case insensitive.

- **filename (fn)**
  Specifies the path name of a text file to be used as input or output of system object information. If only the file name is given, the file is assumed to be in the user's current directory.

  To prevent the system from appending the `.plmxml` file extension to the specified file name, Siemens PLM Software recommends that you specify a file name using the `.xml` file extension.

- **report (rep)**
  Specifies the path name of a text file to which the local report is written.

- **email (em)**
  Indicates the e-mail address to which the remote report is sent. It can be a single address or multiple addresses separated by a semicolon (`;`).
-attr-name=attr-value
Specifies the attribute name and value pair identifying a specific instance of the given system class. This argument can be given multiple times in the command line if necessary to locate a specific instance of a given class.

-attr-name_listfile
Specifies the path name of the text file containing the IDs or names of instances of the given class. Use to process multiple instances of a given class.

-h=topics
Displays a list of topics for which detailed help information is available.

-h=topic-name
Displays help information for a specific topic.

-h -f=function-name
Displays detailed help information for the given function.

-h -class=class-name
Displays class-specific help information for the given class. The class name must be one of the classes listed by the list_classes function. If the class name is set to ALL_CLASSES, displays help information for all supported classes.

-h
Displays help information on basic usage.

Return values

<table>
<thead>
<tr>
<th>Return value upon success</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Return value upon failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;1</td>
</tr>
</tbody>
</table>

Restrictions

1. To use this utility, you must be a user with system administration privileges or be granted authorization by a user with system administration privileges.

2. Do not use this utility to share organization objects between sites if the same organization objects are shared through a global organization.

3. When exporting the user object, this utility does not export the license level of the user. The license level of the user is set to the lowest available license level at the importing site. System administrators at the importing site must manually set the license level and/or the license bundle of each user.

4. The dsa_util utility does not recognize externally managed users, groups, roles, persons, and group members with a datasource attribute value greater than 0 and convert them to remotely managed (for example, managed by an LDAP external directory at a remote site). Because the dsa_util utility is the only way user constructs can be converted to remotely managed, no user construct objects in the Organization user interface appear as remotely managed.

5. The set_logging_level function and -level argument are only for RPC-based Multi-Site environments. Use the JMX console to set the logging levels for the loggers in an HTTP (four-tier) Multi-Site environment.
6. To use this argument, you must add the source site (site where the utility is run) to the `IDSM_dsa_sites_permitted_to_push_admin_data` preference value at the remote site.

**EXAMPLES**

To set the Multi-Site logging level to **DEBUG** at a remote site 203456177, enter the following command on a single line:

```
da_util -u=infodba -p=infodba -f= set_logging_level -site=203456177 level=DEBUG
```
**ensure_site_consistency**

Allows users to perform corrective actions if the site ownership transaction is interrupted due to a system or network crash or a user-initiated process termination (such as the Windows Task Manager). In cases where legitimate error conditions are encountered (such as lack of transfer privilege or duplicate item IDs), there is no requirement to perform any corrective action; Teamcenter restores the data to consistent states under most non-crash conditions.

**Note** This utility should be run only at the exporting site; never run it at the importing site. The flag that marks an object as requiring this utility is always at the exporting site.

**SYNTAX**

```plaintext
ensure_site_consistency [-u=user-id [-p=password ] [-pf=password-file ] -g=group] -f=recovery | report | list_all_rec | clean_all_rec
  [-item_id=item-id ] | [-key={keyAttr1=keyVal1 [ ,keyAttr2=keyVal2 ]}...{keyAttrN=keyValN}]
  [-class=class-name ] | [-folder=folder-name ] | [-filename=file-name ]
  [-itemKeyFile=file-name ] | [-search ] | [-4gd_id=object-id [-class=4gd-class-name] ]
  [-report=file-name ]
  [-mode={sst | gms }]
  [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the **user-ID** value to be the password.

  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.

  For more information about managing password files, see **Manage password files**.

  This argument is mutually exclusive with the **-p** argument.
-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-f
Specifies the function to perform. Valid values are:

  report
  Generates a list of objects that require recovery. The list is output to a text file
  identified by the value of the report argument. By default, the report contains
  the Global Services transfers (GMS) report followed by the Synchronous Site
  Transfer (SST) report. If the -mode argument is supplied with this argument,
  the utility generates a report on the mode specified.

  The clean_all_rec value can be used with this value.

recovery
Performs recovery operations such as reclaiming site ownership, releasing
transfer locks, and removing unwanted export records.

list_all_rec
Lists all inconsistent local/replica IXR, ITXR, and PAR records that exist for
local/replica objects on a local site. This value must be used with the report
value.

clean_all_rec
Deletes all inconsistent local/replica IXR, ITXR, and PAR records specified in
the input that exist for local/replica objects at a local site. This argument deletes
workspace objects only. It does not delete VariantExpression, AbsOccData, or
MEApprPathNode objects.

Note
Inconsistent local/replica IXR, ITXR, and PAR records occur in the following
situations:

- The object is local and the referencing auxiliary objects (IXR, ITXR, and PAR) are replicas.

- The object is replica and the referencing auxiliary objects (IXR, ITXR, and PAR) are replicas.

- The object is replica and the referencing auxiliary objects (IXR, ITXR, and PAR) are replicas.

- At a hub site, the object is local/replica and the referencing auxiliary
  objects (IXR, ITXR, and PAR) are replicas.

-folder
Specifies a folder that contains items on which to perform corrective action.

The use of a folder is intended for Workspace objects that do not have unique IDs, for
example, datasets and forms. This is useful for failed remote checkins of multiple
objects where many of the remotely checked-out objects do not have unique IDs, for
example, datasets, forms, BVRs, and so forth.
-filename
Specifies a file name that contains a list of items on which to perform corrective action. The file should only contain item IDs. This argument is mutually exclusive with the -folder, -item_id, and -search arguments.

-class (cl)
Specifies the Teamcenter class of the object specified by the -name or -4gd_id argument. This argument is valid only with the -name or, when the -low_level argument is specified, with the -4gd_id argument. The default class is Item.
For organization objects, this argument accepts Role, User, Group, and Person classes.

-key
Specifies the keys of the objects on which to perform corrective action. Use the following format:

[keyAttr1=keyVal1][,keyAttr2=keyVal2]...[keyAttrN=keyValN]

To find the key of an object, use the get_key_string utility.
For more information, see the Business Modeler IDE Guide.

-itemKeyFile
Specifies the name of the file containing the keys of the objects on which to perform corrective action.

-search
Finds all the objects that are flagged as requiring corrective action.
This argument is mutually exclusive with the -folder, -filename, and -item_id arguments.

• When used with the report function, the utility generates a report on all the objects that are found as requiring corrective actions.

• When used with the recovery function, the utility performs corrective actions on the objects that are found as requiring corrective actions.

-4gd_id
Specifies a 4GD object identifier or 4GD object pattern. The -class=class-name argument must be specified with the -4gd_id argument.
The utility maps the -4gd_id argument to the corresponding unique ID of the 4GD class, for example:

Class=Cpd0DesignElement, 4gd_id=cpd0design_element_id

A 4GD partition object and 4GD subset definition objects do not have a unique 4GD class ID. Therefore, using -4gd_id for partition objects or subset definition objects may result corrective action on multiple objects.
To export unique partition objects, use multifield key attributes supplied in the -key argument. See Examples.

-item_id
Specifies the item ID.

• When used with the report function, the utility generates a report on the item specified by item-ID.
Chapter 7  Data sharing utilities

- When used with the recovery function, the utility performs corrective action on the item specified by item-ID only if the specified item is flagged as requiring corrective actions.

-report
Specifies the output file path for generating the report. Use this argument with either the report function or the recovery function.

- When used with the report function, the report lists the objects that require corrective action.

- When used with the recovery function, the report lists the objects where corrective action was taken.

-mode
Specifies the recovery method type of transfer failures that you want to recover or the type of report to generate when used with the -report argument. If you do not specify this argument, the utility uses standard Multi-Site Collaboration transfer failures or generates both a Synchronous Site Transfer (SST) and Global Services (GMS) report when used with the -report argument. You can specify one of the following valid values:

- sst
  When used with the recovery function, sst recovers SST transaction failures. When used with the report argument, the report lists the SST transaction objects that require corrective action.

- gms
  When used with the recovery function, gms recovers GMS transaction failures. When used with the report argument, the report lists the GMS transaction objects that require corrective action.

-h
Displays help for this utility.

ENVIRONMENT
As specified in the Manually configuring your environment for Teamcenter utilities.

FILES
As specified in the Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
- Generate a report on all the objects that are flagged as requiring corrective actions:

  ensure_site_consistency -u=infodba -p=infodba -g=dba -f=report -search -report=recovery_candidates.txt

- Generate a report on the item specified by item_ID:

  ensure_site_consistency -u=infodba -p=infodba -g=dba -f=report -item_id=000301 -report=recovery_item.txt
• Perform corrective actions on all the objects that are flagged as requiring corrective actions:
  ```
  ensure_site_consistency -u=infodba -p=infodba -g=dba
  -f=recovery -search -report=recovery_fixup.txt
  ```

• Perform corrective actions on the item specified by item_ID:
  ```
  ensure_site_consistency -u=infodba -p=infodba -g=dba
  -f=recovery -item_id=000301 -report=recovery_fixup.txt
  ```

• Perform corrective actions on a list of item IDs:
  ```
  ensure_site_consistency -u=infodba -p=infodba -g=dba
  -f=recovery -filename=item_id_list.txt
  ```

The item_id_list.txt file should contain a list of item IDs, one item ID per line.

• Perform corrective actions on all objects under a given uniquely named folder:
  ```
  ensure_site_consistency -u=infodba -p=infodba -g=dba
  -f=recovery -folder=RecoveryFolderFor26June2007
  ```
**export_recovery**

Recovers and restores exported objects to your database under certain conditions. Occasionally, when you export an object and transfer ownership the object may not be successfully imported at the destination site. This places the object in an undefined state where no one has ownership. The preferred method of correcting this situation is to have the destination site complete the import/export transaction by importing the object into the database from the importing site’s TC_transfer_area (using interactive object import).

However, if this is not possible, the **export_recovery** utility is used to restore the object to the exporting database from the exporting site’s TC_transfer_area using the **min** or **full** mode (effectively canceling the export/transfer ownership transaction). If no data is available at either site, recovery can be attempted by running the automode at the exporting site that was the last known owning site.

Use the **export_recovery** utility when an export with transfer of site ownership fails, resulting in objects within an item having inconsistent site ownership. The mode of recovery to use depends on whether there is a valid export directory. The directory must include the **objects.meta** file.

Siemens PLM Software recommends the following order for attempting export recovery procedures; you should try the succeeding procedure only if you cannot perform the previous one or if the previous one fails to restore site ownership:

- If a valid export directory exists (most likely in the **TC_transfer_area** of the exporting or importing site), use either **full** or **min** mode while specifying the valid export directory with the `-dir=` switch. If you attempt to recover at the exporting site, use **min** mode; if you attempt to recover at the importing site, use **full** mode.

- If a valid export directory does not exist, you must attempt recovery from a valid database copy that may be a replica or one with inconsistent site ownership. Use **export_recovery** in **auto** mode. Specify the **-include_bom** switch if appropriate. Specify **-exclude** and/or **-include** switches, if desired.

- If the **auto** mode fails to restore site ownership, perform the manual export recovery procedure:
  1. Define the **TC_EXPORT_COPY=TRUE** environment variable.
  2. Run **item_export** as the **infodba** user to transfer site ownership to any site.
  3. Run **export_recovery** in **min** mode specifying the directory output in step 2 as the **-dir** parameter.
  4. If successful, delete the export directory from step 2.

**SYNTAX**

```
export_recovery [-u=user-id [-p=password | -pf=password-file] -g=group]
               [-mode={full | min | auto | find}]
               [-item_id=item-id-to-restore]
               [-key={keyAttr1=keyVal1},keyAttr2=keyVal2]...[keyAttrN=keyValN]]
               [-folder=folder-name] [-filename=file-name]
               [-itemKeyFile=file-name] [-dir=directory]
```

---

**Chapter 7  Data sharing utilities**

**export_recovery**

Recovers and restores exported objects to your database under certain conditions. Occasionally, when you export an object and transfer ownership the object may not be successfully imported at the destination site. This places the object in an undefined state where no one has ownership. The preferred method of correcting this situation is to have the destination site complete the import/export transaction by importing the object into the database from the importing site’s TC_transfer_area (using interactive object import).

However, if this is not possible, the **export_recovery** utility is used to restore the object to the exporting database from the exporting site’s TC_transfer_area using the **min** or **full** mode (effectively canceling the export/transfer ownership transaction). If no data is available at either site, recovery can be attempted by running the automode at the exporting site that was the last known owning site.

Use the **export_recovery** utility when an export with transfer of site ownership fails, resulting in objects within an item having inconsistent site ownership. The mode of recovery to use depends on whether there is a valid export directory. The directory must include the **objects.meta** file.

Siemens PLM Software recommends the following order for attempting export recovery procedures; you should try the succeeding procedure only if you cannot perform the previous one or if the previous one fails to restore site ownership:

- If a valid export directory exists (most likely in the **TC_transfer_area** of the exporting or importing site), use either **full** or **min** mode while specifying the valid export directory with the `-dir=` switch. If you attempt to recover at the exporting site, use **min** mode; if you attempt to recover at the importing site, use **full** mode.

- If a valid export directory does not exist, you must attempt recovery from a valid database copy that may be a replica or one with inconsistent site ownership. Use **export_recovery** in **auto** mode. Specify the **-include_bom** switch if appropriate. Specify **-exclude** and/or **-include** switches, if desired.

- If the **auto** mode fails to restore site ownership, perform the manual export recovery procedure:
  1. Define the **TC_EXPORT_COPY=TRUE** environment variable.
  2. Run **item_export** as the **infodba** user to transfer site ownership to any site.
  3. Run **export_recovery** in **min** mode specifying the directory output in step 2 as the **-dir** parameter.
  4. If successful, delete the export directory from step 2.

**SYNTAX**

```
export_recovery [-u=user-id [-p=password | -pf=password-file] -g=group]
               [-mode={full | min | auto | find}]
               [-item_id=item-id-to-restore]
               [-key={keyAttr1=keyVal1},keyAttr2=keyVal2]...[keyAttrN=keyValN]]
               [-folder=folder-name] [-filename=file-name]
               [-itemKeyFile=file-name] [-dir=directory]
```
ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-mode
Specifies the basic mode in which the utility operates. The value of this argument can be one of the following:

full
Restores objects from the export metafile, imports them in to your database and restores ownership to your site.

min
Restores ownership to your site without reimporting data from the metafile. Valid only if the metafile was generated with transfer of ownership.

auto
Restores ownership on the specified item without reimporting. You must specify the -itemid argument and either the -remote_site or -real_owning_site arguments when using this mode.
find
Searches for items with inconsistent site ownership and generates a report.

-dir
Defines the path of the directory containing the exported metafile and the data files. Required only with the -mode=full and -mode=min arguments.

-item_id
Specifies the ID of the item to process. Wildcards are allowed.

-folder
Defines the name of the Teamcenter folder containing the list of items to process.

-filename
Defines the full path of the file that contains the list of items to process.

-key
Specifies the keys of the items to process. Use the following format:

[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-itemKeyFile
Specifies the name of the input file containing the keys to process. The file format is:

- key = [keyAttr1=keyVal1] [keyAttr2=keyVal2]...  
- key = [keyAttr1=keyVal1] [keyAttr2=keyVal2]...  
- key = [keyAttr1=keyVal1] [keyAttr2='keyVal2']...

-remote_site
Defines the last site for which a transfer of ownership was attempted. This argument is valid only with the auto mode.

-report
Specifies the full path of the report file. Valid only with find mode.

-real_owning_site
Changes the owning site of specified objects to the site designated. Valid only with the -mode=auto argument.

-include_bom
Includes assembly components, if any exist.

-exclude
Excludes the specified relation type and may be given multiple times. The database name (not display name) of the relation type must be used.

-include
Includes the specified relation type and may be given multiple times. The database name (not the display name) of the relation type must be used. Use this argument to force the inclusion of a relation type that is not specified by your TC_relation_required_on_export preference.
-ignore_am_rules
Ignores AM rules for recovery purposes.

-update_lmd
Updates the last modified user and date. Valid only with the -mode=auto argument.

-bp
Displays best practices information.

-h
Displays help for this utility.

ENVIRONMENT
As specified in the Manually configuring your environment for Teamcenter utilities.

FILES
As specified in the Log files produced by Teamcenter.

RESTRICTIONS
• To use this utility, you must be a user with system administration privileges or be granted authorization by a user with system administration privileges.

• At least one primary mode must be specified.

• Not more than one primary mode can be specified.

• For the -mode=auto and -mode=find options, exactly one object selection filter (-itemid, -filename, or -folder) must be specified.

EXAMPLES
In each of the following examples, the -u=user-id -p=password and -g=group arguments are assumed:

• To restore ownership on an item with the ID MyCorruptItem:
  
  export_recovery -mode=auto -item_id=MyCorruptItem
  -remote_site=Manufacturing

• To restore ownership on objects contained in an export metafile without reimporting:
  
  export_recovery -mode=min -dir=metafile_dir

• To reimport objects from the metafile and restore site ownership:
  
  export_recovery -mode=full -dir=metafile_dir

• To generate a report of ownership inconsistencies:
  
  export_recovery -mode=find -filename=suspect_itemlist.dat
  -report=report.dat

• To make an item (xyz) in the local site a replica that is owned by another site (Site2):
  
  export_recovery -mode=auto -item_id=xyz -real_owning_site=Site2

• To restore ownership of an entire assembly:
  
  export_recovery -mode=auto -item_id=Assy1 -remote_site=Site2
  -include_bom
idsminetd

Serves as the Integrated Distributed Services Manager (IDSM) launching program on UNIX systems. Located in the $STC_ROOT/bin directory, it is run at system startup and services all inbound requests for a new IDSM.

For more information on IDSM, see the Multi-Site Collaboration Guide.

SYNTAX

idsminetd [-u=user-id [-p=tcp-port-number | -pf=password-file] -g=group] [-d] [-t] [-r=idsm-start-script] [-n=RPC-program-number]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the port number on which the IDSM should run. Default is the system-assigned port number.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

-d
Specifies debug mode for stand-alone testing. The server runs in the foreground.

-t
Enhances logging.

-r
Specifies the IDSM start script.

-n
Specifies the RPC program number the IDSM should use. The default RPC program number is used if this argument is omitted.
Data sharing utilities

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
The selected port number must be in the range 1025–65535 and must not conflict with other system services.

EXAMPLES
Under normal circumstances, this utility runs only at system startup. The following is an example of running a debug session:

```bash
idsminetd -d -t -p=33333 -r=/tmp/myscript
```
import_file

Imports files into the Teamcenter database according to a set of user-specified arguments. These arguments supply user identification information, dataset information, and (optionally) item information to be associated with the imported file. The arguments may be specified on the command line to import a single data file or in a file to import multiple data files (bulk import).

Depending on the arguments, each data file is copied (an ImanFile object is created), a dataset is created (or modified), and if specified, an item is created or modified to contain the dataset. In the absence of a specified item, the dataset is placed in the user’s Newstuff folder.

**Note**  The import_file utility does not support the creation of custom item types.

**SYNTAX**

```shell
import_file [-u=user-id [-p=password | -pf=password-file] -g=group]
            [-f=file-name | -i=file-name [-vb] [-log=file-name] -type=datasettype -d=dataset-name
            -ref=named-reference [-de=[n | e | a | r] [-item=item-id | -itemkey=key-id]
            [-itemRevUid=item-revision-uid]
            [-relationType=relation-type] [-use_ds_attached_to_rev_only]
            [-revision=item-revision-num] [-ie=[n | y]] [-desc=string]
            [-v=volume-name] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see Manage password files.

  This argument is mutually exclusive with the -p argument.
Data sharing utilities

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-f
Imports a single file into Teamcenter. The full path must be provided if the file does not reside in the current working directory. The -f and -i arguments are mutually exclusive. See example 1.

-i
Imports multiple files into Teamcenter using a specified import file. The full path must be provided if the file does not reside in the current working directory. The -f and -i arguments are mutually exclusive. See example 2.

-vb
Runs utility in verbose mode. Displays maximum amount of information. Nonverbose sessions only display error messages.

-log
Creates a log of items and datasets created.

-type
Defines the dataset type in Teamcenter, for example, TEXT or UGPART datasets.

-d
Specifies the name of the dataset into which the file is imported.

-ref
Specifies the type of named reference associated with the file. The value specified by this argument may or may not be identical to the value specified by the -type argument.

For example, TEXT or UGPART type datasets have named references of TEXT and UGPART, respectively. However, DirectModel type datasets have a JTPART named reference. Each dataset type defines one or more named references to be associated with it. See restriction #2.

For more information, see the My Teamcenter Guide.

-de
Indicates that a dataset exists. Used when a dataset of the same name already exists.

=n
Specifies that a new dataset be added even if one with the same name exists. If it does exist, it is added to the same item folder. If it does not exist, it is placed in the new item folder or the user’s Newstuff folder.

=e
Specifies that the dataset should be added if it already exists and that this dataset type supports multiple instances of the same dataset.

=a
Specifies that the imported file be added as a named reference to the existing dataset. When this is done, a new dataset version that contains the additional imported named reference file is created.
Specifies that a new dataset revision be created and the existing named reference be replaced with the new one. This option generates an error if the dataset has no existing named reference.

-item
Specifies the name of the item containing the dataset that references the imported file.

-itemkey
Specifies the key of the object. You can use the -item argument or the -itemkey argument.

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-itemRevUid
Specifies the 14 character UID string of the item revision object where the file and dataset are to be attached.

-relationType
Specifies a relation to use when the IMAN_specification relation is not appropriate. If the -relationType argument is not specified, the IMAN_specification relation is used.

-use_ds_attached_to_rev_only
Specifies a dataset based on its name and type, but it considers datasets attached to the specified item and item revision only. The item and item revision are specified by the -item and -revision parameters, respectively.

This prevents the utility from referring to datasets with the same name and type but that are unattached or are attached to another item or revision.

The -use_ds_attached_to_rev_only parameter is particularly useful when used along with the de=r argument (that is, if you want to revise the existing dataset instead of creating a new one).

-revision
Specifies the item revision number and revision ID. See restriction #3.

-ie
Specifies behavior if the item already exists.

   =n
   Specifies that the dataset will not be added if the item already exists.

   =y
   Specifies that the dataset may be added if the item already exists. If the item exists, but the item revision does not, an item revision is created.

-desc
Specifies a user-defined text description of an item that is created by the import function. If the import_file utility is creating a new revision of an existing item, this is the description of the item revision.
-v
Specifies the full path of the Teamcenter volume where the imported file is placed.

ENVIRONMENT
As specified in the *Manually configuring your environment for Teamcenter utilities.*

FILES
As specified in the *Log files produced by Teamcenter.*

RESTRICTIONS
1. When importing a file, the file name cannot be longer than 31 characters.
2. To create a dataset in Teamcenter, the user must specify the dataset type and the named reference.
3. When importing a file as a dataset, you must specify the named reference using the -ref argument.
4. When importing a file into an item or item revision, you must specify the revision; otherwise, an error message displays indicating a missing revision.

EXAMPLES

- To import a single operating system file, *bike.dat*, into Teamcenter as a UGPART dataset named *my_bike_dataset*, enter the following on a single line:
  ```
  $TC_ROOT/bin/import_file -user=user-id -p=password -g=group -f=bike.dat -type=UGPART -d=my_bike_dataset -ref=UGPART
  ```

- To import multiple operating system files into Teamcenter, first create an input file that contains the following information:
  ```
  -f=bike1.dat -d=my_bike1_dataset -type=UGPART -ref=UGPART
  -f=bike2.dat -d=my_bike2_dataset -type=UGPART -ref=UGPART
  -f=binkeN.dat -d=my_bikeN_dataset -type=UGPART -ref=UGPART
  ```

- Run the *import_file* utility using the input file from example 2, entering the following command on a single line:
  ```
  $TC_ROOT/bin/import_file
  -user=user-id -password=password -group=group -i=input-file
  ```

- Import the *d:\some_file.jt* file:
  ```
  %TC_ROOT%\bin\import_file -user=user-id -p=password -group=group -f=d:\some_file.jt -type=DirectModel -d=my_jt_file_dataset -ref=JTPART
  ```

- Import the *d:\WordDoc.doc* file:
  ```
  %TC_ROOT%\bin\import_file -user=user-id -p=password -group=group -f=d:\WordDoc.doc -type=MSWord -d=my_word_dataset -ref=word
  ```

- Import the *d:\ExcelFileTest.xls* file:
  ```
  %TC_ROOT%\bin\import_file -user=user-id -p=password -group=group -f=d:\ExcelFileTest.xls -type=MSExcel -d=my_excel_dataset -ref=excel
  ```

- Import the *d:\myfile.txt* file:
  ```
  %TC_ROOT%\bin\import_file -user=user-id -p=password -group=group -f=d:\myfile.txt -type=Text -d=my_text_file_dataset -ref=Text
  ```
Exports a single item or multiple items in batch mode. It is the companion to the `item_import` utility. This utility supports part family templates and members and works with the `TC_relation_required_on_export` and `TC_relation_required_on_transfer` preferences.

**SYNTAX**

```
item_export [-u=user-id | -p=password | -pf=password-file] -g=group]
-dir=directory
[-item=item-id | -keykey-id [-rev=revision-selector] | -filename=input-file
 | -itemKeyFile=file-name]
[-owning_site=site-name | -target_site=site-name1, site-name2, ...]
[-exclude=relation-type1 -exclude=relation-type2...]
[-reason=export-reason] [-latest_ds_version] [-include_bom]
[-batch_objects=list-of-deferred-classes]
[-batch_file=file-name-listing-deferred-classes]
[-deferred_batch_size=batch-size-for-deferred-objects]
[-preview] [-report=file-name] [-continue_on_error]
[-xfr_top_lvl_only] [-xfr_top_asm_only] [-xcl_files]
[-status=release-status] [-exclude_folder_contents]
[-classoffile=class-name] [-separator=separator-character]
[-dont_exclude_protected] [-email=email-address] [-script=script-name]
[revision-selector] [-include_bc] [-include_supercedures] [-v] [-h]
```

**ARGUMENTS**

**Note** Entries in parentheses are accepted abbreviations for arguments.

**-u**

Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

**-p**

Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.

If this argument is not used, the system assumes the `user-ID` value to be the password.

**-pf**

Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
For more information about managing password files, see *Manage password files*. This argument is mutually exclusive with the *-p* argument.

*-*
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

*-*
Specifies the full path of the directory where the metafile and data files are stored.

*-*
Specifies the ID of the item to be exported. Valid only if no input file is specified using the *-i* argument.

*-*
Specifies the key of the object. You can use the *-item* argument or the *-key* argument.
To find the key of an object, use the *get_key_string* utility.
For more information, see the *Business Modeler IDE Guide*.

*-*
Identifies the revision to be exported. This can be the revision ID or one of the following keywords:

* LATEST
* LATEST_WORKING
* LATEST_RELEASED
* LATEST_WORKING_OR_RELEASED
* USE_STATUS

If the *USE_STATUS* keyword is given, you must specify a release status using the *-status* argument. This is valid only when you are not transferring site ownership.

If used with an input file (*-i* argument), the revision keyword is used for every item in the input file. Keywords cannot be specified using the command line; however, you can use revision selectors at the command line as discussed below.

**Note** The revision ID cannot be specified when using an input file.

*-*
Specifies the name of an input file that contains the list of item IDs to be exported.

The format of the text file must contain the *-item* prefix to each item ID. For example, to export item IDs 002259, 002260, and 002261, the input file contains the following entries:

* -item=002259
* -item=002260
* -item=002261

**Note** This replaces the *-i* argument, which is supported for backward compatibility.

*-*
Specifies the name of the input file containing the keys to be exported. The file format is:
Chapter 7  Data sharing utilities

-key = [keyAttr1=keyVal1][keyAttr2=keyVal2]...
-key = [keyAttr1=keyVal1][keyAttr2=keyVal2]...
-key = [keyAttr1=keyVal1][keyAttr2='keyVal2']...

-classoffile (cof)
Specifies the class of objects contained in the input file. If no class is specified, the default class is Item. Valid only with the -filename argument.

-separator (sep)
Specifies the character to separate the item and revision IDs in the file. The default is /.

-target_site (ts)
Specifies the export target site or sites. If more than one site is specified, sites must be separated by a comma and the entire string must be enclosed in quotes. Either the -target_site or -owning_site argument is required.

-owning_site (os)
Specifies the site to which ownership is transferred. Either the -target_site or -owning_site argument is required.

-exclude (exc)
Specifies the relation type to be excluded. This argument may be given multiple times, and the database name (not the display name) of the relation type must be specified. You cannot exclude the IMAN_master_form and TC_ic_intent_rtype relation types with or without ownership transfer. Also, you cannot exclude the IMAN_RES_audit with ownership transfer.

-exclude_folder_contents (efc)
Excludes the contents of a folder. Intended for use with NX Part families where family members are stored in a folder that is attached to the item.

-dont_exclude_protected (dxp)
Does not exclude export-protected objects. If set, any export-protected object within an item prevents the export of the entire item.

-reason (rea)
Specifies the reason for exporting to sites. Up to 240 characters.

-latest_ds_version (ldv)
Exports only the latest version of datasets; default is to export all versions. Valid only when site ownership is not being transferred.

-inlude_bom (bom)
Exports all components if the given item is an assembly.

-preview (pre)
Performs an export dry run and generates a report to the file specified by the -report argument. If the -report argument is not specified, the report is output to the screen.

-report (rep)
Outputs preview or completion reports to the specified file. If no report file name is specified, the report is output to the screen.
-continue_on_error (con)
Continues the export operation even if errors are detected on optional objects. Optional objects are attachments other than requirement, specification, or master form objects.

-xfr_top_lvl_only
Only transfers ownership on top-level items specified in the input file.

-xfr_top_asm_only
Transfers ownership only on the top-level assembly items, as specified in the input.

-xcl_files
Excludes export of files in datasets.

-include_pfmembers
Identifies the related part family members to be exported when handling part family templates.

-include_pftemplates
Identifies the related part family template to be exported when handling part family members.

-pf_bom_treatment
Identifies the part family objects associated with the assemblies to be exported. The argument must be used in conjunction with the -include_bom argument. Valid options are:

- members
Includes part family member components present in the assembly.

- templates
Includes part family template rather than part family member components.

- all
Includes both the part family member components and templates.

- none
Includes neither the part family member components nor the templates.

-status (stat)
Specifies the release status type to use for selecting the item revision to be exported.

-include_bc
Exports the change revision along with the BOMChange objects associated with the affected assemblies of the change revision.

-include_supercedures
Exports the change revision along with the supercedures associated with the BOMChange objects.

-email
Specifies the e-mail address to which the export report is sent. The default address is stored in the Teamcenter user account.
-script
Specifies the name of the script in the TC_BIN directory that is executed after a successful export. If a script is already defined by the TC_post_export_script preference, the specified script overrides the preference entry.

For more information, see the Preferences and Environment Variables Reference.

-revision_selector
Determines which item revision is exported with the item. The valid selectors are as follows:

- **latest_revision (lt)**: Exports the latest revision only, regardless of whether it is a working or released revision.
- **latest_working (lw)**: Exports the latest working revision only.
- **latest_released (lr)**: Exports the latest released revision only with any release status.
- **latest_working_or_any (lwoa)**: Exports the latest working revision. If no working revision exists, it exports the latest released revision with any release status.
- **status (stat)**: Specifies the release status to be exported.

If no revision selector is given, all revisions are exported.

**Note** Revision selectors should be capitalized only when used with the -rev= switch and should be in lower case when used as a switch.

-v
Runs utility in verbose mode to display maximum amount of information. Typically, nonverbose utility sessions only display error messages.

-batch_objects (bo)
Specifies a list of comma-separated deferred classes. If you use this argument with the preview argument, only nondeferred objects with the number of deferred objects appear in the report.

-batch_file (bof)
Specifies the file name of a text file containing a list of deferred classes.

-deferred_batch_size (dbs)
Specifies the number of objects per batch; a new process is created per batch. The default value is 1000. This value must be a positive integer. Use this argument to process thousands of objects to avoid memory and disk shortage problems.

The following classes are supported for deferred objects:

- **Dataset**
- **Folder**
- **Form**
- **ImanRelation**
- **MEAppearancePathNode**
Data sharing utilities

- **NamedVariantExpression**
- **PSOccurrence**
- **VariantExpression**
- **VariantExpressionBlock**

-h
Displays help for this utility.

**ENVIRONMENT**
As specified in the *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in the *Log files produced by Teamcenter*.

**RESTRICTIONS**
1. The -item argument is mutually exclusive with the -i and -filename arguments.
2. Either the -target_site or -owning_site argument must be specified and must not be a local site.
3. It is the responsibility of the user exporting objects to inform the system administrator which directories need to be exported and to which site.
4. It is the responsibility of the system administrator to set up the list of other sites which are known to the local site.
5. It is the responsibility of the system administrator to send directories of the exported objects to the receiving sites, users, volumes, and other systems.
6. Administration object types cannot be exported.

**EXAMPLES**
To restart a checkpoint transaction that failed during import:

```
item_export -transaction_id=AjEZaOnRAAAFfD -restart
```
Chapter 7  Data sharing utilities

item_import

Imports multiple items (in batch mode) into the Teamcenter database. It is the companion to the item_export utility. This utility supports part family templates and members.

SYNTAX

```
```

ARGUMENTS

```
Note  Entries in parentheses are accepted abbreviations for arguments.

-u  Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note  If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p  Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf  For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g  Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-dir  Specifies the path name to the directory containing the metafile and the data files to be imported.
-folder (fol)
Specifies the destination folder in which imported items are placed. If the folder does not exist or the argument is not supplied, the imported items are placed in the user’s Newstuff folder.

-preview (pre)
Performs an import dry run and generates a dry run report to the file specified by the -report argument. If the -report argument is not specified, the report is output to the screen.

-report (rep)
Outputs a preview or completion report to the specified report file. If no report file name is specified, the report is output to the screen.

-filename (fn)
Specifies the name of the text file listing objects for selective import, one name per line.

-classoffile (cof)
Specifies the class of objects contained in the input file. If not specified, the default class is Item.

-list_metafile (lm)
Lists only the contents of the metafile; does not import objects.

-include_pfmembers
Identifies the related part family members to be imported when handling part family templates.

-include_pftemplate
Identifies the related part family template to be imported when handling part family members.

-part_family_bom_treatment
Identifies the part family objects associated with the assemblies to be imported. The argument must be used in conjunction with the -include_bom argument. Valid options are:

  -members
  Includes part family member components present in the assembly.

  -templates
  Includes part family template rather than part family member components.

  -all
  Includes both the part family member components and templates.

  -none
  Includes neither the part family member components nor the templates.

-script
Specifies the name of the script to be executed prior to import. If a script is defined by the TC_post_export_script preference, this argument overrides the preference setting. If specified as NONE, the script defined in the preference file is executed.
-email
Sends e-mail to the user at the specified e-mail address after completion. If no e-mail address is specified, the e-mail address in the user's Teamcenter user profile is used.

-paral (par)
Specifies the number of processes to be started automatically. If this argument is not specified, the system imports the deferred objects with a sequential process.

-continue_on_error (con)
Specifies that the import operation proceeds when an error has occurred on an optional object, such as a reference or manifestation attachment.

-verbose (v)
Runs the utility in verbose mode to display the maximum amount of information. Typically, nonverbose utility sessions only display error messages.

-transaction_id (trid)
Specifies the transaction ID for a given checkpoint-related operation.

-restart (rs)
Restarts a given transaction at the point of failure.

-h
Displays help for this utility.

ENVIRONMENT
As specified in the Manual configuring your environment for Teamcenter utilities.

FILES
As specified in the Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
To restart a transaction at a site where a failure occurred:

```
item_import -transaction_id=transaction-id -restart
```
item_relink

Replaces the external references for a duplicate item and its corresponding replica in a Multi-Site Collaboration environment. The item_relink utility works in conjunction with the item_rename utility.

The Bypass option enables or disables special bypass object protections for Teamcenter administrators, allowing you to freely access any object in the database to perform maintenance. When running this utility, you must use the Bypass option, the user ID must be infodba, and the OS user account must have read-access to the NX part files to comply with the rules stated in Bypass UG Part File Verification.

Caution The item_relink utility is used only with Multi-Site Collaboration to process production data. Siemens PLM Software recommends that a full backup of your database be performed before running this utility. This allows you to restore the database if the data becomes corrupted.

• Naming pattern

Because the item_relink utility works in conjunction with the item_rename utility, the same naming pattern must be used in both utilities.

• Bypass NX part file verification

Each NX part file that is attached to a duplicate is checked against the corresponding NX part file that is attached to the replica. The item_relink utility compares the UID strings in the NX part files. The ug_inspect utility retrieves the UID strings from the part files. Therefore, it is very important to run the item_relink utility using the OS account that has read access to the part files. Usually, the Teamcenter user account, such as infodba, is used to run the utility. If UIDs are not the same, the relink process for the duplicate fails. If you are confident about the part files being reconciled, you can use the -bypass_ugpart command line argument to bypass this check. The -bypass_ugpart argument is ignored if the item_relink utility is run in verify mode.

• Refile folder

The -refile argument generates a refile folder used as an output folder. The refile folder contains all the assemblies or subassemblies that use the replicas.

After a duplicate is reconciled, the item_relink utility retrieves the items that reference the replica item revisions and adds them to the refile folder. If the refile folder does not exist in the database, the utility creates one.

If no items are added to the newly created refile folder, it is not saved in the database and no refile process is required. Otherwise, the refile folder is saved and used as an input folder during the refile process. The refile folder must reside in the Home folder of the infodba user to comply with the restriction in the ugmanager_refile utility.

For more information about the ugmanager_refile utility, see Teamcenter Integration for NX documentation in the NX online help collection.

• Matching criteria
To find the corresponding replica, construct the replica item ID based on the
duplicate item ID and renaming pattern and then search the database for the
replica.

To find the corresponding item revision, match the revision ID.
To find the corresponding BOM view, match the view type name.
To find the corresponding BOM view revision, match the view type name.
To find the corresponding secondary object, match the object name, object type,
and relation type.

**Matching results**

For each object that is attached to a duplicate item or duplicate item revision,
if more than one object with the same object name, object type, and relation
type are found in its corresponding replica item or replica item revision, the
first occurrence is used.

If objects attached to a duplicate do not have corresponding objects found in
replica, use the `-verify` switch to generate a report that lists any discrepancies.
In this case, perform a detailed examination and make the necessary corrections
and/or ownership change for the duplicate. If any discrepancies are detected
during the relink process, the duplicate is not replaced. Instead, the duplicate
is placed in the exception folder. An error message is logged on the report file
for review.

**Exception**

If unexpected Teamcenter internal errors occur or the duplicate contains
objects not found in its corresponding replica, the utility stops processing the
duplicate that has a problem, logs an error message to the report file, and then
processes the next duplicate in the replacement folder. All duplicates that are
not reconciled are placed in the `Item_ID_ConsolidationEXP` exception folder
so you can further examine these duplicates.

**SYNTAX**

```
item_relink [-u=userid] [-p=password | -pf=password-file] [-g=group]
-replace=folder-name -refile=folder-name
-update | -verify
   [-prefix=prefix-removed-from-item-id | -suffix=suffix-removed-from-item-id | -f=file-name]
[-bypass_ugpard]
[-ignore_attachments]
[-relink_to_latest_rev]
-report | -report=file-name
[-h]
```

**ARGUMENTS**

- `u`
  Specifies the user ID.

  This is generally `infodba` or another user with administration privileges. If this
  argument is used without a value, the operating system user name is used.
Data sharing utilities

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-replace
Specifies the name of the folder that holds items that are currently duplicates but should be replicas. This must be the same folder used by the item_rename utility.

-refile
Specifies the name of the folder that holds all the assemblies that use the replicas. This folder is the input folder to the ugmanager_refile utility.

For more information about the ugmanager_refile utility, see Teamcenter Integration for NX documentation in the NX online help collection.

-verify
Requests verification of compatibility between duplicates and replicas.

-update
Performs the link replacement.

-prefix
Specifies the prefix removed from the item ID of duplicates to form the new item IDs for replicas. This must be the same prefix used by the item_rename utility. See restriction 5.

-suffix
Specifies the suffix removed from the item ID of duplicates to form the new item IDs for replicas. This must be the same suffix used by the item_rename utility. See restriction 5.
Chapter 7  Data sharing utilities

-f
Specifies the file containing item ID cross reference records. The cross reference contains the duplicate item ID and the renamed duplicate item ID for each duplicate item ID. This data is contained in a single 80-byte line in the file. The item_rename utility also uses this file. See restriction 5.

-bypass_ugpart
Indicates whether NX part files are verified. If this switch is specified, no verification is performed. This switch is ignored if the -verify argument is specified.

-ignore_attachments
Prohibits linking of secondary objects (attachments). Use this argument when the replacement item already has links to all required attachments.

-relink_to_latest_rev
Links all revisions of a duplicate item to latest revision of the replica item. Ignores secondary objects (attachments) to avoid incorrect attachments. This argument cannot be specified for items with multiple views.

-report
Generates a report. Outputs the report to standard output if the file name is not supplied.

-h
Displays help for this utility.

ENVIRONMENT
As specified in the Manually configuring your environment for Teamcenter utilities.

FILES
As specified in the Log files produced by Teamcenter.

RESTRICTIONS
The following restrictions must be understood and adhered to when using the item_relink utility:

1. Must be run with the Bypass option, and the user ID must be infodba.
2. The OS user account must have read-access to the NX part files to comply with the rules stated in Bypass UG Part File Verification.
3. The -replace and -refile arguments must be supplied.
4. Either the -rename or -verify arguments must be supplied.
5. A default naming pattern is used if the -prefix, -suffix, or -f argument is not supplied.

EXAMPLES
The best practice is to run the item_relink utility with the -verify argument to do a comparison to find discrepancies between duplicates and replicas. If any exist, examine the discrepancies and make the necessary corrections. To ensure data integrity, Multi-Site Collaboration imposes strict rules on object replication. One of these rules is that only the master object can be modified. The replicated object must never be checked out for modification or submitted for release. Therefore, if the duplicates contain objects that have no corresponding replicas, the relink process for
these duplicates is not performed. However, if the replicated objects have increased with more attachments, the duplicates are overwritten.

- To verify the items in the replacement folder and generate a report called `relink.rpt`, enter the following command on a single line. The naming pattern must be the same as that used by the `item_rename` utility.

```bash
Item_relink -u=infodba -p=infodba -replace=replacement
-refile=assm_refile -prefix=AAA -verify -report=relink.rpt
```

- After generating a replacement report, you may need to correct duplicates or change ownership. To replace the links, enter the following command on a single line:

```bash
Item_relink -u=infodba -p=infodba -replace=replacement
-refile=assm_refile -prefix=AAA -update -report=relink.rpt
```
item_rename

Changes the item IDs for duplicate part numbers in a naming pattern in a Multi-Site Collaboration environment. The item_rename utility works in conjunction with the item_relink utility. The main reason for renaming duplicates is to avoid a naming conflict while bringing in copies of the master data that was previously created.

The Bypass option enables or disables special bypass object protections for Teamcenter administrators, allowing you to freely access any object in the database to perform maintenance. When running this utility, you must use the Bypass option and the user ID must be infodba.

- **Naming pattern**
  
  You can use the -prefix, -suffix, or -f arguments to embed a renaming pattern for the duplicate data objects. If these arguments are not used, the system applies a default naming pattern. The default naming pattern adds the DUP_ prefix to the duplicate item IDs. For example, if the duplicate item ID is ABC123, after the item_rename utility runs the duplicate item ID is DUP_ABC123.
  
  The -prefix and -suffix switches enable you to add character strings to the item IDs to form new item IDs.

  The -f switch supplies a file that contains a list of item ID cross-references. If the -f argument is specified, the system ignores the -prefix and -suffix switches.

- **Cross-reference file format**
  
  The -f switch generates a file that contains a list of item ID cross-references, specifically the duplicate item ID and the renamed duplicate item ID. Each set of item IDs is contained in a single 80-byte line. The duplicate item ID precedes the renamed duplicate item ID. The duplicate item ID and the renamed duplicate item ID must be separated by at least one blank space, although more are allowed. Leading blanks may appear before the duplicate item ID or padding blanks may appear after the renamed duplicate item ID.

  The system administrator manually creates the cross-reference file. The system administrator must know how to match the item ID replicas and the item ID duplicates.

- **Exception**
  
  If any unexpected Teamcenter internal errors occur, the utility stops processing the duplicate that has a problem, logs an error message to the report file, and then processes the next duplicate in the replacement folder.

The item_rename utility is used only with Multi-Site Collaboration.

**SYNTAX**

```
item_rename [-u=user-id [-p=password | -pf=password-file] -g=group]
-replace=folder-name -rename | -verify [-prefix= prefix-added-to-item-id | -suffix= suffix-added-to-item-id | -f=file-name] -report=file-name [-h]
```

**ARGUMENTS**

- **-u**
  
  Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note**  If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
  If this argument is not used, the system assumes the user-ID value to be the password.

- **pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the -p argument.

- **g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **replace**
  Specifies the name of the folder that holds the items that are currently duplicates but that should be replicas.

- **prefix**
  Specifies the prefix added to the item ID of duplicates to form the new item IDs.

- **suffix**
  Specifies the suffix added to the item ID of duplicates to form the new item IDs.

- **f**
  Specifies the file containing item ID cross-reference records. The cross-reference is comprised of the duplicate item ID and the renamed duplicate item ID for each duplicate item ID. This data is contained in a single 80-byte line in the file. The item_relink utility also uses this file.

- **verify**
  Requests verification of the existence of renamed items.

- **rename**
  Performs the rename function.

- **report**
  Generates a report and outputs it to standard output if the file name is not supplied.
Chapter 7  Data sharing utilities

-h
Displays help for this utility.

ENVIRONMENT
As specified in the Manualy configuring your environment for Teamcenter utilities.

FILES
As specified in the Log files produced by Teamcenter.

RESTRICTIONS
The following restrictions must be understood and adhered to when using the item_rename utility:
1. Must use the Bypass option, and the user ID must be infodba.
2. The -replace argument must be supplied.
3. Either the -rename or -verify argument must be supplied.
4. A default naming pattern is used if either the -prefix, -suffix, or -f arguments are not supplied.

EXAMPLES
The best practice is to run item_rename with the -verify switch to do a quick search for any objects with the chosen naming pattern. If any exist, choose a different naming pattern for all objects.

• Enter the following command on a single line to verify the items in the replacement folder and generate a report called rename.rpt. Assume that the naming pattern adds the prefix AAA to the item ID.

  Item_rename -u=infodba -p=infodba -replace=replacement -prefix=AAA -verify -report=aname.rpt

  If any items in the database have the same item ID as the chosen naming pattern, error messages beginning with ***ERROR are logged on the rename.rpt file.

• Change the naming pattern and run the item_rename utility again. Otherwise, use the same command line in step 1, and replace the -verify argument with the -rename argument to rename the items.
**item_report**

Generates detail reports of an item or multiple items at the site level. The site level reports can be merged to generate a combined status output.

Using this utility, a site can investigate item consistency and dual ownership. It also provides information about the last modified user, locked information and details about the checkout user (owning and remote checkout). Checkout information includes the checkout user, respective checkout date, and time information.

**SYNTAX**

```
item_report [-u=user-id [-p=password | -pf=password-file] -g=group]
[-f=report | merge] [-itemidsfile=data-file
 | -itemKeyFile=file-name] [-grmtypefile=grm-file
 | -item_id=itemids
 | -key=[keyAttr1=keyVal1]...[keyAttrN=keyValN]]
[-mergelist=file1,file2,...] [-mergfiles=merge-list-file-name]
[-sites_list=site1,site2,...] [-sites_file=site-list-file-name]
[-file=file1] [-file=file2] [-file=file3]
[-remove_consistent] [-show_rco] [-include_bom]
[-includefoldercontent] [-delimiter=delimiter]
[-anchorfile=anchor-file-name] [-traverseditemfile=outname]
[-outfile=file-name]
[-skipItem]
[-start_creation_date=creation-date]
   [-end_creation_date=creation-date]
   [-start_modification_date=modification-date]
   [-end_modification_date=modification-date]
   [-start_release_date=release-date]
   [-end_release_date=release-date]
   [-sort_by=item_id | item_name | date] [-dataset_version=latest | all]
   [-out_item_revs_file=output-file] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.

  If this argument is not used, the system assumes the **user-ID** value to be the password.
-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

-function
Specifies one of the following functions:

- report Parses object information to a report file. This is the default.
- merge Parses input from a set of input files as specified by the mergelist argument.

-itemidsfile
Specifies a data file containing comma-separated values (CSVs) or carriage return/line feed separated item IDs.

-item_id
Specifies a list of comma-separated values of item IDs.

-key
Specifies the keys of the items on which to report. Use the following format:

[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-itemKeyFile
Specifies the name of the file containing the keys on which to report. The file format is:

- key = [keyAttr1=keyVal1] [keyAttr2=keyVal2]... 
- key = [keyAttr1=keyVal1] [keyAttr2=keyVal2]...
- key = [keyAttr1=keyVal1] [keyAttr2='keyVal2']...

-grmtypefile
Specifies a data file containing comma-separated values (CSVs) or carriage return/line feed separated grmrelations.

-mergelist
Specifies a comma-separated list of files from individual sites in the same order as specified by the sites_list argument.

-mergefiles
Specifies a file containing a list of reports from individual sites in the same order as specified by the sites_list argument.
-sites_list
Specifies a comma-separated list of sites to be analyzed when using the report function. This option is ignored when using any of the date-range arguments.

-sites_file
Specifies a file containing a list of sites to be analyzed when using the report function. This option is ignored when using any of the date-range arguments.

-remove_consistent
Specifies that the utility does not output consistent items in the merged report.

-show_rco
Specifies that the utility displays remote checkout information. By default, this information is not displayed.

-include_bom
Specifies that the utility traverses to the end of the item revisions of PSOccurrences. By default, this action is not performed.

-includefoldercontent
Specifies that the utility includes the contents of folders. By default, folders are not processed.

-delimiter
Specifies the delimiter used in the output file. By default, the commercial at symbol (@) is used. Ensure the delimiter for site-based files matches the merge file input file.

-anchorfile
Specifies the output file of UIDs of revision anchors. This file is used as input to the purge_dataset utility.

-traverseditemfile
Specifies an output list of traversed item IDs when using the include_bom argument.

-outfile
Specifies an output file.

-skipItem
 Specifies that items are to be skipped.

-start_creation_date
 Specifies the creation from date. The date is entered in dd-mmm-yyyy hh:mm:ss format, for example, 01-Jan-2007 00:00:00. This argument is used with the end_creation_date argument.

-end_creation_date
 Specifies the creation to date. The date is entered in dd-mmm-yyyy hh:mm:ss format, for example, Jan-2007 00:00:00. This argument is used with the start_creation_date argument.

-start_modification_date
 Specifies the modification from date. The date is entered in dd-mmm-yyyy hh:mm:ss format, for example, Jan-2007 00:00:00. This argument is used with the end_modification_date argument.
-end_modification_date
Specifies the creation to date. The date is entered in \textit{dd-mmm-yyyy hh:mm:ss} format, for example, \textit{Jan-2007 00:00:00}. This argument is used with the \textit{start_modification_date} argument.

-start_release_date
Specifies the released from date. The date is entered in \textit{dd-mmm-yyyy hh:mm:ss} format, for example, \textit{Jan-2007 00:00:00}. This argument is used with the \textit{end_release_date} argument.

-end_release_date
Specifies the released to date. The date is entered in \textit{dd-mmm-yyyy hh:mm:ss} format, for example, \textit{Jan-2007 00:00:00}. This argument is used with the \textit{start_release_date} argument.

-dataset_version
Specifies whether all or the latest version of the dataset needs to be reported. If this argument is not specified, the utility uses the default value of all.
-sort_by
Specifies one of the following attributes by which the items are processed:

- date
- item_id
- item_name

If this argument is not specified, the utility uses the default value of item_id.

-out_item_revs_file
Specifies an output file for item revisions. You can use this file as an input to the delete_pdm_data utility. The following is an example of an output item revision file:

```
ABC000075/A
ABC000074/A
ABC000092/A
ABN000002/A
ABN000011/A
ABN000058/A
```

-h
Displays help for this utility.

RESTRICTIONS
None.

EXAMPLES

- To create reports for the latest dataset versions created between 01-jan-2007 and 01-jan-2008, write the report file to c:\temp\reports.txt and write the reported item revisions to c:\temp\itemrevs.txt:

```plaintext
item_report -u=infodb -p=xxxxxx -g=dba
- start_creation_date="01-Jan-2007 00:00:00"
- end_creation_date="01-Jan-2008 00:00:00"
- outfile=c:\temp\reports.txt -out_item_revs_file=c:\temp\itemrevs.txt
```
migrate_organization

Allows you to create a global organization for your Multi-Site environment. Organization objects that have been duplicated across multiple sites can be migrated to be replicas of a master organization site. You use the utility first to identify duplicate objects between two sites. After identifying objects that must be made replicas, use the utility make the identified duplicate objects replicas of the master organization site objects.

SYNTAX

migrate_organization [-u=user-id [-p=password | -pf=password-file] -g=group] [-f=compare_organization -report=report-file-name | make_replica] [-user_id=userid1,userid2, ... | -role_name=rolename1,rolename2, ... | -group_name=group1,group2, ... | -person_name=person1,person2, ...] [-classoffile=class-name -filename=input-file] [-site=remote-site-name] [-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-f
Specifies the name of the function. Following functions are valid:
**compare_organization**

Identifies the duplicate and missing organization objects at the remote site (specified by -site argument) and the current site. The remote site is specified using the -site argument and the output is written to the file specified by the -report argument.

**make_replica**

Makes the object specified by the -user_id, -group_name, -role_name, or -person_name argument replica objects at the target (remote) site. This command must be used only at the site that is intended to be the master site for organization objects. One class of object must be specified but only one class can be in a command. Alternatively, the -classoffile and -file_name arguments can be specified to use a file containing the objects to be replicated. See restriction 4.

**-report**

Specifies the file name of the report generated by the compare_organization function.

**-user_id**

Specifies an ID of a user to change to a replica object at the remote site. You can specify multiple IDs separated by commas.

**-group_name**

Specifies the full name of a group to change to a replica object at the remote site. You can specify multiple group names separated by commas.

**-role_name**

Specifies the name of a role to change to a replica object at the remote site. You can specify multiple role names separated by commas.

**-person_name**

Specifies the name of a person to change to a replica object at the remote site. You can specify multiple person names separated by commas.

**-classoffile**

Specifies the class of objects contained in the input file. Valid only with the -filename argument. The -classoffile argument can specify:

- **User**
  
  The file must contain user IDs of User class objects.

- **Role**
  
  The file must contain role names of Role class objects.

- **Group**
  
  The file must contain full group names of Group class objects.

- **Person**
  
  The file must contain person names of Person class objects.
-filename
Specifies the name of a file that contains a list of identifiers for objects of a specified class. Valid only with the -classoffile argument.

Note All objects in the file must be separated by a new line character.

-site
Specifies the remote site name.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
1. You must set the IDSM_dsa_sites_permitted_to_push_admin_dat preference at the remote site specifying the sites that are allowed to push organization data to the local site.

2. You must preform the premigration tasks described in the Multi-Site Collaboration Guide before using this utility with the make_replica function.

3. After creating a global organization, you must follow the post migration requirements described in the Multi-Site Collaboration Guide to properly maintain your organization.

4. The make_replica function must be run only at the master site (owning site of global organization data).

5. To migrate a user, the related Person object must be migrated first.

6. To migrate a role, for each associated GroupMember object, its User object must already be migrated.

7. To migrate a group, all of the roles related to the group must be migrated first.

8. Only a top-level group can be migrated. Specifying a sub-group fails. All sub-groups of the specified group are automatically migrated.

EXAMPLES

• Generate a report (cvg_cgn.txt) file showing the duplicate objects between the current site and the remote site (cgn).

  migrate_organization -u=infodba -p=infodba -g=dba -f=compare_organization
  -report=cvg_cgn.txt -site=cgn

• Make the users identified in the cgn_user_rpl.txt file replica objects at the remote site (cgn).

  migrate_organization -u=infodba -p=infodba -g=dba -f=make_replica
  -file=cgn_user_rpl.txt -classoffile=User -site=cgn

• Make the identified group objects (ptrain_dev, frame_prod) replica objects at the remote site (cgn).
migrate_organization -u=infodba -p=infodba -g=dba -f=make_replica  
   -group=ptrain_dev, frame_prod -site=cgn
migrate_saved_searches

Updates pre-Teamcenter 8.1 saved search data (which is in the form of user preferences) to the current data model. Current saved search functionality allows users to share saved searches with other users.

SYNTAX


ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

-mode
Determines which function the utility performs. Use report to generate a report of legacy saved searches. Use upgrade to migrate the legacy saved searches to the current data model.
-owning_users
Migrates the legacy saved search data for the specified users. Use all to migrate the data of all users. Enter multiple user names separated by commas. If left unset, the default is all.

-users_of_group
Migrates the legacy saved search data for all the uses in the specified groups. Use all to migrate the data of all groups. Enter multiple group names separated by commas. If left unset, the default is all.

-file
Specifies the path and file name to which the migration report is written. Use this argument with the report value. The default location is current-working-directory/migrate_saved_search_date_report.txt.

-delete
Determines whether to delete legacy saved search data from the database after migration. Use yes to delete the data. The default setting is no.

-log
Specifies the path and file name to which any migration errors are written. Use this argument with the upgrade value. The default location is current-working-directory/migrate_saved_search_date_report.log.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
To migrate all the saved searches belong to the users john and dave, and to delete the user preferences after migration:

```
migrate_saved_searches -u=infodba -p=password -g=dba -mode=upgrade
-owning_users=john,dave -delete=yes
```

To generates a report of all the saved searches belonging to all users in the design and manufacturing groups:

```
migrate_saved_searches -u=infodba -p=password -g=dba -mode=report
-users_of_group=design,manufacturing -file=C:\reports\des_mfg_mss.txt
```

To migrate all the saved searches belong to all the users in the database, and to delete the user preferences after migration:

```
migrate_saved_searches -u=infodba -p=password -g=dba -mode=upgrade
-owning_users=all -delete=yes
```
pdx_export

Exports data in PDX format.

SYNTAX

pdx_export [-u=admin-id | -pf=password-file] -g=dba]
[ -item=item-id [ -rev=item-revision ] | -item_key=item-key -sitename=target-site]
[ -optionset=transfer-option-set] [-reason=reason-description]
[ -immediate= { True | False } ] [-notify= { True | False } ]
[ -emailaddress=email-address1, email-address2, email-addressn]
[ -revisionrule=revision-rule-name ] [-bomlevel=level-of-BOM-structure]
[ -vendors=vendor-name1, vendor-name2, vendor-name3 ] [-file=output-file-name]
[ -usegs= { True | False } ]
[ -h ]

ARGUMENTS

-u
Specifies the user ID. The user must have administrative privileges.
If this argument is used without a value, the operating system user name is used.

-p
Specifies the user’s password.
If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user. The group value must be dba to run this utility.

-item
Specifies the identifier for the item object to export. This argument is mutually exclusive with the -item_key argument.

-rev
Specifies the revision of the item object to export. You can use this argument only when you include the -item argument.

-item_key
Specifies the a string identifier containing attributes that identify the item object to export. This argument is mutually exclusive with the -item argument.

-sitename
Specifies the name of the importing (target) site.
-optionset
Specifies the name of the transfer option set to use for the export.

-reason
Allows you to type a description of the export purpose. This argument is limited to 240 characters. If you enter more than 240 characters, the argument is truncated.

-immediate
Specifies whether to schedule the export or perform it immediately. Valid values are True or False.

-notify
Specifies whether to send e-mail notification to the users specified in the -emailaddrs argument. Valid values are True or False.

-emailaddrs
Specifies a comma delimited list of e-mail addresses that are notified of the export.

-revisionrule
Specifies the name of the revision rule to use for the export.

-bomlevel
Specifies the level of BOM to traverse for the export.

-vendors
Specifies a list of vendor names used to filter the content of the exported data. Only objects associated with a vendor in this list are included in the export file. If this argument is not specified, objects associated with any vendor are included.

-file
Specifies the name of the output file containing the PDX export data. If the file exists, it is overwritten.

-usegs
Specifies whether to use Global Services to perform the export.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Configuring utilities in the Utilities Reference.

FILES
As specified in Log files in the Utilities Reference.

RESTRICTIONS
You must be logged on as a member of the dba group.
Exports objects from Teamcenter in PLM XML format. If there are files for export, as determined by transfer mode, a directory is created and the files are exported into that directory. The directory is named using the specified file name without the .xml extension.

This utility is also used to extract file information from the database into a PLM XML file to prepopulate FSC.

For more information, see the `load_fcccache` and `fscadmin` utilities.

**Caution** Do not use this utility to export organization objects from sites if the same organization objects are shared through a global organization.

The Business Modeler IDE application maintains most of the objects that affect the data model. Any export operation that can result in one or more of the following objects is not recommended because the generated XML file should not be imported using `plmxlml_import` utility to avoid data accuracy issues.

<table>
<thead>
<tr>
<th>ActivityTypeDef</th>
<th>GRMRule</th>
<th>PropBusinessOperation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AliasTypeDef</td>
<td>HideTypeRule (Type-Display rule)</td>
<td>PropertyRule</td>
</tr>
<tr>
<td>AppearanceGroupTypeDef</td>
<td>IdContextRule</td>
<td>RelationTypeDef</td>
</tr>
<tr>
<td>ApplicationInterface</td>
<td>ImanTypeDef</td>
<td>StatusTypeDef</td>
</tr>
<tr>
<td>CannedMethodRule</td>
<td>ItemTypeDef</td>
<td>StorageMediaTypeDef</td>
</tr>
<tr>
<td>ChangeTypeDef</td>
<td>ListOfValues</td>
<td>ToolTypeDef</td>
</tr>
<tr>
<td>CompoundPropDefRule</td>
<td>NameFieldRule</td>
<td>TypeBusinessOperation</td>
</tr>
<tr>
<td>DatasetTypeDef</td>
<td>NamingRule</td>
<td>UOMTypeDef</td>
</tr>
<tr>
<td>DeepCopyRule</td>
<td>NoteTypeDef</td>
<td>ViewTypeDef</td>
</tr>
<tr>
<td>Extension</td>
<td>OccurrenceTypeDef</td>
<td>WorkAreaTypeDef</td>
</tr>
<tr>
<td>FolderTypeDef</td>
<td>OperationTypeDef</td>
<td></td>
</tr>
<tr>
<td>FormTypeDef</td>
<td>ProcessTypeDef</td>
<td></td>
</tr>
</tbody>
</table>

**SYNTAX**

```
plmxlml_export [-u=user-id | -p=password | -pf=password-file] -g=group]
 -xml_file=xml-file-name -transfermode=transfermode-name
 [-item=item-id | -key=[keyAttr1=keyVal1],[keyAttr2=keyVal2]...,[keyAttrN=keyValN]]
 [-rev=item-revision-id] [-export_bom=yes | no]
 [-rev_rule=revision-rule] [-svrule=saved-variant-rule]
 | [ -class=class-name | -type=type-name | -ics_class=ics-class-name
 | -imantypedef=iman-type | -uid=uid-of-object | -foldername=folder-to-export]
 | [-template=workflow-template-name] [-template_stage=workflow-template-stage]
 | [-template_classification=workflow-template-classification]]
 [-locales=language-ID] [-log=log-file-location] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
This is generally **infodba** or another privileged user. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

**-p**
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

**-pf**
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see *Manage password files*.
This argument is mutually exclusive with the -p argument.

**-g**
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

**-xml_file**
Specifies the full path of the file to which the data is exported.

**-transfermode**
Specifies the name of the transfer mode used to export the objects. This transfer mode specifies the traversal rules, filter rules, and property sets to be used for export. It determines what is exported from the system. If not specified, a default transfer mode is used. If -transfermode is set to **justDatasetsOut**, you must specify a revision ID using the -rev argument.

**-item**
Specifies the ID of the item to be exported.

**-key**
Specifies the keys of the items to be exported in PLM XML format. Use the following format:

```
[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]
```

To find the key of an object, use the **get_key_string** utility.
For more information, see the *Business Modeler IDE Guide*.

**-rev**
Specifies the revision ID of the item to be exported. If not specified, the configured revision (either specified or default) is exported for the item.
-rev_rule
Specifies the revision rule applied to export the BOM. This is also used to determine the configured revision if the -rev option is not specified.

If this option is not specified, the default revision rule is applied, as specified in the TC_config_rule_name preference.

-svrule
Specifies the name of the saved variant rule to be applied for the BOM window configuration.

-class
Exports all instances of a given class.

Note • You cannot use the -class argument to export scope rules (TransferModes, ClosureRules, FilterRules, PropertySets, ActionRules, and TransferOptionSets). Use the txml_export utility.

• To view the persistent object manager (POM) schema, open the Classes view in the Business Modeler IDE.

• If ListOfValues and BusinessRule are specified, all instances of subclasses of specified class are also exported.

Options to export organization information using -class are shown in the following table:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person</td>
<td>Export all persons</td>
</tr>
<tr>
<td>User</td>
<td>Export all users</td>
</tr>
<tr>
<td>Role</td>
<td>Export all roles</td>
</tr>
<tr>
<td>Group</td>
<td>Export all groups</td>
</tr>
<tr>
<td>GroupMember</td>
<td>Export all group members</td>
</tr>
<tr>
<td>POM_imc</td>
<td>Export all sites</td>
</tr>
<tr>
<td>ImanVolume</td>
<td>Export volumes</td>
</tr>
<tr>
<td>ListOfValues</td>
<td>Export all list of values</td>
</tr>
<tr>
<td>ListOfValuesString</td>
<td>Export string list of values</td>
</tr>
<tr>
<td>ListOfValuesDate</td>
<td>Export date list of values</td>
</tr>
<tr>
<td>ListOfValuesDouble</td>
<td>Export double list of values</td>
</tr>
<tr>
<td>ListOfValuesInteger</td>
<td>Export integer list of values</td>
</tr>
<tr>
<td>ListOfValuesChar</td>
<td>Export char list of values</td>
</tr>
<tr>
<td>ListOfValuesTag</td>
<td>Export reference list of values</td>
</tr>
</tbody>
</table>

Options to export workspace objects using -class are shown in the following table:
## Data sharing utilities

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>Export all instances of item</td>
</tr>
<tr>
<td>ItemRevision</td>
<td>Export all instances of item revisions</td>
</tr>
<tr>
<td>Folder</td>
<td>Export all instances of folder</td>
</tr>
<tr>
<td>Form</td>
<td>Export all instances of forms</td>
</tr>
<tr>
<td>Dataset</td>
<td>Export all instances of datasets</td>
</tr>
<tr>
<td>Alias</td>
<td>Export all instances of alias</td>
</tr>
<tr>
<td>EPMJob</td>
<td>Export all instances of workflow jobs</td>
</tr>
<tr>
<td>PSBOMView</td>
<td>Export all instances of BOM view</td>
</tr>
<tr>
<td>PSBOMViewRevision</td>
<td>Export all instances of BOM view revision</td>
</tr>
<tr>
<td>Tool</td>
<td>Export all instances of tool</td>
</tr>
</tbody>
</table>

Options to export business rules using `-class` are shown in the following table:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BusinessRule</td>
<td>Export all business rules</td>
</tr>
<tr>
<td>NameRule</td>
<td>Export all naming rules</td>
</tr>
<tr>
<td>NameField</td>
<td>Export all naming field</td>
</tr>
<tr>
<td>HideTypeRule</td>
<td>Export all hide type rules of tool</td>
</tr>
<tr>
<td>ImanCompoundPropDef</td>
<td>Export all compound property rules of tool</td>
</tr>
<tr>
<td>ImanGRM</td>
<td>Export all GRM rules</td>
</tr>
<tr>
<td>TypeCannedMethod</td>
<td>Export all action rules</td>
</tr>
</tbody>
</table>

Other options using `-class` are shown in the following table:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FormTypeDef</td>
<td>Export all form type definition</td>
</tr>
<tr>
<td>ImanType</td>
<td>Export all instances of Teamcenter types</td>
</tr>
<tr>
<td>NoteType</td>
<td>Export all note types</td>
</tr>
<tr>
<td>PSViewType</td>
<td>Export all view types</td>
</tr>
<tr>
<td>UnitOfMeasure</td>
<td>Export all defined unit of measures</td>
</tr>
<tr>
<td>TaskType</td>
<td>Export all defined status</td>
</tr>
<tr>
<td>PSOccurrenceType</td>
<td>Export all occurrence types</td>
</tr>
</tbody>
</table>

- **-type**
  Exports all instances of a given type.

- **-ics_class**
  Exports the specified classification class, if it exists.
Chapter 7  Data sharing utilities

-**-imantypedef**
Exports the definition of specified type.

Options and their results for **-imantypedef** are shown in the following table:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ListOfValues</td>
<td>Export list of values</td>
</tr>
<tr>
<td>ImanQuery</td>
<td>Export saved queries</td>
</tr>
<tr>
<td>Tool</td>
<td>Export tool definitions</td>
</tr>
<tr>
<td>TaskType</td>
<td>Export defined status</td>
</tr>
<tr>
<td>IdContext</td>
<td>Export identifier contexts</td>
</tr>
<tr>
<td>Status</td>
<td>Export defined status</td>
</tr>
<tr>
<td>StorageMedia</td>
<td>Export storage media</td>
</tr>
<tr>
<td>Note</td>
<td>Export PS occurrence note types</td>
</tr>
<tr>
<td>UnitOfMeasure</td>
<td>Export unit of measures defined</td>
</tr>
<tr>
<td>Occurrence</td>
<td>Export occurrence types</td>
</tr>
<tr>
<td>View</td>
<td>Export view types</td>
</tr>
<tr>
<td>RevisionRule</td>
<td>Export revision rules for PS configuration</td>
</tr>
<tr>
<td>Alias</td>
<td>Export alias and its types</td>
</tr>
<tr>
<td>Identifier</td>
<td>Export identifier and its types</td>
</tr>
<tr>
<td>MWorkArea</td>
<td>Export workarea</td>
</tr>
<tr>
<td>MEOP</td>
<td>Export ME operation</td>
</tr>
<tr>
<td>ChangeTypeData</td>
<td>Export changeid/changetypen</td>
</tr>
<tr>
<td>Dataset</td>
<td>Export dataset type definition</td>
</tr>
<tr>
<td>ImanType</td>
<td>Export all Teamcenter types</td>
</tr>
<tr>
<td>ImanRelation</td>
<td>Export relations</td>
</tr>
<tr>
<td>AppearanceGroup</td>
<td>Export appearancegroup types</td>
</tr>
</tbody>
</table>

-**-export_bom**
Specifications that the BOM is exported. This argument must be used in conjunction with the **-item** argument.

-**-uid**
Exports the object specified by the UID.

-**-foldername**
Exports the specified folder, if it exists.

-**-template**
Specifies the name of the exported workflow template.

-**-template_stage**
Specifies the stage type of the exported workflow template. This argument is used with the **-template** argument. Valid values are **OBSOLETE_STAGE**, **7-114** Utilities Reference
UNDER_CONSTRUCTION_STAGE, or AVAILABLE_STAGE (default). If this option is not specified, the default value is used.

-template_classification
Specifies the classification type of the exported workflow template. This argument is used with the -template argument. Valid values are TASK_TEMPLATE and PROCESS_TEMPLATE (default). If this option is not specified, the default value is used.

-locales
Specifies the languages for the export. Separate multiple languages by commas. The language IDs should follow the standard Java locale naming conventions (for example, en_US). If no locales are specified for export, the database scalar value (attribute master) is exported to PLM XML scalar fields.

-log
Specifies the full path of the export log file. If this option not specified, the log file is created in the $TC_TMP_DIR directory. If $TC_TMP_DIR is not defined, the log file is created in the system temporary directory (C:\TEMP on Windows or /tmp on UNIX).

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
- Siemens PLM Software recommends you do not use the following transfer modes with this utility:
  BOMwriterExport
  JTDataExportDefault
  TIEPDXExportDefault
  TIEUnconfiguredExportDefault
  PLMXMLAdminDataExport

- Do not use this utility to export organization objects from sites if the same organization objects are shared through a global organization.

EXAMPLES
- The following command exports item ABC00001, revision A, to a PLM XML file using the toPrimeSupplier transfer mode context. The default revision rule is applied.

  plmxml_export -u=infodba -p=password -g=dba -xml_file=abc00001_A.xml
  -item=ABC00001 -rev=A -transfermode=toPrimeSupplier

- The following command exports item ABC00002, revision A to a PLM XML file using the toEnterprise transfer mode context by applying the specified revision rule and saved variant rule to apply to the BOM window:

  plmxml_export -u=infodba -p=infodba -g=dba -xml_file=abc00002_A.xml
  -item=ABC00002 -rev_rule="Latest Released" -svrule="AlphaRelease"
  -transfermode=toEnterprise
The following command exports all users to an XML file using the default context to export the data to PLM XML format:

```
plxml_export -u=infodba -p=infodba -g=dba -xml_file=tcusers.xml
-class=User
```

The following command exports an object specified by the UID and uses the default context to export the data to PLM XML format. The UID should be a unique identifier in Teamcenter:

```
plxml_export -u=infodba -p=infodba -g=dba -xml_file=myobj.xml
-uid="QRw4L20g1YomJAAAAAALAAAAAA"
```

The following command creates a PLM XML file containing all external file references associated with the top level item selected for cache prepopulation.

```
plxml_export -u=infodba -p=infodba -g=dba -item=ITEM -rev=A
-export_bom=yes -transfermode=justDatasetsOut -out=tickets.plmxml
```

The following command exports the item with ID item1 to the PLM XML file item1.xml. The French and German translations of the localized properties on item1 that are identified for export (from the property set) are also exported to text elements.

```
plxml_export -u=infodba -p=infodba -g=dba -item=item1
-locales=fr_FR,de_DE -xml_file=item1.xml
```
Imports objects to Teamcenter from a specified PLM XML file. In cases where a transfer mode manages the import, the utility looks for files in the path specified by the xml_file argument. This utility is also used to import workflow templates. If the PLM XML file being imported contains translations of localizable properties in multiple languages, the translations of the supported languages are imported into the database.

Caution
Do not use this utility to import organization objects to sites if the same organization objects are shared through a global organization.

The Business Modeler IDE application maintains most of the objects that affect the data model. To avoid data accuracy issues, any PLM XML file that may contain one or more of the following objects should not be imported using the plmxml_import utility.

<table>
<thead>
<tr>
<th>AliasTypeDef</th>
<th>GRMRule</th>
<th>ProcessTypeDef</th>
</tr>
</thead>
<tbody>
<tr>
<td>ApplicationInterface</td>
<td>HideTypeRule</td>
<td>PropBusinessOperation</td>
</tr>
<tr>
<td>AppearanceTypeDef</td>
<td>IdContextRule</td>
<td>RelationTypeDef</td>
</tr>
<tr>
<td>ActivityTypeDef</td>
<td>ImanTypeDef</td>
<td>StatusTypeDef</td>
</tr>
<tr>
<td>CannedMethodRule</td>
<td>ItemTypeDef</td>
<td>StorageMediaTypeDef</td>
</tr>
<tr>
<td>ChangeTypeDef</td>
<td>ListOfValues</td>
<td>ToolTypeDef</td>
</tr>
<tr>
<td>CompoundPropDefRule</td>
<td>NamingRule</td>
<td>TypeBusinessOperation</td>
</tr>
<tr>
<td>DatasetTypeDef</td>
<td>NameFieldRule</td>
<td>UOMTypeDef</td>
</tr>
<tr>
<td>DeepCopyRule</td>
<td>NoteTypeDef</td>
<td>ViewTypeDef</td>
</tr>
<tr>
<td>Extension</td>
<td>OccurrenceTypeDef</td>
<td>WorkAreaTypeDef</td>
</tr>
<tr>
<td>FolderTypeDef</td>
<td>OperationTypeDef</td>
<td></td>
</tr>
<tr>
<td>FormTypeDef</td>
<td>PropertyRule</td>
<td></td>
</tr>
</tbody>
</table>

SYNTAX
plmxml_import [-u=user-id [ -p=password | -pf=password-file] -g=group] 
-xml_file=name-of-xml-file -transfermode=transfermode-name 
[-log=log-file-name] [-import_mode=overwrite | ignore] 
[[-apply_template | -ignore_originid]] [-h]

ARGUMENTS
-u
Specifies the user ID.

This is generally infodba or another privileged user. If this argument is used without a value, the operating system user name is used.
Note: If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specify the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specify the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specify the group associated with the user.
If used without a value, the user's default group is assumed.

-xml_file
Specify the full path of the file name from which the data is imported.

-transfermode
Specify the name of a transfer mode used to import the objects. This transfer mode specifies the traversal rules, filter rules, and property sets to be used for import. It determines what is imported from the system. If not specified, a default transfer mode is used. In addition the following transfer mode values can be applied to import workflow templates.

workflow_template_import
Use to create a new template. If the template already exists in the database, the command is ignored.

workflow_template_overwrite
Use to overwrite an existing workflow template. The version existing in the database is overwritten by the imported version. If the workflow template does not already exist, a new workflow template is created.

-log
Specify the full path of the import log file. If this option not specified, the log file is created in the $TC_TMP_DIR directory. If $TC_TMP_DIR is not defined, the log file is created in the system temporary directory (C:\TEMP on Windows or /tmp on UNIX).
-import_mode
Specifies the mode in which import is handled for PLM XML Import/Export configuration objects. In overwrite mode, objects that already exist in the database are overwritten. In ignore mode, the imported object is ignored if the imported object already exists in the database.

The classes that function with this argument are:

<table>
<thead>
<tr>
<th>Teamcenter class name</th>
<th>SDK class name</th>
</tr>
</thead>
<tbody>
<tr>
<td>TransferMode</td>
<td>plmxml60::TransferMode</td>
</tr>
<tr>
<td>ClosureRule</td>
<td>plmxml60::ClosureRule</td>
</tr>
<tr>
<td>PropertySet</td>
<td>plmxml60::PropertySet</td>
</tr>
<tr>
<td>Filter</td>
<td>plmxml60::FilterRule</td>
</tr>
<tr>
<td>PIEActionRule</td>
<td>Exported as UserData under</td>
</tr>
<tr>
<td></td>
<td>plmxml60::TransferMode</td>
</tr>
<tr>
<td>Person</td>
<td>plmxml60::Person</td>
</tr>
<tr>
<td>TCCalendar</td>
<td>plmxml60::Calendar</td>
</tr>
<tr>
<td>User</td>
<td>plmxml60::User</td>
</tr>
<tr>
<td>Group</td>
<td>plmxml60::Organisation</td>
</tr>
<tr>
<td>Discipline</td>
<td>plmxml60::Discipline</td>
</tr>
<tr>
<td>Role</td>
<td>plmxml60::Role</td>
</tr>
<tr>
<td>POM_imc</td>
<td>plmxml60::Site</td>
</tr>
<tr>
<td>RevisionRule</td>
<td>plmxml60::RevisionRule</td>
</tr>
<tr>
<td>ListOfValues</td>
<td>plmxml60::ListOfValues</td>
</tr>
<tr>
<td>ImanQuery</td>
<td>plmxml60::SavedQueryDef</td>
</tr>
</tbody>
</table>

-apply_template
When the workflow_template_overwrite transfer mode is specified, and the imported workflow template contains changes from the existing workflow template, this argument applies those changes to all active workflow processes based on the workflow template.

For more information about how the workflow template changes are applied, see the Workflow Designer Guide.

This argument must be used with the workflow_template_overwrite transfer mode.

The -apply_template and -ignore_originid arguments are mutually exclusive.

-ignore_originid
Prevents the check of the origin_id property and forces the imported workflow template to overwrite the current one. Changes to active workflow processes are not applied.

The -apply_template and -ignore_originid arguments are mutually exclusive.

-h
Displays help for this utility.
Chapter 7    Data sharing utilities

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities.*

FILES
As specified in *Log files produced by Teamcenter.*

RESTRICTIONS
- Siemens PLM Software recommends you do not use the following transfer modes with this utility:
  
  - JTDataImportDefault
  - TIEImportDefault

- Do not use this utility to export organization objects to sites if the same organization objects are shared through a global organization.

EXAMPLES
- To import all objects in the abc.xml file using the default context, enter the following command on a single line:
  
  `plmxml_import -u=infodba -p=infodba -g=dba -xml_file=abc.xml`

  If errors are detected during the import operation, a log file named *abc_log.txt* is created.

- To import the wkf_templates.xml workflow template without overwriting existing templates, enter the following command on a single line:
  
  `plmxml_import -u=infodba -p=infodba -g=dba -xml_file=wkf_templates.xml -transfermode=workflow_template_import`

- To import the wkf_templates.xml workflow template that overwrites the existing wkf_templates.xml workflow template, creating an updated version of the template in the database, enter the following command on a single line:
  
  `plmxml_import -u=infodba -p=infodba -g=dba -xml_file=wkf_templates.xml -transfermode=workflow_template_overwrite`

- To import the wkf_templates.xml workflow template that overwrites the existing wkf_templates.xml workflow template, creating an updated version of the template in the database, and applies all changes from the imported version to all active workflow processes, enter the following command on a single line:
  
  `plmxml_import -u=infodba -p=infodba -g=dba -xml_file=wkf_templates.xml -transfermode=workflow_template_overwrite -apply_template`
plmxml_tm_edit_xsl

Lists, exports, attaches, or detaches an .xsit file to a given transfer mode.

If you are using multiple .xsit files, you must run the utility for each file. The files are applied in the order in which you include them in and run the utility.

SYNTAX

plmxml_tm_edit_xsl [-u=user-id [-p=password | -pf=password-file] -g=group] -transfermode=transfermode-name -action= | list | export | attach | detach | detach_all -xsl_file=xslt-filename [-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

-transfermode
Specifies the transfer mode to which the .xsit file is exported, attached, or detached.

-action
Performs one of the following actions on the transfer mode:
list
Lists all .xslt files associated with the transfer mode.

export
Exports the .xslt file to the operating system.

attach
Attaches the .xslt file to the transfer mode.

detach
Detaches and removes the .xslt file from the transfer mode.

detach_all
Detaches and removes all of the .xslt files from the transfer mode.

-xsl_file
Specifies the .xslt file.

This option is required if the -action option is set to export, attach, or detach.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.
Exports Teamcenter data from the database to STEP-compliant physical files.

There are two ways to use this utility: single-line and batch mode. The single-line method uses the \textit{-item=item-id} argument and other optional arguments to export one object at a time; batch mode uses the \textit{-i=input-file} argument and an input file to export several objects at once.

**SYNTAX**

\texttt{step\_export \{-u=user-id \{-p=password \{-pf=password\_file\} \-g=group\} \-i=input\_file\} \} \{-item=item-id \-key=[keyAttr1=keyVal1][,keyAttr2=keyVal2]...[,keyAttrN=keyValN]\} \{-item\_rev=item\_rev\_id\} \-ds=dataset \-rel=relation\_name\} \-fmt=AP203 | AP214 | IMAN \{-full\_assembly\} \{-all\_ds\_versions\} \{-f=file\_name\} \-cmt=comments \-h \-v\}

**ARGUMENTS**

- \texttt{-u}
  Specifies the user ID.
  This is generally \texttt{infodba} or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  \textbf{Note} If Security Services single sign-on (SSO) is enabled for your server, the \textit{-u} and \textit{-p} arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- \texttt{-p}
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the \textit{-pf} argument.
  If this argument is not used, the system assumes the user-ID value to be the password.

- \texttt{-pf}
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see \textit{Manage password files}.
  This argument is mutually exclusive with the \textit{-p} argument.

- \texttt{-g}
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- \texttt{-i}
  Specifies the input file containing the list of objects to export. The complete path name must be provided.
**-item**
Specifies the item ID of the item being exported.

**-item_rev**
Specifies the item rev ID of the item revision being exported.

**-ds**
Specifies the dataset being exported.

**-rel**
Specifies the name of the Teamcenter relation containing the dataset.

**-key**
Specifies the keys of the items to export. Use the following format:

\[keyAttr1=keyVal1] [,keyAttr2=keyVal2]\ldots [,keyAttrN=keyValN]\]

To find the key of an object, use the **get_key_string** utility.

For more information, see the *Business Modeler IDE Guide*.

**-fmt**
Specifies the data output format: **AP203**, **AP214**, or **IMAN**.

**-full_assembly**
Specifies that the full assembly, including product structure and all component parts that constitute the assembly, are exported.

**-all_ds_versions**
Specifies that all version of the datasets are included in the export.

**-f**
Specifies the output file name. The complete file specification (full path and file name) must be supplied unless the desired location is the current working directory.

**-cmt**
Describes the data being exported. This comment is placed in the **file_description** section of the output file.

**-v**
Runs utility in verbose mode, displaying maximum amount of information. Typically, nonverbose utility sessions only display error messages.

**-h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter* and the following:

$ROSE_DB/*.rose

*.rose files are STEP schema files used by the STEP Translator. The **step_export** utility must be able to write these files in this directory.

**RESTRICTIONS**
Either the **-item=item-id** or the **-i=input-file** argument must be supplied.
EXAMPLES

To export several objects in batch mode (using an input file), perform the following:

1. Create an input file and add one line for each object you want to export in the following format:

   **Note** Ensure that you separate each argument with a semicolon (;) and put each object on its own line.

   ```
   -item=item-id; -item_rev=item-rev-id; -ds=dataset; -rel=relation-name
   -item=item-id; -item_rev=item-rev-id; -ds=dataset; -rel=relation-name
   ```

2. Run the **step_export** utility using the **-i=input-file** argument:

   ```bash
   $TC_ROOT/bin/step_export -u=infodba -p=password -g=dba -i=input-file
   ```
step_import

Imports product information from STEP-compliant physical files into the Teamcenter database.

**SYNTAX**

```bash
step_import [-u=user-id [-p=password | -pf=password-file] -g=group]
[-f=file-name | -i=input-file] [-h] [-v]
```

**ARGUMENTS**

- `-u` Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- `-p` Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- `-pf` Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the `-p` argument.

- `-g` Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- `-f` Specifies a single STEP file. The complete file specification (full path and file name) must be supplied unless the file is in the current working directory.

- `-i` Specifies the input file containing list of STEP files to batch process. The complete file specification (full path and file name) must be supplied unless file is in the current working directory.

- `-h` Displays help for this utility.
-v
Runs utility in verbose mode, displaying maximum amount of information. Typically, nonverbose utility sessions only display error messages.

ENVIRONMENT
As specified in _Manually configuring your environment for Teamcenter utilities_.

FILES
As specified in _Log files produced by Teamcenter_ and the following:

$ROSE_DB/*.rose

.rose files are STEP schema files used by the STEP Translator. The _step_export_ utility must be able to write these files in this directory.

RESTRICTIONS
Either the -f=file-name or the -i=input-file argument must be supplied.

EXAMPLES
None.
Chapter 7  Data sharing utilities

sync_form_util

Creates or modifies the ParticipatingSitesForm type used to control replication of released assemblies to designated sites.

SYNTAX

sync_form_util [-u=user-name [-p=password | -pf=password-file] -g=group]
[-item_id=root-item -rev=-] -f=[create | add | mv] [forminfo]
-project=project-id -sitelist={site1, site2, ..., siten}]
[-h]

ARGUMENTS

Note Entries in parentheses are accepted abbreviations for arguments.

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value is the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

Caution For HTTP enabled sites, remote site operations log on using the default group for the user supplied with the -u argument. Any value supplied with the -g argument is ignored.

-item_id
Specifies the top item in the structure context object (SCO) assembly.
-rev
Specifies the top item revision used to configure the structure.

-f
Specifies the function to perform.

create
Creates and attaches the ParticipatingSites form.

add
Adds the site(s) specified in the -sitelist argument to the SiteList attribute of the ParticipatingSites form.

mv
Removes the site(s) specified in the -sitelist argument from the SiteList attribute.

forminfo
Retrieves the ParticipatingSites form information.

-project
Specifies the name of the project associated with the participating sites.

-sitelist
Specifies a comma delimited list of sites to receive the replicated SCO assembly.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

EXAMPLES
Note Required logon information is omitted from the following examples.

• A participating site form for the B1_Y project:

  sync_form_util -item_id=ABC00002 -rev="Latest Released" -f=create -project=B1_Y -sitelist=CologneEng, Ann ArborEng, CambridgeEng
sync_on_demand

Synchronizes or reports the synchronization state of a specified component, assembly, or object. The synchronization state indicates whether the replica is up-to-date and whether any object that has been added to the master has been replicated by the site running the utility.

The site that runs the sync_on_demand utility and the site that owns the component, assembly, or object being synchronized must both be instances of Teamcenter that support on-demand synchronization. If an assembly contains components from sites that do not support on-demand synchronization, the state of those components are reported as unknown.

Component synchronization allows you to determine the state of, or synchronize, all objects associated with the specified revision, such as BVR and attachments.

Assembly synchronization allows you to determine the state of, or synchronize, an entire assembly.

Object synchronization allows you to determine the state of individual objects, such as a dataset or form. You can also select item or item revisions for object synchronization, however the state or objects associated with the item or item revision is not reported or affected.

This utility uses the IDSM process at the remote replica’s owning site to accomplish the report task and remote import to accomplish the synchronization.

SYNTAX

sync_on_demand [-u=user-id [-p=password | -pf=password-file] -g=group] 
-f=sync | report [-uid_report=uid-report-file-name] 
-type=object | component | assembly 
{-rev_rule=revision-rule | -rev=rev-id} [-assy_level=number] 
{[-item_id=item-id | -key=keyAttrN=keyValN] [keyAttr1=keyVal1] [keyAttr2=keyVal2]...} 
[-exclude_folder=folder-name] 
[-name=wso-name | -filename=file-name] 
[-itemKeyFile=file-name] 
[-class=wso-class-name | -classoffile=class-name] 
[-exclude=relation-type1 | -exclude=relation-type2 ...] 
[-include=relation-type3 | -include=relation-type4 ...] 
[-exclude_folder_contents] [-exclude_protected_objects] 
[-exclude_protected_comp] [-batch_size=number-of-objects-per-batch] 
[-report_file=report-file-name] [-error_report=error-file-name] 
[-separator=uid-separator-characters] [-h]

ARGUMENTS

Note Entries in parentheses are accepted abbreviations for arguments.

-u

Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
Note: If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-f
Specifies the function to perform. Valid values are sync or report (rep). Where sync performs a synchronization on the specified object, component, or assembly, and report returns the synchronization state.

-uid_report
Returns a report on the specified object, component, or assembly that contains the UIDs of objects enclosed within square brackets ([ ]) by default. The characters used to enclose the UIDs are configurable through the -separator argument. This file can be processed by a custom script to create an input file that the data_share utility uses to import objects from a remote site. Using UIDs for remote import increases performance by eliminating the remote query required to determine an item or item revision UID.

-separator (sep)
Designates the start and end characters used to enclose the UID of objects in a uid_report file. If this argument is not specified, the UIDs are enclosed in square brackets ([ ]).

-type
Specifies the type of Teamcenter object on which to perform the function. Valid values are:
- object (obj)
- component (comp)
- assembly (assy)
-rev_rule
Specifies the name of the revision rule used to perform the synchronization or report function. This name must specify and existing revision rule at the local site. This value is passed to the owning site where it is used to determine the item revision to report status for or synchronize. You must supply this argument if the target object is an assembly.

-rev
Specifies the revision ID of the revision to report the status of or synchronize.

-assy_level (al)
Specifies the number of levels of the assembly to report. This argument is valid only for the report function.

-item_id (item)
Specifies the ID or template of items to report the status of or synchronize. Mutually exclusive with the -name, -folder, and -filename arguments.

-key
Specifies the keys of the items to export. Use the following format:

[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]
To find the key of an object, use the get_key_string utility.
For more information, see the Business Modeler IDE Guide.

-folder (fl)
Specifies the folder that contains the object to report the status of or synchronize. If the folder is not unique, the first folder found that matches this value is used. Mutually exclusive with the -name, -filename, and -item_id arguments.

-name
Specifies the name of a single workspace object to be precessed. If not an item, use the -class option to specify the class of the object. Mutually exclusive with the -folder, -filename, and -item_id options.

-filename (fn)
Specifies the name of the input file containing IDs or names of objects to report the status of or synchronize. Mutually exclusive with the -name, -folder, and -item_id arguments. If the input file contains names, the -classoffile argument is required.

-keyFileNameln
Specifies the name of the output file containing the keys to export. The file format is:

-key = [keyAttr1=keyVal1][keyAttr2=keyVal2]...
-key = [keyAttr1=keyVal1][keyAttr2=keyVal2]...
-key = [keyAttr1=keyVal1][keyAttr2='keyVal2']...

-class (cl)
Specifies the Teamcenter class of the object specified by the -name argument. This argument is valid only with the -name argument. If not specified, Item is the default class.
-classofile (cof)
Specifies the class of objects in the input file. This argument is valid only with the 
-filename argument. If not specified, Item is the default class. Folder is a valid 
class for synchronization.

-exclude
Excludes the specified relation type. This argument may be given multiple times 
and must use the database name (not the display name) of the relation type.

-include
Includes the specified relation type. This argument may be given multiple times and 
must use the database name (not the display name) of the relation type. Use this 
argument to force the inclusion of a relation type that may have been excluded 
during the last export.

-exclude_folder_contents (efc)
Excludes the contents of a folder. Intended for use with NX part families where 
family members are stored in a folder that is related to the item.

-exclude_protected_object (epo)
Excludes export protected objects.

-exclude_protected_comp (epc)
Excludes export protected components. This argument is valid only when the -type 
argument is set to assembly.

-batch_size (bs)
Specifies the number of objects per batch; a new process is created per batch. 
Default batch size is 1000. Must be a positive integer. This is useful when processing 
thousands of objects, because it helps avoid memory and disk space shortage 
problems.

-report_file
Generates a report that is output to the specified file.

If the function specified is report, the report contains the synchronization state of 
each object, component, or components of an assembly.

If the function specified is sync, the report shows all successful imports and any 
errors that occur during the synchronization.

If the function specified is report and this argument is not supplied, the report is 
displayed in a shell (std out).

-error_report
Generates a error report that is output to the specified file. This file contains only 
error information. It provides no synchronization information. If a file name is not 
supplied, the report is displayed in a shell. This argument is normally used with the 
-sync argument to provide error information during the synchronization process.

-h
Displays help for this utility.

EXAMPLES

Note Required logon information is omitted from the following examples.

• To synchronize an assembly and output any errors that occur to stdout:
Chapter 7  \hspace{1cm} Data sharing utilities

\begin{verbatim}
sync_on_demand -f=sync -type=assembly -rev_rule="Latest Working"
-item_id=Item100/A -error_report
\end{verbatim}

The assembly components are synchronized and errors are output to \texttt{stdout}.
To generate a report called assy_sync.rpt for the Item100/A assembly:

Enter the following command on a single line:

```
sync_on_demand -f=report -type=assy -rev_rule="Latest Working"
   -item_id=Item100/A -report=assy_sync.rpt
```

An example of the contents of the assy_sync.rpt file on the owning site:

<table>
<thead>
<tr>
<th>Component</th>
<th>Owning Site</th>
<th>Sync Site</th>
<th>Master LMD</th>
<th>Replica LMD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item100/A</td>
<td>Site1</td>
<td>09/25/05</td>
<td>09/25/05</td>
<td></td>
</tr>
<tr>
<td>Item100/A-view</td>
<td>Site1</td>
<td>09/25/05</td>
<td>09/25/05</td>
<td></td>
</tr>
<tr>
<td>Item101/B</td>
<td>Site2</td>
<td>out of date</td>
<td>09/25/05</td>
<td>09/25/05</td>
</tr>
<tr>
<td>Item101/B-view</td>
<td>Site2</td>
<td>out of date</td>
<td>10/25/05</td>
<td>09/25/05</td>
</tr>
<tr>
<td>Item102/A</td>
<td>Site2</td>
<td>09/25/05</td>
<td>09/25/05</td>
<td></td>
</tr>
<tr>
<td>Item102/A-view</td>
<td>Site2</td>
<td>09/25/05</td>
<td>09/25/05</td>
<td></td>
</tr>
<tr>
<td>Item103/C</td>
<td>Site1</td>
<td>09/25/05</td>
<td>09/25/05</td>
<td></td>
</tr>
<tr>
<td>Item104/B</td>
<td>Site3</td>
<td>unknown</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The report contains components up to the highest level that is out-of-date within a branch. For example, in the sample report, the BVR of component Item101/B is out of date and no further expansion is done to show its children in this branch. The branch with Item102/A has an up to date BVR so it is expanded until a leaf node is encountered or until a BVR with an out-of-date or unknown status is found.

To generate a report called comp_sync.rpt for the Item100 component:

Enter the following command on a single line:

```
sync_on_demand -f=report -type=comp -rev_rule="Latest Working"
   -item_id=Item100/A -report=comp_sync.rpt
```

An example of the contents of the comp_sync.rpt file on the owning site:

<table>
<thead>
<tr>
<th>Object</th>
<th>String</th>
<th>Type</th>
<th>Relation</th>
<th>Owning Site</th>
<th>Sync Site</th>
<th>Master LMD</th>
<th>Replica LMD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item100</td>
<td>Item</td>
<td>IMAN_master_form</td>
<td>out of date</td>
<td>10/25/05</td>
<td>09/25/05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item100-view</td>
<td>Item Master</td>
<td>IMAN_master_form</td>
<td>Site1</td>
<td>09/25/05</td>
<td>09/25/05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item100/A</td>
<td>Item Revision</td>
<td>Revision</td>
<td>Site1</td>
<td>out of date</td>
<td>10/25/05</td>
<td>09/25/05</td>
<td></td>
</tr>
<tr>
<td>Item100/A-spec</td>
<td>Rev Master</td>
<td>IMAN_master_form</td>
<td>Site1</td>
<td>09/25/05</td>
<td>09/25/05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item102/B-ref</td>
<td>Text</td>
<td>IMAN_reference</td>
<td>Site2</td>
<td>out of date</td>
<td>10/25/05</td>
<td>09/25/05</td>
<td></td>
</tr>
<tr>
<td>Item100/A-view</td>
<td>BOMViewRev</td>
<td>IMAN_specification</td>
<td>Site1</td>
<td>09/25/05</td>
<td>09/25/05</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To create a file (uids_list.txt) containing UIDs that can be processed for use as input for the data_share utility:

```
sync_on_demand -f=report -uid_report=uids_list.txt
```

To create both a report file (uids_list.txt) containing UIDs and a synchronization report file (sync.txt):

```
sync_on_demand -f=report -report_file=sync.txt -uid_report=uids_list.txt
```

To create a report file (uids_list.txt) containing UIDs enclosed by brackets ({ }):

```
sync_on_demand -f=report -uid_report=uids_list.txt -sep="{}"
```
Exports objects from Teamcenter in TC XML format. If there are files for export, the utility creates an FMS read file ticket and saves it in the output XML file for each file.

**SYNTAX**

```bash
tcxml_export [-u=user-id [-p=password | -pf=password-file] [-g=group] ]
-file=output-xml-file [-item=item-id [-rev=revision-id] | -folder=folder-name | -class=POM-classname | -uid=uid-of-object | -item_key=attr-name1=value, attr-name2=value, ...]
[-transfermode=transfer-mode-name | -optionset=transfer-option-set-name]
[-targetsites=list-of-target-site-ids]
[-transferownership]
[-sync]
[-incrementalChangeDelta]
[-reason=reason-for-export]
[-revrule =revision-rule]
[-bomlevel =desired-bom-level]
[-svrule]
[-processUnconfiguredByOccEff]
[-processSuppressedOcc]
[-processUnconfiguredVariants]
[-processUnconfiguredChanges]
[-requiredLang=locale-code-1, locale-code-2, ..., locale-code-n]
[-allowedLang=locale-code-1, locale-code-2, ..., locale-code-n]
[-low-level { -inputfile=file-with-item-ids | -inputuidfile=file-with-uids}
[-force_retraverse]]
[-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.

  If this argument is not used, the system assumes the `user-ID` value to be the password.
-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

-file
Specifies the output XML file name. The value can be either an absolute path (full path name) or a relative path name.

-item
Specifies the ID of the item to be exported.

-rev
Specifies the revision ID of the item to be exported. If this argument is not specified, the configured revision (either specified or default) is exported for the item.

-folder
Specifies the folder containing objects to be exported.

-class
Specifies a class name. Instances of this POM class are exported. The following workspace object names are valid:

- Item
- ItemRevision
- Folder
- Dataset
- Alias
- ImanFile
- ImanRelation
- ReleaseStatus
- IdContext
- Identifier
- PSBOMView
- PSBOMViewRevision
- TransferMode
- TransferOptionSet

-uid
Specifies the UID of an object (one object only).

-item_key
Specifies a comma-delimited list of attributes used to identify the object to be exported.
-transfermode
Specifies the transfer mode name used to export the objects. If this argument is not specified, the utility uses a default transfer mode. See restriction 2.

-optionset
Specifies the transfer option set name used to export the objects. Mutually exclusive with the -transfermode argument. If you specify both, the command does not fail. However, the transfer mode indicated by this -optionset argument takes precedence over the transfer mode specified by the -transfermode argument. See restriction 3.

targetsites
Specifies a comma-delimited list of destination site IDs. If used with the -transferownership argument, must contain only one site ID.

-transferownership
Indicates that this export transfers the ownership of exported objects to the given target site. You must specify only one site ID in the -targetsites argument if you use this argument.

-sync
Indicates that this export is for data synchronization.

-incrementalChangeDelta
Exports modified objects tracked by configured incremental change as a partial structure export.

Because incremental change data is configured data, you must specify a configured transfer option set for the -optionset argument. The -processUnconfiguredChanges and -processSuppressedOcc arguments are ignored if they are included.

-reason
Specifies the reason for this export.

-revrule
Specifies the revision rule to use to configure the exported BOM with the specified item as the top line.

-bomlevel
Specifies the level in the BOM.

-svrule
Specifies the saved variant rule to use to configure the exported BOM.

-processUnconfiguredByOccEff
Exports BOMLine objects that are not configured for occurrence effectivity.

-processSuppressedOcc
Exports suppressed BOMLine objects.

-processUnconfiguredVariants
Exports BOMLine objects that are not selected by BOMLine object's variant conditions.

-processUnconfiguredChanges
Exports BOMLine objects configured out of the BOM by incremental change.
-requiredLang
Specify a list of comma separated locale values. This list is used to ensure that localized attributes in the exported data have at least one representation that can be used as the attribute master language at the importing site. It also defines a priority order for the exporter to determine the attribute master language. The valid locale values must match the Java locale naming convention that consists of two groups of two-character identifiers separated by an underscore character (_) for a particular combination of language and region. For example, zh_CN represents Simplified Chinese in China and en_US represents English in the United States.

-allowedLang
Specify a list of comma separated locale values. This list is used to get additional representations for localized attributes in the exported data for use at the importing site. The valid locale values must match the Java locale naming convention that consists of two groups of two-character identifiers separated by an underscore character (_) for a particular combination of language and region. For example, zh_CN represents Simplified Chinese in China and en_US represents English in the United States.

-h
Displays help for this utility.

FAST EXPORT ARGUMENTS
The following arguments support low-level fast export functions used for site consolidation activities. The use of these arguments requires the SITCONS_AUTH_KEY environment variable be set to a valid license key. You must obtain a key from GTAC.

Export files created using the low-level export do not contain GSID attributes.

-low_level
Performs fast import using POM-level APIs and a DBA user. You must specify this argument to use any of the fast export arguments.

You can use any of the following standard txml_export arguments, in addition to the other fast export arguments, when you specify the -low_level argument.

-folder
-file
-targetsites
-transfermode
-optionset
-reason

-inputfile
Specifies a file that contains a list of item IDs indicating items to export using fast low-level export. You must include either this argument or the -inputuidfile argument when using the -low_level argument.

If your Teamcenter environment uses multifield key identifiers, you must specify the multifield key values for the item_id attribute as a list of comma-separated values in the input file, for example:

item_id=M2Item1_001,object_name=M2_Item_name1,object_type=M2Item1
Chapter 7  Data sharing utilities

The input file may contain both multifield key and standard item ID values, for example:

```
Item_id=Ace1
Item_id=lor1,object_name=fixedPl,object_type=type
Item_id=lor2,object_descr=acmetool,object_type=type
```

**-inputuidfile**

Specifies a file that contains a list of UIDs indicating items to export using fast low-level export. You must include either this argument or the -inputfile argument when using the -low_level argument.

**-force_retraverse**

Forces retraversal of previously replicated or exported objects during fast low-level export.

**ENVIRONMENT**

As specified in the *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in the *Log files produced by Teamcenter*.

**RESTRICTIONS**

1. Not all PLM data is supported. For a list of objects that are supported, see the *Data Exchange Guide*.

2. If you specify the TransferMode or TransferOptionSet object as the -class argument value, you are not required to specify the -transfermode or -optionset arguments. A predefined transfer mode is used for exporting these objects and if these arguments are specified they are ignored.

3. To export related dataset files, you must specify the -transfermode argument. The arguments value must be set to an option set containing closure rules that traverse dataset files related to the primary object. The TIEExportDefaultTM transfer mode contains a standard option set that can be used for this purpose.

**EXAMPLES**

- Select an item and export the item and its attachments using default export transfer mode. The output XML file, `exportitem.xml`, is created in the directory where this command is executed.

  ```
tcxml_export -u=infodba -p=infodba -g=dba -item=item_id -file=exportitem.xml
  ```

- Select an item revision and export its attachments using default export transfer mode. The output XML file, `itemrev.xml`, is created in the directory where this command is executed.

  ```
tcxml_export -u=infodba -p=infodba -g=dba -item=item_id -rev=item_rev -file=itemrev.xml
  ```

- Export the contents of the `exportObjects` folder using default export transfer mode. If objects in the folder are supported objects, they are also exported. The output XML file, `folder.xml`, is created in the directory where this command is executed.

  ```
tcxml_export -u=infodba -p=infodba -g=dba -folder=exportObjects -file=folder.xml
  ```
• Export item 000001 using the TIEUnconfiguredExportDefault transfer mode.
  
tcxml_export -u=infodba -p=infodba -g=dba -item=000001
  -file=exportitem.xml -optionset=TIEUnconfiguredExportDefault

• Synchronize item 000001.
  
tcxml_export -u=infodba -p=infodba -g=dba -item=000001
  -file=itemsync.xml -optionset=TransferOptionSet
  -sync -reason=ItemIsOutDated

• Export the Latest Working revision of the Top1 item using the
  TIEConfiguredExportDefault transfer option set.
  
tcxml_export -u=infodba -p=infodba -item=Top1
  -optionset=TIEConfiguredExportDefault -revrule="Latest Working"
  -file=D:\temp\Top1_HL.xml

• Export a partial structure that includes only the changes to the Top1 assembly
  that are tracked by configured incremental change:
  
tcxml_export -u=infodba -p=infodba -item=Top1
  -targetsites=-2054508072 -optionset=TIEConfiguredExportDefault
  -revrule="Latest Working" -sync -incrementalChangeDelta
  -file=/tmp/0001_delta.xml

• Fast export the objects identified in the inp.txt file using the VARIANTRULE1
  saved variant rule to site 56781234.
  
tcxml_export -u=infodba -p=infodba -low_level -inputfile=d:\Temp\inp.txt
  -file=d:\temp\top1_ll.xml -optionset=TIEConfiguredExportDefault
  -svrule=VARIANTRULE1 -targetsites=-2054508072

• Fast export the Latest Working revisions of the objects, including suppressed
  BOM lines and BOM lines configured out by incremental changes.
  
tcxml_export -u=infodba -p=infodba -low_level -inputfile=d:\Temp\inp.txt
  -file=d:\temp\top1_ll.xml -optionset=TIEConfiguredExportDefault
  -svrule=VARIANTRULE1 -processSuppressedOcc
  -processIncrementalChanges

The following are site consolidation examples:

• To export the objects to a specified site.
  
tcxml_export -u=infodba -p=infodba
  -optionset=SiteConsolidationDefault -targetsites=-2054508072
  -inputfile=d:\input.txt -file=d:\out.xml -low_level

• To synchronize the objects already exported (low level) to a specified site.
  
tcxml_export -u=infodba -p=infodba -sync
  -file=d:\out.xml -low_level

Special cases for tcxml_export:

• Export in-process workflow Items:
  
  1. Export the item in the workflow.
  
  2. In the rich client, search for workflow job corresponding to that item.
  
  3. Copy this job and paste it into a new folder with unique name.
4. Export this folder to export the job.

**Note** When a workflow process is exported with transfer ownership to the target site, the **My Worklist→Inbox→Tasks to Perform** folder at the target site does not display the task. To display the task, the affected users must delete the **Inbox** and restart the rich client.

Similarly, to display tasks in **ResourcePool Inbox**, delete its **Tasks to Track** and **Tasks to Perform** subfolders.

- Export a collaboration context object (CCO):
  1. In the rich client, search for the CCO.
  2. Copy the CCO and paste it into a new folder with a unique name.
  3. Export this folder to export the CCO and the entire structure context.
  4. Export the associated product structures.

- Low-level synchronization process example:
  1. Create the tables and triggers using an SQL script before exporting the data.

You can use an edited version of the following sample script, located in your **TC_ROOT/install/sitecons** directory, to manage the tables in separate tables spaces for the site consolidation tables. Before you run the script, edit the highlighted parameter values for your site.

```sql
sitcons_create_tablespace.sql
/* Copyright 2009. Siemens Product Lifecycle Management Software Inc. All Rights Reserved. */
/* This is a sample script that can be used by the administrator. The following parameters namely datafile, size, autoextend on maxsize, extent management local uniform size are the variables that need to be changed as required. Also, the tablespace can be named as desired */
/* Creates a separate table space to be used later for ACCT_TABLE creation */
CREATE TABLESPACE TCSITCONS
  DATAFILE 'D:\oracle\product\10.2.0\oradata\test\TCSITCONS.dbf'
  SIZE 10M AUTOEXTEND ON MAXSIZE 100M;
/* Creates the table ACCT_TABLE using above table space */
CREATE TABLE ACCT_TABLE(
  exp_obj_uid VARCHAR2(15) PRIMARY KEY,
  led_date,
  island anchor uid VARCHAR2(15),
  state NUMBER,
) TABLESPACE TCSITCONS;
CREATE TABLE SCRATCH_TABLE(
  puid VARCHAR2(15),
  led_date,
  trigger_condition NUMBER,
) TABLESPACE TCSITCONS;
CREATE INDEX "SCRATCH_TABLE_INDEX" ON "SCRATCH_TABLE" (puid);
CREATE OR REPLACE TRIGGER fast_sync_add_trigger
before insert on PPOM OBJECT
referencing new as newRow
for each row
BEGIN
  INSERT INTO scratch_table VALUES (:newRow.puid, :newRow.plsd, '8');
END;
/
CREATE OR REPLACE TRIGGER fast_sync_delete_trigger
after delete on PPOM OBJECT
referencing old as oldRow
for each row
BEGIN
  INSERT INTO scratch_table VALUES (:oldRow.puid, :oldRow.plsd, '9');
END;
/
```

2. Export the data using the **txml_export** utility in low-level mode:
3. Import the data at the target site using the `tcxml_import` utility in low-level mode:

   `tcxml_import -u=infodba -p=infodba -g=dba -file=d:\out.xml -low_level`

4. Copy the import-generated `out_import_results.txt` file to the source site and run the `tcxml_confirm_export` utility in low-level mode:

   `tcxml_confirm_export -u=infodba -p=infodba -g=dba -file=d:\out_import_results.txt -low_level`

5. Add, delete, and change the low-level exported data as needed.

6. Run the `tcxml_export` utility with the `-sync` argument.

   `tcxml_export -u=infodba -p=infodba -g=dba -file=d:\sync.xml -low_level -sync -optionset=SiteConsolidationDefault -inputfile=d:\input.txt`

7. Import the generated XML file using `tcxml_import` low-level mode.

8. Repeat the earlier step to copy the import-generated `out_import_results.txt` file to the source site and run the `tcxml_confirm_export` utility in the low-level mode.

   `tcxml_confirm_export -u=infodba -p=infodba -g=dba -file=d:\out_import_results.txt -low_level`

**Note**  Fast synchronization operations depend on the timestamp on the local server machine where an object is saved and edited. Therefore, modifying objects on different machines with different system time may influence the identification of out-of-sync status.
Imports objects into Teamcenter from a TC XML file.

Additionally, this utility is used in conjunction with the attribute_export utility to update the values of object properties in your Teamcenter database in bulk.

For more information about updating property values in bulk, see the System Administration Guide.

**SYNTAX**

tcxml_import

[-u=user-id] [-p=password] -g=group]
-file=xml-file-name
[ [-xsl=xsl-file-name]
[ -errorcontinue={yes | no} ]
[ [-site=site-name]
[ -transfermode=transfer-mode]
[ -optionset=option-set-name] ] |
[ [-scope_rules [-scope_rules_mode=ignore | overwrite] ] ]
[ -requiredLang=locale-code-1, locale-code-2, ..., locale-code-n] |
[ -allowedLang=locale-code-1, locale-code-2, ..., locale-code-n] ] |
[ -low_level ] |
[ -bulk_load -site=site-name ]
[ -bypassSiteCheck] |
[ -h]

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-file
Specifies the input TC XML file containing the objects to imported into Teamcenter.

-xsl
Specifies the input XSL file to apply to the TC XML file before import.

-errorcontinue
Indicates whether to continue import after encountering an error. The default value is yes. If you specify no and the utility encounters an error, the utility rolls back all of the changes performed during the current import.

-site
Specifies the master exporting site from which input TC XML data is generated. This argument is mutually exclusive with the -scope_rules and -scope_rules_mode arguments.

-transfermode
Specifies the transfer mode name that is to be used for import. If this argument is not specified, the utility uses the TIEImportDefault transfer mode. This argument is mutually exclusive with the -scope_rules and -scope_rules_mode arguments.

-optionset
Specifies the option set name that contains options to use during import. This argument is mutually exclusive with the -scope_rules and -scope_rules_mode arguments.

-scope_rules
Specifies the input XML data contains scope rules, that is, transfer modes, closure rules, filter rules, property sets, actions rules, or transfer options sets. This argument is mutually exclusive with the -site, -transfermode, and -optionset arguments. See Restrictions.

-scope_rules_mode
Specifies the import behavior when a rule is imported that already exists in the database. If set to ignore the rule is not imported. If set to overwrite, the existing database rule is overwritten. If you do not specify this argument, ignore behavior is used. If you do not specify the -scope_rules argument, this argument is invalid.

-optionset
Specifies the option set name that contains options to use during import.

-requiredLang
Specifies a list of comma separated locale values. This list is used to ensure that localized attributes in the imported data have at least one representation that can be used as the attribute master language at the importing site. It also defines a priority order for the exporter to determine the attribute master language. The valid locale values must match the Java locale naming convention that consists of two groups of two-character identifiers separated by an underscore character (_) for a particular
combination of language and region. For example, zh_CN represents Simplified Chinese in China and en_US represents English in the United States.

-allowedLang
Specifies a list of comma separated locale values. This list is used to get additional representations for localized attributes in the imported data for use at the importing site. The valid locale values must match the Java locale naming convention that consists of two groups of two-character identifiers separated by an underscore character (_) for a particular combination of language and region. For example, zh_CN represents Simplified Chinese in China and en_US represents English in the United States.

-low_level
Performs a fast import using POM level APIs. Fast import is normally used for consolidation of site databases. You must specify only the -file argument; all other arguments are ignored during fast imports. To use this argument, you must set a license key value for the SITCONS_AUTH_KEY environment variable. You must obtain the key from GTAC. For more information about consolidating sites see the Site Consolidation Guide.

-bulk_load
Performs a fast import of legacy data from a file containing low-level TC XML formatted data. You must specify only the -file and -site arguments; all other arguments are ignored when bulk loading low-level data. If you specify any other optional arguments they are ignored. To use this argument you must set a license key value for the SITCONS_AUTH_KEY environment variable. You must obtain the key from GTAC.

For more information about loading bulk data, see the Data Exchange Guide.

-bypassSiteCheck
If specified, this switch bypasses the check that prevents the utility from updating objects at the same site.

If specified, this switch bypasses the check that prevents the update of replica objects

**Note**  In a multi-site environment, the utility must be run at each of the sites to update the objects belonging to the respective sites.

Users have the capability of performing updates on replica objects, eliminating the need to re-replicate all updated objects.

**Caution**  Use this argument only with the -bulk_load argument for bulk update of attributes of local objects and import of archived audit records.

-h
Displays help for this utility.

ENVIRONMENT
As specified in the Manually configuring your environment for Teamcenter utilities.

FILES
As specified in the Log files produced by Teamcenter.

RESTRICTIONS
- When importing transfer option sets, if a local option set at the exporting site is specified for import, the utility assigns the local site as the site reference and
the imported option becomes local to the importing site. If a remote option at the exporting site is specified for import, the site reference of that option set is expected to exist in the database at the importing site. If it is not, the import fails. To avoid this failure, you must manually create the option set before attempting the import.

- Not all Teamcenter data is supported for import. For a list of objects that are supported, see the Data Exchange Guide.

**EXAMPLES**

- The following example imports objects specified by the `-file` argument:
  
  ```
  tcxml_import -file=xml-file-name -u=userid -p=password
  ```

- The following example imports objects specified by the `-file` argument according to the rules given in transfer mode specified by the `-transfermode` argument:
  
  ```
  tcxml import -file=xml-file-name -u=userid -p=password
  -transfermode=transfer-mode-name
  ```

- The following example imports objects specified by the `-file` argument and uses the value specified by the `-site` argument as the exporting site for this import:
  
  ```
  tcxml_import -file=xml-file-name -u=userid -p=password
  -site=site-id
  ```

- The following example imports objects specified by the `-file` argument and uses the value specified by the `-xsl` argument to apply transformation on the input XML file:
  
  ```
  tcxml_import -file=xml-file-name -u=userid -p=password
  -xsl=xsl-file
  ```

- The following example imports objects specified by the `-file` argument and uses the value specified by the `-errorcontinue` argument to determine whether to roll back the import if an error occurs:
  
  ```
  tcxml_import -file=xml-file-name -u=userid -p=password
  -errorcontinue=yes
  ```

- The following example imports objects specified by the `-file` argument and uses the value specified by the `-optionset` argument to access the options that must be used during import:
  
  ```
  tcxml_import -file=xml-file-name -u=userid -p=password
  -optionset=option-set-name
  ```

- The following example imports objects specified `-file` argument with localizable attribute values in en_US and fr_FR locales.
  
  ```
  tcxml_import -u=infodba -p=infodba -g=dba -file=exportitem.xml
  -requiredlanguage=en_US -allowedlanguage=fr_FR
  ```

- The following example imports archived audit records.
  
  ```
  tcxml_import -u=infodba -p=infodba -g=dba -bulk_load -bypassSiteCheck
  -file=c:/temp/AuditExport.xml
  ```
Chapter 7  Data sharing utilities

**txml_validate**

Validates the contents of a low-level TC XML formatted file. This file may be an
file exported from a Teamcenter site or constructed by a custom solution that
maps legacy system data to the Teamcenter unified data model. You can use this
to validate the file information prior to importing it into a Teamcenter site or to
compare the Teamcenter data created by importing the file to the contents of the
imported file. This utility requires a license key. For information about obtaining
and setting the license key, contact GTAC.

SYNTAX

```
txml_validate [-u=user-id [-p=password | -pf=password-file] -g=group]
[-file=input-xml-file -action={pre | post}] [-h]
```

ARGUMENTS

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this
  argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u
  and -p arguments are authenticated externally through SSO rather than
  being authenticated against the Teamcenter database. If you do not supply
  these arguments, the utility attempts to join an existing SSO session. If no
  session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually
  exclusive with the -pf argument.

  If this argument is not used, the system assumes the user-ID value to be the
  password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null
  value. If this argument is not used, the system assumes the user-ID value to be the
  password.

  For more information about managing password files, see Manage password files.

    This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user’s default group is assumed.

- **-file**
  Specifies the input TC XML file name. The value can be either an absolute path
  (full path name) or a relative path name.
-action
When set to pre, checks the named file for conformance to the importing sites schema, logical data model, and business constraints. The output of the utility is written to a log file that uses the naming convention input-xml-file-name_validator.log. This file uses a pipe ( | ) character as a field delimiter and can be imported into Microsoft Excel for easy reading. This file contains any errors and discrepancies found by the utility.

**Note** The post action is not available at this time. Use the pre action.

When set to post compares the named file contents to the data created when the file was imported to verify the objects where imported properly.

-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
You must acquire a license key from GTAC and set the SITCONS_AUTH_KEY environment variable to this value to use this utility.

EXAMPLES
The following command validates a file (0001.xml) and creates a log file (0001_validator.log) containing the results of the validation.

```
tcxml_validate -u=infodba -p=infodba -file=D:\temp\0001.xml -action=pre
```
**tcxml_xfer_ownership**

**DESCRIPTION**
Transfers the ownership of a set of Teamcenter objects. You can use this utility to change ownership of all objects owned by a site during site consolidation, change ownership of related objects during transition from Teamcenter Enterprise to Teamcenter (flip-the-switch ownership transfer), or change object ownership when importing objects into Teamcenter from another data management system.

For performance reasons during site consolidation, this utility changes ownership of objects using SQL calls, not the POM API. Rich client refresh works only when POM calls are used to change an attribute, including ownership changes. Therefore, ownership changes that the utility enacts during an active rich client session are not reflected in the interface. You must restart all active rich clients to get the changes. This is normally not an issue because user access must be prohibited during the *time critical period* when this utility is used.

A valid license key is required to use this utility for site consolidation ownership changes.

The `perform_highlevel` argument enables the flip-the-switch ownership transfer feature of this utility. By default, during flip-the-switch ownership transfer, this utility uses the POM API to change object ownership. Therefore, ownership changes that the utility enacts during an active rich client session are reflected in the interface. You are not required to restart the active rich clients to get the changes.

For better performance, you can set the `TIE_flip_using_SQIL` preference to `true` to use SQL calls during flip-the-switch ownership transfers. If you use this preference setting, you must restart all active rich clients to get the changes.

A valid license key is not required to use this utility when you enable the flip-the-switch feature.

**SYNTAX**
```
tcxml_xfer_ownership -u=user-name [-p=password | -pf=password-file] [-g=group] 
-act=extract | perform | update_status | 
perform_highlevel | perform_highlevel_dryrun 
[-inputfile=file-with-object-list] 
[-change_ownership_to=site-ID] 
[-dryrun [-startDate=MM/DD/YYYY -endDate=MM/DD/YYYY] [-source_extinct]] 
[-file=status-output-file] 
[-report=report-file-name] 
[-h]
```

**ARGUMENTS**
- `-u`
  Specifies the user ID.

This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
Note: When Security Services single sign-on (SSO) is enabled for your server, the
-u and -p arguments are authenticated externally through SSO, rather than
being authenticated against the database.

- If you do not supply these arguments, the utility attempts to join an
  existing SSO session.
- If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the user's password.
If used without a value, the system assumes a null value. If this argument is not
used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. The file must be a single-line ASCII file containing
the password in clear text. Teamcenter Environment Manager prompts you for a
password and creates the password file during installation.
If used without a value, the system assumes a null value. If this argument is not
used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-action
Specifies whether to extract, perform, or update status.

  extract
  Generates the file for ownership transfer.
The -change_ownership_to, -report, or -dryrun arguments are supported
for this action.

  perform
  Transfers the ownership at target site.
The -inputfile, -file, -source_extinct, or -dryrun arguments are supported
for this action.

  update_status
  Updates the status at source site.
The -inputfile, -change_ownership_to, -source_extinct, -report, or -dryrun
arguments are supported for this action.

  perform_highlevel
  Performs a high-level (flip-the-switch) ownership transfer at the target site
The -inputfile and -change_ownership_to arguments are supported for this
action. Any other arguments are ignored.
Chapter 7  Data sharing utilities

This action generates two outputs files, the `input-file-name_flip_objects.log` file lists all objects transferred and the `input-file-name_results.xml` file contains the flip status of objects given in input file.

**perform_highlevel_dryrun**
Generates a report to preview the ownership change of objects transferred by a high-level (flip-the-switch) ownership transfer at the target site.

The `-inputfile` and `-change_ownership_to` arguments are supported for this action. Any other arguments are ignored.

- **-inputfile**
  Specifies the name of the file containing the objects for ownership change.

- **-change_ownership_to**
  Specifies the site ID of the target site. This argument is required when the utility is run at the source site. If this argument is omitted, the utility uses the local site as the target site. If either the `-dryrun` or the `perform_highlevel_dryrun` argument is specified, the ownership transfer is not performed.

- **-dryrun**
  Generates a report to preview the ownership change of objects transferred by the site consolidation tools, and identifies inconsistencies.

  To preview the objects at the target site that are owned by the source site and are inconsistent with the source site due to modifications made to them at the target site post-replication, set the `TIE_DRYRUN_VALIDATION=TRUE` preference at the target site.

  The `-startDate` and `-endDate` arguments are valid only with the `-dryrun` argument. The utility generates a dry run report for objects transferred within the date range specified by the `-startDate` and `-endDate` values.

- **-startDate**
  Specifies the starting date for replicas and inconsistencies reported by the `-dryrun` argument. This argument is used in conjunction with the `-endDate` argument and is ignored if the `-dryrun` argument is not specified. The date supplied must be in supplied in a `MM/DD/YYYY` format.

- **-endDate**
  Specifies the ending date for replicas and inconsistencies reported by the `-dryrun` argument. This argument is used in conjunction with the `-startDate` argument and is ignored if the `-dryrun` argument is not specified. The date supplied must be in supplied in a `MM/DD/YYYY` format.

- **-source_extinct**
  Generates the list of replica items at the target site which are owned by the source site and which were not transferred by site consolidation tools.

  This argument can be used only when the `-dryrun` argument is used and is ignored otherwise.

- **-file**
  Specifies the name of the output file (with an absolute path) that contains the status of ownership transfer of the objects at the target site. This argument is valid only for the site consolidation `-action=perform` argument.
-report
Specifies the name of the report file or extract file. This argument is valid only for site consolidation actions.

Note To use the dry run mode to check objects of an island owned by the source site that are not covered in the accountability table for ownership transfer, set the TIE_DRYRUN_VALIDATION preference to TRUE at the target site.

For debug information, set the following environment variables:

- **TC_SLOW_SQL=1**
- **TC_SQL_DEBUG=BJPT**

ENVIRONMENT
As specified in the *Manually configuring your environment for Teamcenter utilities.*

FILES
As specified in the *Log files produced by Teamcenter.*

RESTRICTIONS
None.

EXAMPLES

- To run at the source site and extract to a file the objects for ownership transfer:
  ```
tcxml_xfer_ownership -u=infodba -p=infodba -g=dba
  -action=extract -report=D:\Temp\ownership_transfer_extract.txt
  -change_ownership_to=target_site_id [-dryrun]
  ```

- To transfer the ownership or validate the inconsistencies for ownership transfer at the target site:
  ```
tcxml_xfer_ownership -u=infodba -p=infodba -g=dba
  -action=perform -inputfile=ownership_transfer_extract.txt
  -file=ownership_transfer_status.txt [-dryrun] [-source_extinct]
  ```

- To update the ownership transfer status or to generate report for a dry run at the source site:
  ```
tcxml_xfer_ownership -u=infodba -p=infodba -g=dba
  -action=update_status -inputfile=ownership_transfer_status.txt
  -report=ownership_transfer_update_status.txt
  -change_ownership_to=target_site_id [-dryrun]
  ```

- To use flip-the-switch ownership transfer to change ownership at the target site:
  ```
tcxml_xfer_ownership -u=infodba -p=infodba -g=dba
  -action=perform_highlevel -inputfile=flip_the_switch_input.txt
  -change_ownership_to=target_site_id
  ```

- To use flip-the-switch ownership transfer to determine ownership change at the target site without actually changing ownership:
  ```
tcxml_xfer_ownership -u=infodba -p=infodba -g=dba
  -action=perform_highlevel_dryrun -inputfile=flip_the_switch_input.txt
  -change_ownership_to=target_site_id
  ```

- The following example shows the contents of a sample file used as the input for a flip-the-switch ownership transfer (*-inputfile=flip_the_switch_input.txt*):
  ```xml
  Triangle version="1.0" encoding="UTF-8">
  <!-- flip the switch input.txt file -->
  </TcFlipXML
```
You can construct the input file manually by copying the **GSIdentity** elements from the TC XML files used for importing the objects.
upload_plmxml_struct

Uses the item ID and revision ID of the top node of the assembly and the revision rule and executes the bomwriter utility with options specified in the arguments. The PLM XML file generated is then attached as a named reference to the DirectModelAssembly dataset.

SYNTAX

```
upload_plmxml_struct [-u=user-id [-p=password | -pf=password-file] -g=group]
[-item=item-id | -key=[keyAttr1=keyVal1][,keyAttr2=keyVal2]...[,keyAttrN=keyValN]]
-rev=revision-id -rev_rule=revision-rule [-h]
```

ARGUMENTS

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**: If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.

  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

  For more information about managing password files, see Manage password files.

  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.

- **-item**
  Specifies the item ID of the top node of the assembly structure.

- **-key**
  Specifies the key of the of the top node of the assembly structure.

  `[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]`

  To find the key of an object, use the `get_key_string` utility.
For more information, see the *Business Modeler IDE Guide*.

**-rev**
Specifies the revision ID of the top node of the assembly structure.

**-rev_rule**
Specifies the revision rule to use to apply on the assembly and create the structure output.

**-h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
Open the Teamcenter menu shell with the database connection variables set and execute the following command:

```bash
upload_plmxml_struct -u=infodba -p=infodba -g=dba -item=000125 -rev=001 -rev_rule="Latest Working"
```
validate_and_replicate_assembly

Validates an assembly with checks based on parameters and generates a PLM XML file containing a list of all components in a configured assembly. The utility gets a list of participating sites using the project that the assembly root item is assigned to and invokes the replication mechanism to update the assembly components to all the participating sites. Use this utility only from a translator task to generate PLM XML output for an assembly that is being released.

SYNTAX

validate_and_replicate_assembly [-u=user-name [-p=password | -pf= password-file]
  -g=group] -item_id=assembly-root -rev=revision -revision_rule=revision-rule
  [-variant_rule=rule-to-configure-BOM] [-check_precise] [-check_no_stubs]
  [-check_all_released] [-h]

ARGUMENTS

Note Entries in parentheses are accepted abbreviations for arguments.

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value is the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.
For HTTP enabled sites, remote site operations log on using the default group for the user supplied with the -u argument. Any value supplied with the -g argument is ignored.

=item_id
Specifies the top item in the assembly structure.

=rev
Specifies the top item revision used to configure the structure.

=revision_rule
Specifies the name of the revision rule used to configure the assembly.

=variant_rule
Specifies the variant rule used to configure the assembly. If not specified, the default variant rule set at the site level is used.

=check_precise
Performs a validation check on the complete assembly to ensure that all sub assemblies are precise.

=check_no_stubs
Performs a validation check on the complete assembly to ensure that there are no stubs in the assembly.

=check_all_released
Performs a validation check on the entire assembly to ensure that all components are released.

=h
Displays help for this utility.

=Note
Required logon information is omitted from the following examples.

The following command validates that the assy_root assembly is a precise assembly with no stubs and all components are released. It also replicates the assembly to all participating sites:

```
validate_and_replicate_assembly -u= -p= -g=dba -item_id=assy_root -rev=A -revision_rule=Latest Released -check_precise -check_no_stubs -check_all_released
```
Chapter

8 Visualization utilities

harvest_mmv_index

Creates or updates the spatial cell index for a particular product specified by an item revision. The spatial cell index describes the spatial structure of the massive product data and is used by viewer clients to quickly load and render the product geometry.

The utility traverses the product structure and locates all unconfigured occurrences that contain a JT dataset. Each occurrence is identified by the revision independent path from the root to this occurrence. The bounding box information is computed for each occurrence, and the bounding box is rolled up to the root coordinate system by applying the accumulated transform. The rolled-up bounding boxes are used to create a spatial tree, which is saved as an .mmv file. This .mmv file is uploaded as a named reference of a Fnd0SpatialHierarchy dataset.

Syntax

harvest_mmv_index [-u=user-id [-p=password | -pf=password-file] -g=group] [-item=item-id | -key=item-key | -itemuid=root-item][-rev=revision] [-rev_rule=revisionRuleList][-log=file-name][-h]

Arguments

-u
Specifies the user ID.

This is generally infodba or another privileged user. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.
-pf
Specifies the password file. The file must be a single-line ASCII file containing the password in clear text. Teamcenter Environment Manager prompts you for a password and creates the password file during installation.
If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -p argument.
-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.
-item
Specifies the item ID for the root of the BOM structure.
-key
Specifies a string used to identify an item instead of specifying an item using the -item and -rev arguments.
To find the key of an object, use the get_key_string utility.
For more information, see the Business Modeler IDE Guide.
-itemuid
Specifies the UID to identify the item of the product to be harvested. If this option is specified, the -item and -key options cannot be specified.
-rev
Specifies the item revision for the root of the BOM structure.
-rev_rule
Specifies the revision rules that are supplied for the product that is to be harvested. Each specified revision rule is delimited by a comma. If no revision rule is supplied, the product is harvested as unconfigured.
-log
Specifies the name for the log file. By default, the log file is harvest_spatial_index_time.log.
-h
Displays help for this utility.

Environment
As specified in Manually configuring your environment for Teamcenter utilities.

Files
As specified in Log files produced by Teamcenter.

Restrictions
None.
Examples

- To harvest a specific revision of a product (item_id=000004), configured with revision rules Latest Working and Latest Released, type the following command on a single line:

  `harvest_mmv_index -u=adminjones -p=passjones -g=admin -item=000004 -rev=001 -rev_rule="Latest Working,Latest Released"

- To harvest spatial cell indexes for a specific revision of an unconfigured product (item_id=000004) using the multifield key, type the following command on a single line:

  `harvest_mmv_index -u=adminjones -p=passjones -g=admin -key=000004-key -rev=001`
Chapter

9 Repeatable Digital Validation (RDV) utilities
bomwriter

Emits a bill of materials (BOM), in a variety of file formats, to a nominated file optionally restricted to selected areas of the BOM.

For example, you can use this utility to export product structure information from Teamcenter to a PLM XML file that can be consumed by several applications. If the size of the product structure is very large (several thousand occurrences) you may run the export overnight. In such situations, consider using the `PLMXML_sdk_threshold` preference to minimize memory consumption during the export.

For more information about using this preference to serialize PLM XML objects, therefore reducing memory consumption during large exports, see the *Preferences and Environment Variables Reference*.

**SYNTAX**

```bash
bomwriter [-u=user-id [-p=password | -pf=password-file] -g=group]
[-noprompt] [-h | -help]
[-bookmark=bookmark-file]
[-item_list=input-file-name]
[-item=item-name | -key=item-key]
[-rev=revision]
[-selected=input-file-name]
[-subselected=input-file-name]
[-output_file=output-file-name]
[-revision_rule=configuration-rule]
[-show_substitutes=true | false]
[-show_unconfigured=true | false]
[-show_unconfigured_occ_eff=true | false]
[-show_variants=true | false]
[-view=view-type-name]
[-descendants=true | false]
[-flatten=true | false]
[-packed_window=true | false]
[-transient_unpack=true | false]
[-smstring=true | false]
[-svrule=saved-variant-rule-name]
[-format=format where format is one of the following:
  index
  psup
  plmxml
  ajt]
```

**ARGUMENTS**

- `-u` Specifies the user ID.

This is generally `infodba` or another privileged user. If this argument is used without a value, the operating system user name is used.
If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-noprompt
Specifies that if autologin fails, the system will not prompt for an interactive login.
This is a standard autologin option.

-help
Displays help for this utility.

-bookmark
Specifies a simple bookmark file from which to extract the default root item ID, root revision ID, and revision rule (overruled by any revision rule specified on the command line). The parsing of this file is primitive: one complete XML element per line is expected.

-item_list
Specifies a list of item IDs, one per line, with optional output file names on the same line. If no file name clause is provided, the default is itemid.format without + options. These items are processed successively.

-item
Specifies the item ID for the root of the BOM structure.

-key
Specifies a string used to identify an item instead of specifying an item using the -item and -rev arguments.
To find the key of an object, use the get_key_string utility.
For more information, see the Business Modeler IDE Guide.
-rev
Specifies the item revision for the root of the BOM structure.

-view
Specifies the view to be used.

-output_file
Specifies the output file. The stdout file is the default.

-format
Specifies the output file format with optional modifiers, for example:

- format=ajt+native+asm_jt_file

-format=index
Format used with the -selected or -subselected option. No modifiers.

-format=psup
psup format with the +props=xxx modifier representing comma-separated BOM line properties. You can also specify a delimiter using the delimiter option. The default delimiter is a comma (,).

For example, to specify the semicolon as a delimiter:

- format=psup+delimiter=;

+props=xxx
Comma-separated BOM line properties are exported.

+delimiter=x
Single-character delimiter is used to separate each column in the output.

-format=plmxml
plmxml format with the following modifiers:

+strict
Minor errors are fatal.

+type= xxx
Use nondefault builder.

+tmode= xxx
Use nondefault transfer mode.

+transform=[None | Cumulative | Absolute]
Use specified transformType on Occurrence.

+locales=language_codes
Specifies the languages for the export. Separate multiple languages by commas (for example, en_US, fr_FR). The language IDs follow the standard locale naming conventions (for example, en_US). If no locales are specified for export, the database scalar value (attribute master) is exported to PLM XML scalar fields.

+ua= xxx
User attributes specifier.
The syntax is a combination of a target specifier followed by a key specifier followed by a property specifier, all separated by commas. For example:

```
-format=plmxml+ua=target:<target name>,key:<key name>,prop:<prop name>...
```

The target, key, and property values are controlled by the `INTEROP_ExtraPLMXMLInstanceAttributes` preference. If there is more than one key/property value specified for a given target, you can specify each without repeating the `target` keyword. The properties are exported as `UserValue` under the `UserData` element under the `target` element.

In the following example, the `UserData` element appears under the `Occurrence` element as it is the target.

```
<UserValue value="prop_value" title="key"></UserValue>
```

In the following example, the user exports the `bl_rev_owning_user` property of `BOMLine` under the `Occurrence` element with a title of `OwningUser`. The same applies to `bl_rev_owning_group`.

```
-format=plmxml+ua=target:Occurrence,key:OwningUser,prop:bl_rev_owning_user,
key:OwningGroup,prop:bl_rev_owning_group
```

**+revid_off**

Turn off revision ID in the PRV name attribute.

**+varuid_on**

Turn on variant UID.

**+grdvua_on**

Turn on user attributes for GRDVA in instance element.

**-format=ajt**

**ajt** format with the following modifiers:

**+nt**

`ajt` file attribute in Windows format. For example:
```
d:\folder\tk0404c2_mod_5q8050016xwq6.jt
```

**+unix**

`ajt` file attribute in UNIX format. For example:
```
/folder/tk0404c2_mod_5q8050016xwq6.jt
```

**+native**

`ajt` file attribute in machine-native (UNIX or Windows) format.

**+uidtag**

`ajt` file attribute in `uidtag` format. For example:
```
BVHRD95$1V1P$n$hD.jt
```

**+identity**

Causes a missing transform to become an identity transform rather than a fatal error.

**+strict**

Minor errors are fatal.
Chapter 9  Repeatable Digital Validation (RDV) utilities

+skip_fake_part
Skips dummy part for subassemblies.

+asm_jt_file
Outputs the associated JT files (if any) information for any intermediate lines in the assembly.

-selected
Specifies the input file to nominate particular lines as selected, defaults to the root line if none is selected. If the specified input file is empty, the output should contain configuration information only (no BOM lines), where supported.

Run bomwriter once with the -f=index argument, edit the resulting file to remove lines that should not be selected, and run bomwriter again with the same parameters, but -f to the format you want and -s indicating the edited -f=index file.

Note Review the index output file carefully before using it as the input for this option. If the output contains any special characters, for example: new line, the -selected option may not function properly.

-subselected
Specifies the subselected items file. Edit -f=index for format.

-descendants
Specifies whether descendants of selected lines should be included in the output, using true or false values. Defaults to true. Selected lines and ancestors of selected lines are always included.

-flatten
Presents the selected lines as a tree in which the root node is the immediate parent of all selected lines. The transforms of the selected lines are combined with the transforms of their ancestor's lines to compensate for their disappearance. Valid values are true and false. Defaults to false.

The -flatten argument reverses the default for the -descendants argument, because the -flatten argument never needs descendent lines.

-packed_window
Use a packed BOM window. Valid values are true and false. The default value is false.

Do not use with the PLM XML format.

-transient_unpack
Use transient unpacking. Valid values are true and false. The default value is false.

Do not use with the PLM XML format.

-smstring
Use smstring output, printed to stdout. Valid values are true and false. The default value is false.

-revision_rule
Specifies a named revision rule. Defaults to the site default, frequently the latest working revision.
-**show_substitutes**
  Specifies that substitutes be shown. Defaults to the site default value.

-**show_unconfigured**
  Specifies that unconfigured lines be shown. Defaults to the site default value.

-**show_unconfigured_occ_eff**
  Specifies that lines unconfigured by occurrence effectivity be shown. Defaults to the site default value.

-**show_variants**
  Specifies that unconfigured variants be shown. Defaults to the site default value.

-**svrule**
  Specifies the BOM is to be configured based on the given saved variant rule.

-**h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

None.

**EXAMPLES**

- Run the **bomwriter** utility with the following arguments to write an **AJT** file for compilation (using **asciitojt**) on the current platform where some, but not all, BOM lines have transform matrices:

  ```
  bomwriter -bookmark=somefile.bkm -format=ajt+native+identity 
  -output_file=somefile.ajt
  ```

- Run the **bomwriter** utility with the following arguments to write selected parts of a BOM window in **AJT** format (without descendants). First, create the index file from which to select parts:

  ```
  bomwriter -item=XYZ001 -format=index -output_file=xyz001.index
  ```

- Edit the **selected.index** file to remove various lines and then run the utility as follows:

  ```
  bomwriter -item=XYZ001 -format=ajt+native -selected=xyz001.index 
  -descendants=false -output_file=xyz001.ajt
  ```

- Output associated JT files information for any intermediate lines for item **XYZ001**.

  ```
  bomwriter -item=XYZ001 -format=ajt+native+asm_jt_file 
  -output_file=xyz001.index -rev=A
  ```

- The following command calls the **bomwriter** utility with PLM XML format output on **item1** and produces the **Export_WithTranslations.plmxml** file. It also writes the **bl_item_object_desc** BOM line property as **Item_Desc** **UserData** under the **Occurrence** element. The French and German translations of the localized properties on **item1** are also exported to **Text** elements.
Chapter 9  Repeatable Digital Validation (RDV) utilities

bomwriter -u=user -p=password -g=group -item=item1
-output_file=Export_WithTranslations.plmxml
-format=plmxml+ua=target:Occurrence,key:"Item_Desc",prop:"bl_item_object_desc"+locales=fr_FR,de_DE
Updates the QPL database with the latest changes in the product structure. The QPL database is used when performing spatial and attribute queries. Use the -run_level argument to run this utility in a setting similar to a UNIX crontab command, allowing you to achieve a finer level of granularity and control with this utility.

**Note** To access the Teamcenter volumes containing JT data, this utility and the FMS service must all be run by the same user.

Below is a list of the `harvester.pl` components and a description of their functionality:

- **update_structure**
  Updates the top-level cache in the NX part file with the latest changes in the product structure.

- **ug_spacemap**
  Creates the cell occupancy map in binary format. Attribute schema and the attribute details of the NX file are created in XML format.

- **QPL upload**
  Uploads the spatial and attribute data into the QPL database.

**SYNTAX**

```
$QPL_ROOT/scripts/harvester.pl [-u=user-id [-p=password | -pf=password-file]
    -g=group] -run_level=value -k -l -r -v -h
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see *Manage password files*. This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-run_level
Defines which component of the harvester process is to be run:

1= update_structure
2= ug_spacemap
3= update_structure + ug_spacemap
4= QPL upload
5= update_structure + QPL upload
6= ug_spacemap + QPL upload
7= update_structure + ug_spacemap + QPL upload

-k
Preserves the intermediate files created by the ug_spacemap utility.

-l
Specifies symbolic links followed in UNIX.

-r
Recursively searches the search directory specified in the options.txt file.

-v
Logs the current status of the executables run by this utility in to the terminal.

-h
Displays help for this utility.

ENVIRONMENT
The environment variables are provided by the variables defined in the $QPL_ROOT/qpldata/options.txt file and the $QPL_ROOT/qpldata/config.txt file. This script uses all the variables defined in the two aforementioned files as environment variables. For more information regarding the variables, see the options.txt file in the $QPL_ROOT/qpldata directory.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.

EXAMPLES
The following examples demonstrate use of this utility in a command line and also in a crontab setting, which is most likely to be used in a production environment.

- The following command runs the utility at run level 7, which runs all possible executables. These are run on bookmark files located in the search directory pointed to by the QPL_H_root_dirs variable in the options.txt file in the $QPL_ROOT/qpldata directory:
harvester.pl

- The following command runs the utility at run level 3 on the bookmark file named `BOOKMARK1.bkm` in the directory from which the utility is being run:

  `harvester.pl BOOKMARK1.bkm -run_level=3`

- The following command runs the utility at run level 7 on bookmark files found in the directory named `anyDir`, which is a subdirectory existing in the current directory:

  `harvester.pl anyDir`

- The following example illustrates using the `harvester.pl` script in a `crontab` setting:

  ```
  10 * * 1-6 harvester.pl BOOKMARK1.bkm -run_level=3
  14 * * 1-6 harvester.pl BOOKMARK1.bkm -run_level=3
  18 * * 1-6 harvester.pl BOOKMARK1.bkm -run_level=3
  22 * * 1-6 harvester.pl BOOKMARK1.bkm -run_level=3
  2 * * 1-6 harvester.pl BOOKMARK1.bkm -run_level=4
  12 * * 1-6 harvester.pl BOOKMARK2.bkm -run_level=3
  16 * * 1-6 harvester.pl BOOKMARK2.bkm -run_level=3
  20 * * 1-6 harvester.pl BOOKMARK2.bkm -run_level=3
  0 * * 1-6 harvester.pl BOOKMARK2.bkm -run_level=3
  4 * * 1-6 harvester.pl BOOKMARK2.bkm -run_level=4
  ```
Updates the QPL database with the latest changes in the product structure based on the tessellated representation of the assembly. The QPL database is used when performing spatial and attribute queries.

**Note** OpenGL runtime libraries are required for this utility to run.

A list of the **harvester_jt.pl** utility components and a description of their functionality follows:

**bomwriter**
Creates a textual representation of the product structure in the form of an .ajt file. The file contains information regarding all the BOM line attributes in the product structure. This file is then read by the **asciitojt** utility to create the .jt file representation of the entire structure.

**asciitojt**
Creates the .jt file representation of the entire structure from the text file created by the **bomwriter** utility.

**SpaceMapJt**
Creates the voxel representation of the assembly from the binary .jt file created by the **asciitojt** utility.

**QPL utilities**
Creates the cell occupancy map and the XML representation of the attributes from the output of the **SpaceMapJt** utility, and then uploads them to the QPL database.

### SYNTAX

```
$QPL_ROOT/scripts/harvester_jt.pl [-u=user-id [-p=password | -pf=password-file] -g=group] -zone_min=x1, y1, z1 -zone_max=x2, y2, z2 -k -l -r -v
```

### ARGUMENTS

**-u**
Specifies the user ID.

This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

**-p**
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see *Manage password files*. This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-zone_min
Defines the minimum coordinates of the two-dimensional plane to be considered while generating the occupancy map. It is provided in an x1, y1, z1 format.

-zone_max
Defines the maximum coordinates of the two-dimensional plane to be considered while generating the occupancy map. It is provided in an x2, y2, z2 format.

-k
Preserves the intermediate files created by the ug_spacemap utility.

-l
Symbolic links followed in UNIX.

-r
Recursively searches the search directory specified in the options.txt file.

-v
Logs the current status of the executables run by the harvester_jt.pl utility into the terminal.

-h
Displays help for this utility.

ENVIRONMENT
The environment variables are provided by the variables defined in the $QPL_ROOT/qpldata/options.txt and the $QPL_ROOT/qpldata/config.txt files. This script uses all the variables that are defined in the two aforementioned files as environment variables. For more information regarding the variables, refer to the options.txt file in the $QPL_ROOT/qpldata directory.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.

EXAMPLES
The following examples demonstrate use of this utility in a command line:

- The following command runs the utility on bookmark files located in the search directory pointed to by the QPL_H_root_dirs variable in the options.txt file in $QPL_ROOT/qpldata directory:
Chapter 9  *Repeatable Digital Validation (RDV) utilities*

harvester_jt.pl

• The following command runs the utility on the bookmark file named *BOOKMARK1.bkm* in the directory from which the utility is being run:

  ```
  harvester_jt.pl BOOKMARK1.bkm
  ```

• The following command runs the utility on bookmark files found in the directory named *anyDir*, which is a subdirectory existing in the current directory:

  ```
  harvester_jt.pl anyDir
  ```
qpl_convert_occs2tc

Converts the NX subfile-ID instance paths to Teamcenter occurrence unique identifier (UID) instance paths in the attribute data file. This attribute data file is generated by the ug_spacemap utility. The utility updates the attribute data file as well as the schema file. It is mandatory to provide a name for the attribute file as well as the schema file as part of the input parameters.

The utility uses the **UG ENTITY HANDLE** attribute on a BOM line to generate the subfile-ID string from the BOM line.

Entity handles are generally in the following format:

\[
\begin{align*}
0 & \quad n & \quad n + 8 & \quad n + 16 \\
\hline
\end{align*}
\]

\[--------------------------xxxxxxxxxx--------------end\]

**xxx** is the subfile ID and **n + 16** is the end of the string. It is in hexadecimal representation.

This method generates the instance paths of BOM lines in terms of NX subfields and Teamcenter occurrence UIDs and adds them to the **sfid_uid** mapper. These strings are generated by concatenating the subfile-IDs (or Teamcenter UIDs) of BOM lines up until the top BOM line.

**SYNTAX**

\[
qpl_convert_occs2tc [-u=user-id | -p=password | -pf=password-file] [-g=group] \\
[-item=item-name | -key=item-key] \\
-rev=revision \\
-revision_rule=revision-rule-name \\
-view=view-name \\
-attr_file=attribute-file-name \\
-schema_file=schema-file-name \\
-h
\]

**ARGUMENTS**

- **-u**
  
  Specifies the user ID.
  
  This is generally **infodba** or another privileged user. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  
  Specifies the password.
  
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.
  
  If this argument is not used, the system assumes the **user-ID** value to be the password.
-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-item
Specifies the item ID for the root of the BOM structure.

-key
Specifies a string used to identify an item instead of specifying an item using the -item and -rev arguments.

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-rev
Specifies the item revision for the root of the BOM structure.

-revision_rule
Specifies a named revision rule. Defaults to the site default, frequently the latest working revision.

-view
Specifies the view to be used.

-attr_file
Specifies the file to contain the converted attributes.

-schema_file
Specifies the file to contain the converted schema.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.
rdv_context_download

Evaluates or reevaluates a structure context object (SCO) and writes DesignContext information and user attributes into a PLM XML or AJT (BOMWriter) file. The contents of the SCO can represent the entire product or a subassembly. The information written into the PLM XML file depends on the specified input transfer mode.

The output file is used to facilitate the sharing of data between users, programs, or sites using Multi-Site Collaboration. You can download this file to the operating system or import it into Teamcenter as a dataset.

This utility can process a single SCO, a list of SCOs, or all SCOs in a specified folder. If you process a list or folder of SCOs, a separate PLM XML file is generated for each SCO. It can also accept a saved query as input.

If you use Multi-Site Collaboration, the validate_and_replicate_assembly utility can consume the PLM XML files created by this utility and replicate them across sites.

If the output PLM XML file is in BOMWriter format, you can launch it in Lifecycle Visualization.

SYNTAX


ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.
-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-item_id
Specifies the item ID.

-key
Specifies the key of the item. Use the following format:

[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]

To find the key of an object, use the get_key_string utility.
For more information, see the Business Modeler IDE Guide.

-rev_id
Specifies the revision ID.

-variant_rule_name
Specifies the name of the variant rule configuring the structure.

-revision_rule_name
Specifies the name of the revision rule configuring the structure, which defaults according to the TC_config_rule_name preference.

-engg_change_id
Specifies the engineering change item ID. The utility configures an RDV context based on change attachments and the latest engineering change revision.

-engg_change_key
Specifies the key of the engineering change item. The utility configures an RDV context based on change attachments and the latest engineering change revision.
To find the key of an object, use the get_key_string utility.
For more information, see the Business Modeler IDE Guide.

-folder_name
Configures a context based on attachments of the folder/envelope/engineering-change-revision-name.
The attachments include the following:

- One product item revision
- One or more component item IDs
- Optional revision rule, overwrites the -r argument
- Optional variant rule, overwrites the -v argument

**Note** Search results are affected by the following preferences:

- **TC_config_rule_name**
- **WebDesignContextDefaultSearchDistance**
- **PortalDesignContextMaxMatchingObjects**
- **PortalDesignContextMaxMatchingBOMLines**

For more information, see the *Preferences and Environment Variables Reference*.

**-process_name**
Specifies the name of the workflow processes that have not yet completed.

**-zone_name**
Specifies the name of the zone. When both the -zone_name and -zone_type arguments are specified, the utility performs a search according to the preference settings.

**-zone_type**
Specifies the type of the zone, either **BOX** or **PLANE**. The -zone_name argument must be used in conjunction with the -zone_type argument.

**-operator**
Specifies the zone type operator. Valid values for the BOX zone type are **Within**, **Outside**, or **Interferes**; the default value is **Within**. Valid values for the PLANE zone type are **Above**, **Below**, and **Intersects**; the default value is **Intersects**. The -zone_name and -zone_type arguments must be specified in conjunction with the -operator argument.

**Note** This utility performs a proximity search if the -zone_name argument is not specified and performs a name zone search if the -zone_type argument is not specified.

**-sco_download**
Specifies if the SCO should be downloaded.

**-user_attribute**
Specify user attributes in the same format described for the **bomwriter** utility.
-sco_name
Specifies the name of the structure context object from which a PLM XML is generated. You can specify more than one SCO as a comma-separated list, for example:

SCO1,SCO2,SCO3

-saved_query_name
Specifies the name of a Teamcenter saved query that retrieves a set of SCOs to process for given search criteria.

-sco_folder
Specifies the name of a Teamcenter folder that contains a set of SCOs to process.

-transfer_mode
Specifies the name of a transfer mode to generate the PLM XML file. If no mode is specified, the SCOs are evaluated with the default transfer mode.

-output_format
Specifies the output file format, either BOM writer PLM XML or AJT, or PIE PLM XML. The default format is BOM writer PLM XML.

-file_name
Specifies the name of the output file to which the data is output. Provide the file name without an extension.

-absolute_path
Specifies the full path of the AJT or PLM XML file where the data is to be stored. If not specified, the utility looks at the value of the RDVContextDownloadDirectory preference. Otherwise, the current working directory is used as the default path.

**Note** The absolute_path must be specified without an extension. For example, /users/x_user/tempfile for UNIX or c:\temp\tempfile for Windows.

-h
Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities* and the RDV_debug environment variable. If this variable is set, the Teamcenter syslog file contains additional debugging information.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

You must have the necessary create or modify privileges to successfully run this utility. If you do not have the appropriate privileges, data is not imported and an error message is written to the log file.

**EXAMPLES**

- The following example creates a PLM XML file called TL109375 and uses the TC_config_rule_name preference to determine the revision rule:

  `$TC_ROOT/bin/rdv_context_download -item_id=TL109375 -rev_id=004`

- The following example creates a PLM XML file named TL109375, but enforces revision configuration using the Beta or less w/pdi revision rule:
$TC_ROOT/bin/rdv_context_download -item_id=TL109375 -rev_id=004
-r="Beta or less w/pdi"

- The following example logs in as the infodba user and creates a PLM XML file named 11_21_sco1_a:

$TC_ROOT/bin/rdv_context_download -sco_name=11_21_sco1_a -u=infodba
-p=infodba -g=dba

- The following example prompts the user for autologin and creates a PLM XML file named assy_ajt_file:

$TC_ROOT/bin/rdv_context_download -folder=test_assy
-fileName=assy_ajt_file

The following code shows the PLM XML file created by this example.

```
<?xml version="1.0" ?>
<PLMXML xmlns="http://www.plmxml.org/Schemas/PLMXMLSchema"
schemaVersion="4" date="2004-01-21" time="06:03:46" author="unset">
<ProductDef id="id1">
  <InstanceGraph id="id2" rootRefs="id4">
    <Instance id="id25" partRef="#id16" transformRef="id27" representationRefs="#id22">
      <UserData id="id26">
        ...
      </UserData>
    </Occurrence>
    <Occurrence id="id963" partRef="#id949" instanceRefs="#id958" representationRefs="#id955" >
      <UserData id="id964">
        <UserValue value="/998845" title="UGOCC_SUBFILEID"></UserValue>
        <UserValue value="None" title="UGOCC_REFSET"></UserValue>
        <UserValue value="true" title="__PLM_REASON_SELECTED"></UserValue>
      </UserData>
    </Occurrence>
  </InstanceGraph>
</ProductDef></PLMXML>
```

Sample PLM XML file

- The following example prompts the user for autologin and creates an ASCII JT assembly file named assy_ajt_file:

$TC_ROOT/bin/rdv_context_download -folder=assy_folder
-fileName=assy_ajt_file -bom_writer_format=AJT
Chapter 9  Repeatable Digital Validation (RDV) utilities

The following code sample shows the sample AJT file created in this example.

```
# DirectModel ASCII file - version 1.0
# Written by BOMWriterFormatAJT Teamcenter
Wednesday, 01/21/2004 05:56:39PM
0 ASM "AC7192-Product Book 2.asm;0;0;"
   ATTR Type="STRING" Key="DB_PART_NO" Value="AC7192"
   ATTR Type="STRING" Key="DB_PART_REV" Value="A"
   ATTR Type="STRING" Key="__PLM_ITEMREV_UID" Value="Q1_o4OCyn6c4PB"
   ATTR Type="STRING" Key="DB_OCC_UID" Value="AAAAAAAAAAAA"
1 ASM "0728-045.asm;1885772752;-1684155971;"
   ATTR Type="STRING" Key="DB_PART_NO" Value="0728-045"
   ATTR Type="STRING" Key="DB_PART_REV" Value="A"
   ATTR Type="STRING" Key="__PLM_ITEMREV_UID" Value="QX9o4OCyn6c4PB"
   ATTR Type="STRING" Key="DB_OCC_UID" Value="0z$o4OCyn6c4PB"
Matrix [   1.000 0.000 0.000 0.000 ]
   [ 0.000 0.998 -0.067 0.000 ]
   [ 0.000 0.067 0.998 0.000 ]
   [ -5.646 0.375 -0.150 1.000 ]
2 PRT "1602-023.prt;1968592985;273560760;"
2 PRT "1602-023.prt;1968592985;1738192227;"
2 PRT "1602-017.prt;1215126988;-365534238;"
2 PRT "1602-017.prt;1215126988;365534238;"
1 PRT "H02976.prt;1812813847;-640191115;"
1 PRT "E6895.prt;1559507236;458164065;"
1 PRT "H02592.prt;1415580139;939946980;"
1 PRT "E6820.prt;935130874;650811331;"
1 PRT "ERG056.prt;80810929;396904688;"
# end
```

Sample AJT file
rdv_migrate_architecture

Effective from Teamcenter 2007.1 MP7, Platform Designer allows you to revise architecture breakdowns and carry forward all architecture breakdown elements (ABEs), variability, named variant expressions (NVEs) and part solutions to the next revision. Architectures created in previous versions of Teamcenter are not compatible with the current format and must be updated.

Use this utility to update all existing ABEs to the new format. After migration, each ABE is associated with two sets of appearance path nodes (APNs) and each APN is linked to an AbsOccData object. One AbsOccData object has its immediate parent as the context and the other AbsOccData object has the top-level architecture of the architecture breakdown as its context. The suppression flag on the first AbsOccData object is set to true, and the second suppression flag is set to false.

**Note** Use the `rdv_migrate_part_solutions` utility to migrate the associated part solutions.

**SYNTAX**

```
rdv_migrate_architecture [-u=user-id [-p=password | -pf=password-file] -g=group] [-arch_ItemId<TOP-ARCH-ID>] [-arch_key={[keyAttr1=keyVal1],[keyAttr2=keyVal2]...,[keyAttrN=keyValN]}] [-arch_RevId<TOP-ARCH-REVISION-ID>] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.

  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

For more information about managing password files, see *Manage password files*. 
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-arch_ItemId
Specifies the item ID of the top architecture element.

-arch_key
Specifies the keys of the item to track. Use the following format:

[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]

-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities* and the RDV_debug environment variable. If this variable is set, the syslog file contains additional debugging information.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
Run this utility with a user ID that has sufficient permissions to create tasks and to write to the specified architecture breakdown and ABE objects in the database.

EXAMPLES
- The following example migrates a top architecture element with an item ID of architecture001:

```
rdv_migrate_architecture -u=infodba -p=infodba -g=dba -arch_ItemId=architecture001
```
rdv_migrate_part_solutions

Effective from Teamcenter 2007.1 MP7, Platform Designer allows you to revise architecture breakdowns and carry forward all architecture breakdown elements (ABEs), variability, named variant expressions (NVEs) and part solutions to the next revision. Part solutions created in previous versions of Teamcenter are not compatible with the current format and must be updated.

Use this utility to migrate existing part solution data to the current format. The utility takes the top architecture element of an existing breakdown and fetches all the lines of usage for each of the ABEs in that breakdown. It then creates a LOUHOLDER holder under the top line, if one does not already exist. It adds all the part solutions under this holder and associates them with the corresponding ABEs with Appearance Group relations.

**Note** Use the `rdv_migrate_architecture` utility to migrate the associated architecture.

### SYNTAX

```
rdv_migrate_part_solutions [-u=user-id [-p=password | -pf=password-file] -g=group]
[-arch_ItemId=<TOP-ARCH-ID>] |
[-arch_key=[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]]
[-arch_RevId=<TOP-ARCH-REVISION-ID>]
[-h]
```

### ARGUMENTS

- **-u**

  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**

  Specifies the password.

  If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

  If this argument is not used, the system assumes the *user-ID* value to be the password.

- **-pf**

  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.

  For more information about managing password files, see Manage password files.
Chapter 9  
*Repeatable Digital Validation (RDV) utilities*

This argument is mutually exclusive with the `-p` argument.

-`g`
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-`arch_ItemId`
Specifies the item ID of the top architecture element.

-`arch_key`
Specifies the architecture breakdown keys of the item to track. Use the following format:

```
[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]
```

-`arch_RevId`
 Specifies the revision identifier of the same top architecture element.

-`h`
 Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities* and the `RDV_debug` environment variable. If this variable is set, the `syslog` file contains additional debugging information.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

Run this utility with a user ID that has sufficient permissions to create tasks and to write to the specified objects in the database.

**EXAMPLES**

- The following example migrates the part solutions in a top architecture element with an item ID of `architecture001` and revision identifier of `architecture001Rev1`:

  ```
  rdv_migrate_part_solutions -u=infodba -p=infodba -g=dba
  -arch_ItemId=architecture001 -arch_RevId=architecture001Rev1
  ```
rdv_run_audit_report

Generates audit reports that report the information related to mismatches that exist between VAS CAD structure and usage data that is imported into Teamcenter.

Audit reports allow you to check that design solutions exist for each option combination (NVE) required on the architecture elements. This feature assumes you use both part and design solutions; if you use only part solutions, do not use this report.

**Note** You create audit reports for design solutions in Structure Manager. Use Platform Designer to create audit reports for part solutions.

To create an audit report for design solutions, Teamcenter first performs a consistency check, verifying that for each design solution in the selected installation assembly, there is a part solution that matches the NVE on the design solution. It also checks that the variant condition on the design solution is consistent with the variant condition on the part solution. If the NVE changes on the architecture or part solution, the variant condition on the design solution may be out-of-date and require refreshing. Alternatively, the design solution itself may be changed to meet the new NVE requirement.

Designers perform this type of audit on the installation assembly for which they are responsible. You cannot perform this audit on a level higher than the installation assembly.

You can still use the audit report if no part solutions exist yet, because the NVEs on the architecture are checked. You can create an audit report for a particular configuration by setting the variant and revision rules audit algorithm details. The audit checks the following:

- If the NVE is not referenced by any solution.
- If the NVE is referenced by one or more solutions with a matching architecture element ID, but the variant condition is out-of-date (assuming there are no split NVEs).
- If the usage quantity is not a positive integer.
- If the solutions are referencing an NVE, but the architecture element ID references a split NVE.
- If the NVE is referenced by one or more solutions, but none of them have an architecture element ID that matches that of the NVE. The audit report delivers a list of architecture breakdowns in rows, with colored indicators specifying whether the line is an exact, partial, or mismatch with respect to an NVE, part number (typically the part solution ID), and usage quantity.

The audit algorithms use data stored in occurrence notes on the design solution. It is therefore necessary to replace a design in the product using the Replace Design in Product wizard before the audit can be run to populate the appropriate occurrence notes. These occurrence notes are:

- **Usage_Product**
- **Usage_PartNumber**
Usage_Quantity

Configure these occurrence notes by setting the `RDV_copied_occurrence_notes` preference.

SYNTAX

```
rdv_run_audit_report [-u=user-id  [-p=password | -pf=password-file] -g=group]
[-product_id=item-id-of-top-level-product | -product_key=key-id-of-top-level-product]
[-product_rev_id=revision-id]
-v_rule=saved-variant-rule
-rev_rule=revision-rule-name
[-input_file=input-file-path | -keys_input_file=keys-input-file-path]
-h
```

ARGUMENTS

-u
Specifies the user ID.

This is generally `infoDBa` or another privileged user. If this argument is used without a value, the operating system user name is used.

-Note: If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.

If this argument is not used, the system assumes the `user-ID` value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

For more information about managing password files, see `Manage password files`.

This argument is mutually exclusive with the `-p` argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-product_id
Specifies the item ID of the top-level product.

-product_key
Specifies the key of the top-level product. This argument can be used to identify an item instead of the `-product_id` argument.

To find the key of an object, use the `get_key_string` utility.
For more information, see the *Business Modeler IDE Guide*.

- **product_rev_id**
  Specifies the item ID of the top-level product revision.

- **v_rule**
  Specifies the saved variant rule.

- **rev_rule**
  Specifies a named revision rule. Defaults to the site default, frequently the latest **working** revision.

- **input_file**
  Specifies the path to the file used for input when you use the **product_id** argument.

- **keys_input_file**
  Specifies the path to the file used for input when you use the **product_key** argument.

- **h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

None.
rdv_set_default_variant_condition

Checks whether the input item has any qualified occurrences attached to it and sets a default variant condition on them so that the occurrence can participate in variant configuration. This utility configures the structure using the revision rule provided as input. If the revision rule is not specified, it uses the default revision rule.

This utility also sets the variant condition specified as input. If the variant condition is not specified then it uses the variant condition specified in the RDV_default_variant_condition preference.

SYNTAX

```
rdv_set_default_variant_condition [-u=user-id | -p=password | -pf=password-file]
    [-g=group]
    [-item=item-ID | -key=key-ID]
    [-revision_rule=revision-rule-name]
    [-variant_condition=condition-name]
    [-delimiter=delimiter-string]
    [-qualified_occu_scan_depth=depth]
    -h
```

ARGUMENTS

- **u**
  Specifies the user ID.
  
  This is generally infodba or another privileged user. If this argument is used without a value, the operating system user name is used.

  **[Note]** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **p**
  Specifies the password.
  
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
  
  If this argument is not used, the system assumes the user-ID value to be the password.

- **pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  
  For more information about managing password files, see Manage password files.
  
  This argument is mutually exclusive with the -p argument.

- **g**
  Specifies the group associated with the user.
  
  If used without a value, the user’s default group is assumed.
-item
Specifies the ID of the item to be used for the variant condition.

-key
Specifies a string used to identify an item instead of specifying an item using the -item argument.

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-revision_rule
Specifies a named revision rule. Defaults to the site default, frequently the latest working revision.

-variant_condition (Optional)
Specifies the variant condition.

-delimiter (Optional)
Specifies the delimiter to place between records.

-qualified_occu_scan_depth (Optional)
Specifies the level to scan occurrences.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
• The following example configures the structure using default revision rule, scans the item for null variant components, and sets the default variant condition specified in preference files:

    rdv_set_default_variant_condition -item_id=TL109375

• The following example configures the structure using the latest working revision rule, scans the item for null variant components, and sets the default variant condition specified in preference files:

    rdv_set_default_variant_condition -item_id=TL109375
    -revision_rule=Latest Working

• The following example configures the structure using the latest working revision rule, scans the item for null variant components, and sets the variant data (Color=Red) on null variant components:

    rdv_set_default_variant_condition -item_id=TL109375
    -revision_rule=Latest Working -variant_condition=002763:Color:Red
Chapter 9  Repeatable Digital Validation (RDV) utilities

**start_sco_dispatcher**

Starts the structure context object (SCO) dispatcher to initiate the transfer of SCOs created by the `rdv_context_download` utility to other sites. The `validate_and_replicate_assembly` utility subsequently consumes the PLM XML files created by the `rdv_context_download` utility and replicates them across sites.

**SYNTAX**

```
start_sco_dispatcher [-u=user-id [-p=password | -pf=password-file] -g=group]
-saved_query_name=Teamcenter-saved-query-name |
-sco_folder=Teamcenter-folder-name |
-sco_list=list-of-scots | -sco_name=StructureContextObjectName
-site_name=Destination-site-name | -site_url=Destination-site-url
[-transfer_mode=transfer-mode-name] [-dataset_time_interval=time-interval]
[-user_attrs=user-attributes] [ -h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  
  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the `-pf` argument.
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-sco_name**
  Specifies the name of the SCO from which a PLM XML file is generated. You can specify more than one SCO in a comma-separated list, for example:
SCO1,SCO2,SCO3

-sco_list
Specifies a list of SCOs to process. You can specify more than one SCO in a hash-separated list, for example:

SCO1#SCO2#SCO3

-saved_query_name
Specifies the name of a Teamcenter saved query that retrieves a set of SCOs to process for given search criteria.

-sco_folder
Specifies the name of a Teamcenter folder that contains a set of SCOs to process.

-transfer_mode
Specifies the name of a transfer mode to generate the PLM XML file. If no mode is specified, the SCOs are evaluated with the default transfer mode.

-site_name
Specifies the names of the sites with databases to which Teamcenter sends the SCOs. You can specify more than one site in a hash-separated list, for example:

Site1#Site2#Site3

-site_url
Specifies the URLs of the sites to which Teamcenter sends the SCOs. Use URLs, rather than site names, if the target sites do not have databases. You can specify more than one URL in a hash-separated list, for example:

Site1#Site2#Site3

-dataset_time_interval
Specifies the interval in minutes at which the rdvcontextdownload translator generates PLM XML files. If no interval is specified, the default value of 60 minutes is used.

-user_attribute
Specify user attributes to include in the PLM XML file. The specified attributes must be BOM line properties. You can specify more than one user attribute as a hash-separated list, for example:

Owningsitename#ItemID#RevisionID##last_mod_date

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
- You must have the necessary create or modify data privileges to successfully run this utility. If you do not have the appropriate privileges, data is not imported and an error message is written to the log file.
If the utility evaluates an SCO and identifies that the target BOM lines are not valid, it exits and displays an error message to the user. It does not process any further SCOs.

**EXAMPLES**

- The following example runs a saved query called **SCO_SQR** to transfer SCOs to a single database site using Multi-Site Collaboration:

  ```
  start_sco_dispatcher -saved_query_name=SCO_SQR -site_name=testsite -dataset_time_interval=120
  ```

- The following example transfers all SCOs in the **SCO_folder** folder to a single site without a database. The transfer is achieved via FMS by specifying the target site URL:

  ```
  start_sco_dispatcher -folder_name=SCO_folder -transfer_mode=PIEPLXMLDEFAULT -site-url=http://testsite:7001
  ```
Enables a site to synchronize product appearance path nodes (APNs) with other sites. The utility also synchronizes the absolute occurrence data that is associated with these APNs. In addition, it also synchronizes item revision attachments with the RDV_appgrp_toplevel_relation relationship type. In RDV, this attachment type associates part usage occurrence groups with an architecture revision. Part usage occurrence groups are workspace objects that collect one architecture element (APN) and all corresponding part usage occurrences (APNs). A part usage references its architecture element by means of this part usage occurrence group. Because RDV_appgrp_toplevel_relation attachments are handled with this utility, Siemens PLM Software recommends you exclude this relationship when replicating the architecture revision with the data_sync or data_share utilities.

This utility is similar to the sync_product_variant_data utility in that it synchronizes occurrence data, occurrence roots, APNs etc. while the sync_product_variant_data utility synchronizes variant data, such as variant objects, variant revision objects, item revision expressions, and NVEs.

This utility operates in the following modes and each mode has different mandatory and optional arguments:

- **Export to disk**
  Use of the -item argument indicates that the utility runs in export mode. Note that either -dir=directory-name or -count are required as indicated with the { | } notation.

- **Send to remote IDSM**
  Use of the -dir and -site arguments indicate that the utility runs in send mode.

- **Read/import from disk**
  Use of the -dir argument without the -site argument indicates that the utility runs in read/import mode. Note that the utility runs in read-only mode if the -browse argument is specified, otherwise data is imported to the local site.
Chapter 9  Repeateable Digital Validation (RDV) utilities

SYNTAX

- **Export to disk**


- **Send to remote IDSM**


- **Read / import from disk**


ARGUMENTS

- **-dir**
  Specifies a local directory name. The utility writes exported data into this directory. If the directory exists, it must not contain export data.

  For export mode, the directory may or may not exist. If the directory exists, it must not contain exported data, for example, it must not have been used as an export directory in a previous run. For send or read/import modes, the directory must exist and must contain export data.

- **-item**
  Item ID of the item of which appearance and absolute occurrence data is to be exported.

- **-key**
  Specifies the key of the object. The -key argument can be used instead of the -item argument.

  To find the key of an object, use the get_key_string utility.

  For more information, see the Business Modeler IDE Guide.

- **-arch**
  Exports appearance and absolute occurrence data of the architecture items that are associated with the item specified with the -item argument.
-site
This argument can only be used with the export or send modes; it cannot be used in read/browse mode.

- Export mode
Specifies the sites to which objects are to be replicated. Upon exporting an object, the utility creates one export record for each site if this object type supports export records. Export records contain the time of export to support incremental replication. If the user requests a roll back at the end of the utility, all export records that were generated during export are rolled back.

- Send mode
Specifies the sites to which objects are to be sent. This mode requires an IDSM service to be available at the remote site. If multiple -site switches are used to specify multiple sites, the export directory is sent to each site sequentially. For better throughput, run separate processes for each site instead of running one process for multiple sites.

-count
Reports the number of objects to export. If used with the -modified_only argument, the count indicates the number of changed objects that need to be replicated to at least one of the sites specified with the -site argument. If used with the -tag_list argument, a tag list file is written.

-exclude_variants
Causes the export to exclude objects of either the Variant or VariantRevision class that are attached to the item specified with the -item argument. This argument is useful when exporting in multiple batches. If this option is not set, each batch contains all variant options referenced from its expressions causing multiple batches to contain an overlapping set of objects. Overlapping sets of objects cannot be imported in parallel.

-apn_roots_only
Specifies to only export appearance path node roots and absolute occurrence data qualifiers. If this argument is not specified, these objects are excluded.

-silent
Disables rollback capability and rollback confirmation dialog and executes in silent mode.

-rollback_on_failure
Automatically rolls back on any error code other than ITK_ok.

-debug
Turns on verbose mode that generates a detailed export and modified dates.

-bypass
Disables access control. You must have DBA privileges to use this argument.
-modified_only
Specifies to only export objects that have changed since they were exported to the sites specified by the -site argument.

Note If more than one site is specified, the object is exported according to the most out-of-date export record. This can cause some objects to be exported to some sites even though these sites appear to have an up-to-date export record. After completing the export, all sites specified with the -site argument have the same export date for each exported object.

-reason
Specifies the reason for export. The maximum number of characters is 240. If no reason is specified, the command line of running the export utility is used as the reason text.

-from
Specifies the index of the first object to be exported. The default value is zero.

Use this argument for export, send, and read/import modes. In export and send mode, the index refers to the tag list file specified with the -tag_list argument. Otherwise, it refers to the object list in the export data located in the directory specified with the -dir argument.

-to
Specifies the index of the object following the last object to process. For example, if you specify -to=10, the object at index 9 is the last object to be processed.

Use this argument for export, send, and read/import modes. In export and send mode, the index refers to the tag list file specified with the -tag_list argument. Otherwise, it refers to the object list in the export data located in the directory specified with the -dir argument.

-tag_list
Specifies a file name containing a list of object UIDs to export. This file is written if the -count argument is specified. If the -count argument is not specified, the file is read.

-browse
Specifies to browse objects in the export area without exporting or importing.

-u
Specifies the user ID.

This is a required argument unless the TC_auto_login site preference is set.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.
-p
Specifies the password.
This is a required argument unless the TC_auto_login site preference is set.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
This is a required argument unless the TC_auto_login site preference is set.
If used without a value, the user’s default group is assumed.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.
To bypass the export of named variant expressions, set the RDV_export_nve environment variable to FALSE.
When using the data_share and data_sync utilities, Siemens PLM Software recommends you exclude APN and NVE synchronization by setting the following environment variables:
- TC_EXCLUDE_APN=TRUE
- RDV_export_nve=FALSE

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
1. Export to disk all appearance path nodes, absolute occurrences, and absolute occurrence data on item RDV00190, excluding the item itself:
   ```
   sync_product_apns -u=infodba -p=*** -g=dba
   -bypass -dir=C:\Temp\RDV00190_apns -item=RDV00190
   -site=cologne -site=turin
   ```

2. Export to disk all appearance path nodes, absolute occurrences, and absolute occurrence data on item RDV00190, along with data of associated architecture breakdowns:
   ```
   sync_product_apns -u=infodba -p=*** -g=dba
   ```


3. Export to disk all modified appearance path nodes, absolute occurrences, and absolute occurrence data on item **RDV00190**, and its architecture breakdowns:

   ```
   sync_product_apns -u=infodba -p=*** -g=dba
   -bypass -dir=C:\Temp\RDV00190_apns -item=RDV00190 -arch
   -site=cologne -site=turin
   ```

4. Determine objects for an incremental update of **RDV00190** to sites Cologne and Turin. This includes appearance path nodes, absolute occurrences, and absolute occurrence data for all revisions of **RDV00190** and all revisions of associated architecture breakdown items. Object UIDs are written to the **uid.txt** text file for later export.

   ```
   sync_product_apns -u=infodba -p=*** -g=dba
   -bypass -dir=C:\Temp\RDV00190_apns -item=RDV00190 -arch
   -count -modified_only -site=cologne -site=turin -tag_list=uid.txt
   ```

5. Export to disk object index numbers 1,000 through 1,999 of all appearance path nodes, absolute occurrences, and absolute occurrence data of item **RDV00190**, along with appearance path nodes, absolute occurrences, and absolute occurrence data of associated architecture breakdowns. Objects are exported as determined in example 4.

   The **-exclude_variants** argument causes variant and variant revision objects associated with item **RDV00190** to be excluded. This allows exporting variant data with the **sync_product_variant_data** utility in parallel.

   ```
   sync_product_apns -u=infodba -p=*** -g=dba
   -bypass -dir=C:\Temp\RDV00190_apns -item=RDV00190 -arch
   -site=cologne -site=turin -from=1000 -to=2000
   -exclude_variants -tag_list=uid.txt
   ```

6. Export to disk object index numbers 1,000 through the end of all appearance path nodes, absolute occurrences, and absolute occurrence data of item **RDV00190**, along with appearance path nodes, absolute occurrences, and absolute occurrence data of associated architecture breakdowns:

   ```
   sync_product_apns -u=infodba -p=*** -g=dba
   -bypass -dir=C:\Temp\RDV00190_apns -item=RDV00190 -arch
   -site=cologne -site=turin -from=1000 -exclude_variants
   ```

7. Browse export area:

   ```
   sync_product_apns -u=infodba -p=*** -g=dba
   -dir=C:\Temp\RDV00190_apns -browse
   ```

8. Send export area to Turin's IDSM:

   ```
   sync_product_apns -u=infodba -p=*** -g=dba
   -dir=C:\Temp\RDV00190_apns -site=turin
   ```

9. Send object index numbers 1,000 through 1,999 in export area to Turin:

   ```
   sync_product_apns -u=infodba -p=*** -g=dba
   -dir=C:\Temp\RDV00190_apns -site=turin -from=1000 -to=2000
   ```

10. Browse import area:

    ```
    sync_product_variant_data -u=infodba -p=*** -g=dba
    -dir=C:\Temp\RDV00190_apns -browse
    ```
11. Import objects in import area:
   
   ```bash
   sync_product_variant_data -u=infodba -p=*** -g=dba 
   -dir=C:\Temp\RDV00190_variant_data
   ```

12. Import object index numbers 1,000 through 1,999 in import area:

   ```bash
   sync_product_variant_data -u=infodba -p=*** -g=dba 
   -dir=C:\Temp\RDV00190_apns-from=1000 -to=2000
   ```
sync_product_variant_data

Enables sites to synchronize product variant data with other sites.

This utility is similar to the sync_product_apns utility in that it synchronizes variant data, such as variant objects, variant revision objects, item revision expressions, and NVEs while the sync_product_apns utility synchronizes occurrence data, occurrence roots, APNs, and so forth.

This utility operates in the following modes and each mode has different mandatory and optional arguments:

• **Export to disk**
  Using the -item argument indicates that the utility runs in export mode. Note that either -dir=directory-name or -count are required as indicated with the {||} notation.

• **Send to remote IDSM**
  Using the -dir and -site arguments indicate that the utility runs in send mode.

• **Read / import from disk**
  Using the -dir argument without the -site argument indicates that the utility runs in read/import mode. The utility runs in read-only mode if the -browse argument is specified; otherwise, data is imported to the local site

**SYNTAX**

• **Export to disk**

  ```
  sync_product_variant_data
  [-u=user-id [-p=password | -pf=password-file] -g=group]
  [-item=item-id | -key=key-id] [-rev=revision-id] [-arch] [-bypass]
  [-dir=directory-name [-reason=text]]
  [-site=site-name] [-from=number] [-to=number]
  [-count] [-tag_list=filename] [-modified_only]
  [-debug] [-exclude_variants]
  [-silent] [-rollback_on_failure]
  ```

• **Send to remote IDSM**

  ```
  sync_product_variant_data
  [-u=user-id -p=password | -pf=password-file -g=group]
  [-dir=directory-name]
  [-site=site-name]
  [-from=number] [-to=number]
  [-silent] [-rollback_on_failure]
  ```

• **Read / import from disk**

  ```
  sync_product_variant_data
  [-u=user-id [-p=password | -pf=password-file] -g=group]
  [-dir=directory-name [-browse] [-bypass]
  [-from=number] [-to=number]
  ```
ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

-Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files. This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-dir
Specifies a local directory name. The utility writes exported area into this directory. If the directory exists, it must not contain export data.

For export mode, the directory may or may not exist. If the directory exists, it must not contain exported data, for example, it must not have been used as an export directory in a previous run. For send or read/import modes, the directory must exist and must contain export data.

-item
Specifies the item ID of the item of which variant data is to be exported.

-key
Specifies the key of the object. The -key argument can be used instead of the -item argument.

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.
Chapter 9  
Repeatable Digital Validation (RDV) utilities

-rev
Specifies the revision ID of the item revision of which variant data is to be exported in addition to the variant data of its item.

-arch
Exports variant data of the architecture items and architecture revisions that are associated with the item specified with the -item argument and the revision specified with the -rev argument.

-site
This argument can only be used with the export or send modes; it cannot be used in read/browse mode.

• export mode
  Specifies the sites to which objects are to be replicated. Upon exporting an object, the utility creates one export record for each site if this object type supports export records. Export records contain the time of export to support incremental replication. If the user requests a rollback at the end of the utility, all export records that were generated during export are rolled back.

• send mode
  Specifies the sites to which objects are to be sent. This mode requires an IDSM service to be available at the remote site. If multiple -site switches are used to specify multiple sites, the export directory is sent to each site sequentially. For better throughput, run separate processes for each site instead of running one process for multiple sites.

-count
Reports the number of objects to export. If used with the -modified_only argument, the count indicates the number of changed objects that need to be replicated to at least one of the sites specified with the -site argument. If used with the -tag_list argument, a tag list file is written.

-exclude_variants
Causes the export to exclude objects of either the Variant or VariantRevision class that are attached to the item specified with the -item argument. This argument is useful when exporting in multiple batches. If this option is not set, each batch contains all variant options referenced from its expressions causing multiple batches to contain an overlapping set of objects. Overlapping sets of objects cannot be imported in parallel.

-silent
Disables rollback capability and rollback confirmation dialog and executes in silent mode.

-rollback_on_failure
Automatically rolls back on any error code other than ITK_ok.

-debug
Turns on verbose mode, which generates a detailed report of export and modified dates.

-bypass
Disables access control. You must have DBA privileges to use this argument.
-modified_only
Specifies to only export objects that have changed since they were exported to the sites specified by the -site argument.

Note: If more than one site is specified, the object is exported according to the most out-of-date export record. This can cause some objects to be exported to some sites even though these sites appear to have an up-to-date export record. After completing the export, all sites specified with the -site argument have the same export date for each exported object.

-reason
Specifies the reason for export. The maximum number of characters is 240. If no reason is specified, the command line of running the export utility is used as the reason text.

-from
Specifies the index of the first object to be exported. The default value is zero.

Use this argument for export, send, and read/import modes. In export and send mode, the index refers to the tag list file specified with the -tag_list argument. Otherwise, it refers to the object list in the export data located in the directory specified with the -dir argument.

-to
Specifies the index of the object following the last object to process. For example if you specify -to=10, the object at index 9 is the last object to be processed.

Use this argument for export, send, and read/import modes. In export and send mode, the index refers to the tag list file specified with the -tag_list argument. Otherwise, it refers to the object list in the export data located in the directory specified with the -dir argument.

-tag_list
Specifies a file name containing a list of object UIDs to export. This file is written if the -count argument is specified. If the -count argument is not specified, the file is read.

-count
Reports the number of objects to export. If used with the -modified_only argument, the count indicates the number of changed objects that need to be replicated to at least one of the sites specified with the -site argument. If used with the -tag_list argument, a tag list file is written.

-browse
Specifies to browse objects in the export area without exporting or importing.

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.
In addition, to export named variant expressions (NVEs), you must set the RDV_export_nve preference to TRUE. To bypass the export of NVEs, set the RDV_export_nve preference to FALSE.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
1. Export to disk all variant options and variant revisions of item RDV00190, excluding the item itself:
   ```
   sync_product_variant_data -u=infodba -p=*** -g=dba
   -bypass -dir=C:\Temp\RDV00190_variant_data -item=RDV00190
   -site=cologne -site=turin
   ```
2. Export to disk all variant options and variant revisions of item RDV00190 with variant data of associated architecture breakdowns (mostly NVEs):
   ```
   sync_product_variant_data -u=infodba -p=*** -g=dba
   -bypass -dir=C:\Temp\RDV00190_variant_data -item=RDV00190
   -arch -site=cologne -site=turin
   ```
3. Export to disk all variant options and variant revisions of item RDV00190 and all modified NVEs on its architecture breakdowns:
4. Determine objects for an incremental update of RDV00190/D to sites Cologne and Turin. This includes variant expressions of RDV00190/D and its associated architecture breakdown revisions (mostly DECLARE and DEFAULT statements) and the NVEs of associated architecture breakdown items. Object UIDs are written to the uid.txt text file for later export.

```
sync_product_variant_data -u=infodba -p=*** -g=dba
  -bypass -dir=C:\Temp\RDV00190_variant_data -item=RDV00190
  -arch -modified_only -site=cologne -site=turin
```

5. Export to disk all variant options of item RDV00190 and all variant expressions (mostly DECLARE and DEFAULT statements) on revision D:

```
sync_product_variant_data -u=infodba -p=*** -g=dba
  -bypass -dir=C:\Temp\RDV00190_variant_data -item=RDV00190 -rev=D
  -arch -count -modified_only -site=cologne -site=turin
  -exclude_variants -tag_list=uid.txt
```

6. Export to disk all variant options of item RDV00190 and all variant expressions (mostly DECLARE and DEFAULT statements) on revision D, along with variant data of associated architecture breakdowns (mostly NVEs), and associated architecture breakdown revisions (mostly DECLARE and DEFAULT statements):

```
sync_product_variant_data -u=infodba -p=*** -g=dba
  -bypass -dir=C:\Temp\RDV00190_variant_data -item=RDV00190
  -rev=D -arch -site=cologne -site=turin
```

7. Export to disk object index numbers 1,000 through 1,999 of all variant expressions (mostly DECLARE and DEFAULT statements) of revision D of item RDV00190, along with variant data of associated architecture breakdowns (mostly NVEs), associated architecture breakdown revisions (mostly DECLARE and DEFAULT statements), and their attached saved variant rules. Objects are exported as determined in example 4.
To allow exporting and importing multiple batches in parallel it is recommended to export and import data as described in example 1, before batches as described in this example are exported and imported. The `-exclude_variants` command line option causes the objects exported in example 1 to be excluded. Otherwise, these variants would be exported into each export batch and upon importing a conflict may arise when importing the same variant object via parallel IDSM processes at the same time.

```bash
sync_product_variant_data -u=infodba -p=*** -g=dba
   -bypass -dir=C:\Temp\RDV00190_variant_data -item=RDV00190 -rev=D
   -arch -site=cologne -site=turin -from=1000 -to=2000
   -exclude_variants -tag_list=uid.txt
```

8. Export to disk object index numbers 1,000 through the end of all variant expressions (mostly DECLARE and DEFAULT statements) on revision D of item RDV00190, along with variant data of associated architecture breakdowns (mostly NVEs), associated architecture breakdown revisions (mostly DECLARE and DEFAULT statements), and their attached saved variant rules:

```bash
sync_product_variant_data -u=infodba -p=*** -g=dba
   -bypass -dir=C:\Temp\RDV00190_variant_data -item=RDV00190 -rev=D
   -arch -site=cologne -site=turin -from=1000 -exclude_variants
```

9. Browse export area:

```bash
sync_product_variant_data -u=infodba -p=*** -g=dba
   -dir=C:\Temp\RDV00190_variant_data -browse
```

10. Send export area to Turin's IDSM:

```bash
sync_product_variant_data -u=infodba -p=*** -g=dba
   -dir=C:\Temp\RDV00190_variant_data -site=turin
```

11. Send object index numbers 1,000 through 1,999 in export area to Turin:

```bash
sync_product_variant_data -u=infodba -p=*** -g=dba
   -dir=C:\Temp\RDV00190_variant_data -site=turin -from=1000 -to=2000
```

12. Browse import area:

```bash
sync_product_variant_data -u=infodba -p=*** -g=dba
   -dir=C:\Temp\RDV00190_variant_data -browse
```

13. Import objects in import area:

```bash
sync_product_variant_data -u=infodba -p=*** -g=dba
   -dir=C:\Temp\RDV00190_variant_data
```

14. Import object index numbers 1,000 through 1,999 in import area:

```bash
sync_product_variant_data -u=infodba -p=*** -g=dba
   -dir=C:\Temp\RDV00190_variant_data -from=1000 -to=2000
```

**RDV cache maintenance**
**get_qpl_harvester_assemblies**

Generates an XML file with the list of installation assemblies or special assemblies from the BOM structure of the assembly. This utility is used in the RDV cache maintenance process and its main purpose is to extract information about the assemblies that the QPL harvester must process.

**OVERVIEW**

The utility also finds new, modified, or deleted installation assemblies or special assemblies by comparing the newly generated XML file with a previously generated XML file. The following information about each node is recorded in the XML file:

- **Item_id**
- **Item_name**
- **item_rev**
- **released_date**
- **abs_transformation_matrix**
- **occurrence_path**
- **unique_id**
- **owning_id**

This information is used for two purposes:

- Comparing to the previously generated XML file to find installation assemblies or special assemblies that have been changed, released, deleted from, or added to the structure.

- Providing installation assembly information required by the **ug_spacemap** utility, such as the transformation matrix (absolute xform matrix), the occurrence path (**subfile_id** path that must be appended to the occurrence path of each part occurrence being processed in the installation assembly), and the **unique_id** that is used in conjunction with the **subfile_id** of the **part_occ** to arrive at a uniquely identified number for this **part_occ** in the context of the top-level assembly.

The following input is required for the **get_qpl_harvester_assemblies** utility:

- Item ID, revision, revision rule, or a bookmark file (optional)
- Level at which the special assemblies can be identified
- Branches in which the special assemblies must be identified
- Names of the modules

The cache administrator must specify the level in such a way that the assemblies selected at that level belong to the product assembly structure site. The administrator can specify different levels for different branches, for example:

```
"-select_by_level=4:CRITERIA MODULE"
"-select_by_level=3:STUDY MODULE"
```

The **get_qpl_harvester_assemblies** utility traverses the assembly structure of the assembly by walking down from the top node. Because installation assemblies do not exist in all the branches of the assemblies, it must identify the special
assemblies in those branches that do not have installation assemblies. The `get_qpl_harvester_assemblies` utility identifies the branch by its item name. The second-level assemblies in the vehicle structure represent the branch or modules and they are of type `CORP_Proc_Plan`. This utility is provided with the list of branches or modules, which do not have the installation assemblies. Therefore, as the program walks down the structure, it checks whether the branch name matches with the ones specified in special branches. If yes, it walks further down the level specified in the input argument for this branch and identifies the assemblies. It also checks whether or not these assemblies belong to the product assembly structure site. However, if the branch name does not match the special branches specified as input, then the program walks further down to look for the installation assemblies (with item type `CORP_install`). If this branch is integrated with modules, it requires special handling, as these branches may contain nested installation assemblies. Therefore, the program walks further down from the installation assembly level to find lower level installation assemblies for these modules.

To determine whether the branch is integrated with the module, it must check whether the names of the items of type `CORP_Proc_Plan` matches the module names specified as input to the program.

The following code sample illustrates a typical vehicle assembly structure. Red nodes in the structure are those identified as installation assemblies or special assemblies by the `get_qpl_harvester_assemblies` program.
SYNTAX

get_qpl_harvester_assemblies [-u=user-id | -p=password | -pf=password-file | -g=group]  
[-item_id=item-id] [-item_rev=rev-id] [-rev_rule=revision-rule]  
[-bookmark=bkm-file]  
-select_by_level=level|branch-name  
-select_bottom_up=module-name  
-[process_assy_list=file-with-items]  
-out_modified_list=file-to-be-created  
-out_special_assy_list=file-to-be-created

The following options can be specified multiple times:

-select_by_level  
-select_bottom_up

The following arguments are optional:

-process_assy_list  
-bookmark (If -item_id, -item_id, and -rev_rule arguments are specified.)  
-item_id, -item_rev, and -rev_rule (If -bookmark argument is specified.)

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value. This argument is mutually exclusive with the -pf argument.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.
-item_id
Specifies the item ID of the top-level vehicle assembly part.

-item_rev
Specifies the item revision of the top-level item.

-rev_rule
Specifies the revision rule with which the top-level vehicle assembly is configured.

-bookmark
Indicates the bookmark representing the top-level vehicle assembly structure.

**Note** Use of the -item_id, -item_rev, and -rev_rule arguments and the -bookmark argument are mutually exclusive.

-process_assy_list
Specifies the process assembly list, which is a flat file containing a list of item numbers. The assemblies listed in the file are added to the modified lists (either to the installation assembly list or the special list) even though they are not newly released.

**Note** If the assemblies do not satisfy one of the following requirements, they are not added to the installation assembly or special list:

1. Assembly items must belong to a specific item type, such as the installation assembly item type.
2. The assembly must be a special assembly that was selected based on the input options for the -select_by_level argument.

-select_by_level
Specifies module (branch) names in which the get_qpl_harvester_assemblies should identify the special assemblies based on the level specified in the option, for example:

- select_by_level=3:DESIGN CTR MODULE
  - select_by_level=4:CRITERIA MODULE

-select_bottom_up
Specifies the names of the items below which eligible assemblies in lower levels have precedence over eligible higher level assemblies. This option can be used to select lower-level assemblies of embedded products, for example subassemblies of an embedded power train within a vehicle product assembly structure. For example:

- select_bottom_up=POWERTRAIN
  - select_bottom_up=POWERTRAIN INTEGRATION

-out_xml_file
Specifies the name of the output structure XML file, as follows:

- out_xml_file=bkm_struct.xml

-out_modified_list
Specifies the name of the file in which the utility writes the modified or new installation assembly to be processed, as follows:

- out_modified_list=bkm_modified_date.txt
**-out_special_assy_list**
Specifies the name of the file in which the utility writes the special assemblies to be processed, as follows:

```
-out_special_assy_list=bkm_special_date.txt
```

**-h**
Displays help for this utility.

**ENVIRONMENT**
The Teamcenter environment must be set. Normally, this utility is run from the RDV cache maintenance scripts. This is one of the utilities in the RDV cache maintenance utility suite.

**FILES**
None.

**RESTRICTIONS**
None.

**EXAMPLES**

```
$TC_ROOT/bin/get_qpl_harvester_assemblies -u=username -p=passwd -g=group
-item_id=12344 -rev=A -rev_rule=Alpha
"-select_by_level=3:DESIGN CTR MODULE"
"-select_by_level=4:CRITERIA MODULE"
"-select_bottom_up=POWERTRAIN"
"-select_bottom_up=POWERTRAIN INTEGRATION"
-out_xml_file=/tmp/12344_A_struct.xml
```

```
$TC_ROOT/bin/get_qpl_harvester_assemblies -u=username -p=passwd -g=group
-bookmark=/tmp/12344_A.bkm
"-select_by_level=3:DESIGN CTR MODULE"
"-select_by_level=4:CRITERIA MODULE"
"-select_bottom_up=POWERTRAIN"
"-select_bottom_up=POWERTRAIN INTEGRATION"
-out_xml_file=/tmp/12344_A_struct.xml
```
Chapter

10 Manufacturing utilities
Chapter 10  Manufacturing utilities

cc_writer

Creates a PLM XML cache file for a process structure contained in a specified collaboration context object. The PLM XML cache file can be then loaded to Teamcenter lifecycle visualization mockup from within Teamcenter.

SYNTAX

cc_writer [-u=user-id [-p=password | -pf=password-file] -g=group] 
-cc_name=cc-name
| -cc_uid=uid -sc_name=structure-context-name 
| -sc_type=structure-context-type -output_file=file
[-ua=pref:preferenceName,target:targetName1,key:keyName1,prop:propName1
,.,,target:targetNameN,key:keyNameN,prop:propNameN] [-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-cc_name
Specifies the name of the collaboration context object. Either this argument or the -cc_uid argument must be specified.

Note The collaboration context name is not assumed to be unique. If more than one object is found, the utility returns an error message.
**-cc_uid**
Specifies the UID of the collaboration context object in Teamcenter. This argument is used in place of the `-cc_name` argument in situations where identifying the collaboration context object by name only is not sufficient because the collaboration context name is not unique in Teamcenter. A query must be defined to obtain the UID of a given collaboration context object.

**-sc_name**
Specifies the name of the structure context to export. This argument is optional. By default, the composition in the collaboration context object is exported. This argument is used only to export non-composition structure context.

**-sc_type**
Specifies the type of structure context to export, for example, `MEProcessContext`. This argument is optional.

**-output_file**
Specifies the name of the file to be created and associated with the dataset. The file is created in the current folder if a path is not specified or in the target directory if a path is specified.

**-ua**
Defines user attributes. The syntax is similar to the `bomwriter -ua` option.

- **pref**: preference-name-used-for-this-utility
  For example, `pref: CCExtraPLMXMLInstanceAttributes` picks the value of “CCExtraPLMXMLInstanceAttributes” as the user attribute.

- **target**: the-element-in-the-PLM XML-under-which-the-property-is-added
  Valid values are Part and Occurrence. If Part, the property is added to ProductRevisionView. If Occurrence, the property is added to Occurrence.

- **key**: name-of-property-in-PLM XML-file
- **prop**: name-of-the-property-in-Teamcenter

**-h**
Displays help for this utility.

**RESTRICTIONS**
None.

**EXAMPLES**

- To create the `cc_process_cache.plmxml` PLM XML file for the process structure found in the structure context of the `cc_process_cache` collaboration context object, enter the following command on a single line:

  ```
  cc_writer -u=infodba -p=infodba -g=dba -cc_name=cc_process_cache -sc_type=MEProcessContext -output_file=cc_process_cache.plmxml -ua=target:Part, key:Description,prop:bl_item_object_desc, target:Occurrence, key:FNA, prop:Usage_FNA
  ```

  The PLM XML file contains additional attributes exported as user data. The Description attribute is added to the product revision element and the FNA attribute is added to the occurrence element. Those attributes can then be presented with their values in Teamcenter lifecycle visualization mockup.
Chapter 10  Manufacturing utilities

- To create the `va_test.xml` PLM XML file for the process structure found in the structure context `process` of the collaboration context object `va_test`, enter the following command on a single line:

  ```
  cc_writer -u=infodba -p=infodba -g=dba -cc_name=va_test
  -output_file=va_test.xml -ua=pref:CC_ExtraPLMXMLInstanceAttributes,
  target:Occurrence, key:test_name, prop:CompoundName
  ```

The PLM XML file contains additional attributes exported as user data. The user attribute is the combination of what is specified in the `CC_ExtraPLMXMLInstanceAttributes` preference and the `target:Occurrence,key:test_name,prop:CompoundName` attributes. Those attributes can then be presented with their values in Teamcenter lifecycle visualization mockup.
tcecel_import

Creates process structures based on an input file, for example, generated from an Excel spreadsheet.

For more information about using this utility, see the Manufacturing Process Planner Guide.

**SYNTAX**

```
tcecel_import [-u=user-id [-p=password | -pf=password-file] -g=group]  
-i=input-file1[;input-file2...] [-d=debug-level] [-o={on | off}]  
[-t=item-type]  
[-s=dummy-status] [-pf={precise | imprecise}]  
[-m=marker-file-name] [-f=file-format-help] [-psfile] [-parser_only]  
[-delimiter=delimiter-character] [-h]
```

**ARGUMENTS**

- `u`  
  Specifies the user ID.  
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- `p`  
  Specifies the password.  
  If used without a value, the system assumes a null value.  
  If this argument is not used, the system assumes the user-ID value to be the password.  
  This argument is mutually exclusive with the `-pf` argument.

- `pf`  
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.  
  For more information about managing password files, see Manage password files.  
  This argument is mutually exclusive with the `-p` argument.

- `g`  
  Specifies the group associated with the user.  
  If used without a value, the user's default group is assumed.

- `i`  
  Specifies input files. At least one file name is required. Additional file names are separated with a semicolon (`;`).
-d
Sets debug level. Default value is 0, no debug messages.

-o
Toggles overwrite mode on or off. Default is to overwrite.

-t
Specifies default item type. Default is item.

-s
Specifies dummy release status for working revisions. Default is DUMMY_STATUS.

-pf
Specifies precise mode. Default is imprecise.

-m
Specifies marker file name. Default value is marker.txt.

-f
Displays a help message describing file format.

-psfile
Specifies if the file specified by the -i option is a PIM file.

-parser_only
Specifies to stop after preparsing of Excel files with Header4.

-delimiter
Specifies delimiter character. Default is #.

-h
Displays help for this utility.

The input file has the following format:

- One item per line, fields separated by value of ##.
- Comments and directives start a line with #.

#DELIMITER x  (default: )
#ALT_DELIMITER x  (default: ;)
#CONSUMED_INFO c1,c2 ... (optional)
#COL field ... (default:item type rev attributes option loadif level seq occs uom alt matrix status link_root plant_root consumed resource required workarea occ_note abs_occ act_name act_desc activities duration predecessor owner group_desc process_link)

Alternates to be separated by the value of #ALT_DELIMITER.

Valid fields are:
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>item</td>
<td>Item ID</td>
</tr>
<tr>
<td>rev</td>
<td>Revision ID (default=A)</td>
</tr>
<tr>
<td>name</td>
<td>Item name</td>
</tr>
<tr>
<td>revname</td>
<td>Item revision name</td>
</tr>
<tr>
<td>type</td>
<td>Item type</td>
</tr>
<tr>
<td>descr</td>
<td>Item description</td>
</tr>
<tr>
<td>attributes</td>
<td>Attributes</td>
</tr>
<tr>
<td>option</td>
<td>Option;Value;Value...</td>
</tr>
<tr>
<td>loadif</td>
<td>ItemID;Option ==/!= Value</td>
</tr>
<tr>
<td>level</td>
<td>Determines the structural hierarchy (top = 0)</td>
</tr>
<tr>
<td>seq</td>
<td>Sequence number for item in the BOM view</td>
</tr>
<tr>
<td>occs</td>
<td>Number of occurrences in this item</td>
</tr>
<tr>
<td>qty</td>
<td>Quantity of an item in the structure</td>
</tr>
<tr>
<td>uom</td>
<td>Unit of measure (symbol, not the name)</td>
</tr>
<tr>
<td>alt</td>
<td>Alternates (default delimiter=;)</td>
</tr>
<tr>
<td>matrix</td>
<td>Graphics position</td>
</tr>
<tr>
<td>status</td>
<td>Revision status</td>
</tr>
<tr>
<td>link_root</td>
<td>Link root as target</td>
</tr>
<tr>
<td>plant_root</td>
<td>Plant_root</td>
</tr>
<tr>
<td>consumed</td>
<td>Assign consumed items</td>
</tr>
<tr>
<td>resource</td>
<td>Link resources to operation</td>
</tr>
<tr>
<td>required</td>
<td>Assign required items</td>
</tr>
<tr>
<td>workarea</td>
<td>Link workareas to operation</td>
</tr>
<tr>
<td>occ_note</td>
<td>Attach occurrence notes to process-operation</td>
</tr>
<tr>
<td>abs_occ</td>
<td>Attach absolute occurrence</td>
</tr>
<tr>
<td>act_name</td>
<td>Activity name</td>
</tr>
<tr>
<td>act_desc</td>
<td>Activity description</td>
</tr>
<tr>
<td>activities</td>
<td>Create activities and attach forms</td>
</tr>
<tr>
<td>duration</td>
<td>Duration for operation activity</td>
</tr>
<tr>
<td>predecessor</td>
<td>Predecessor indicator (for process or operations)</td>
</tr>
<tr>
<td>owner</td>
<td>Change ownership to specified owner</td>
</tr>
<tr>
<td>group</td>
<td>Change group to specified group</td>
</tr>
<tr>
<td>process_link</td>
<td>Link to already existing process</td>
</tr>
</tbody>
</table>
Chapter 10  Manufacturing utilities

import_nxcam_post_files

Imports CAM post and CSE driver data from an operating system-based file system into the Teamcenter database. For example, you can use this utility to import the files currently being used in the NX environment to the Teamcenter database. In this situation, run this utility only once to initially load existing supporting files into the Teamcenter database. Once the correct NX customer default is set, the files are stored correctly during the sessions.

SYNTAX

import_nxcam_post_files [-u=user-id [-p=password | -pf=password-file] -g=group] [-action=ignore | overwrite | new_revision [-import_dir=import-directory-name] [-h]]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note  If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-action
Specifies the actions performed during the import.

  • ignore
  Does not import objects that already exist in the database.
- overwrite
  Overwrites objects that already exist in the database.

- new_revision
  Creates a new revisions of the objects that already exists in the database. This is the default setting.

- import_dir
  Specifies the directory containing the CAM post and CSE driver data to be imported. If this argument is not used, one of the environment variables listed in the Environment section must be set.

- h
  Displays help for this utility.

ENVIRONMENT

As specified in Manually configuring your environment for Teamcenter utilities. If the -import_dir argument is not specified, one of the following environment variables must be set before running this utility:

- UGII_CAM_POST_DIR
  Imports global postprocessor files and/or posts and ISV drivers for generic machines.

- UGII_CAM_USER_DEF_EVENT_DIR
  Imports user-defined event files.

- UGII_CAM_SHOP_DOC_DIR
  Imports shop documentation files.

- UGII_CAM_LIBRARY_INSTALLED_MACHINES_DIR
  Imports the post/CSE files of installed machines.

For additional information on these environment variables, see the NX documentation.

FILES

As specified in Log files produced by Teamcenter.

RESTRICTIONS

None.

EXAMPLES

To import machine post and CSE data from \d:import_dir directory using the default action, enter the following command on a single line:

```batch
%TC_ROOT%\bin\import_nxcam_post_files -u=infodba -p=infodba-password -g=dba -import_dir=d:\import_dir
```

To import machine post and CSE data from the \d:mach\resource directory using the -overwrite action, enter the following command on a single line:

```batch
%TC_ROOT%\bin\import_nxcam_post_files -u=infodba -p=infodba-password -g=dba -action=overwrite -import_dir=d:\mach\resource
```
To import only global postprocessor files from the \texttt{d:\mach\resource\postprocessor} directory to the database using the default action, enter the following two commands.

\begin{verbatim}
set UGII_CAM_POST_DIR= d:\mach\resource\postprocessor %TC_ROOT%\bin\import_nxcam_post_files -u=infodba -p=infodba-password -g=dba -import_dir=d:\import_dir
\end{verbatim}
upgrade_nx_cam_templates

Replaces NX/CAM setup templates in the Teamcenter database.

**Note** The templates with a component are imported from the directory specified by the value of TC_DATA; templates without a component are imported from the directory specified by the value of UGII_BASE_DIR.

**SYNTAX**

```
upgrade_nx_cam_templates [-u=user-id [-p=password | -pf=password-file] -g=group] [-included_list=included-file-name] [-excluded_list=excluded-file-name] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-included_list**
  Specifies a text file with a template ID list that is replaced in the Teamcenter database. The complete file specification, that is, the full path and file name, must be supplied. This is an optional argument. If no file is provided, all CAM templates in the Teamcenter CAM Setup Templates folder are replaced.
**-excluded_list**
Specifies a text file with template ID list that is not replaced in the Teamcenter database. The complete file specification, that is, full path and file name, must be supplied. This is an optional argument. If no file is provided, then all CAM templates in the Teamcenter **CAM Setup Templates** folder are replaced.

**-h**
Displays help for this utility.

**ENVIRONMENT**
The **UGII_BASE_DIR** and **TC_DATA** variables must be set to use this utility.

**FILES**
None.

**RESTRICTIONS**
None.

**EXAMPLES**
- To replace all templates in the **CAM Setup Templates** folder:
  ```
  upgrade_nx_cam_templates -u=infodba -p=infodba -g=dba
  ```

- To replace only the templates listed in the **in_file.txt** file in the **d:\workdir** folder:
  ```
  upgrade_nx_cam_templates -u=infodba -p=infodba -g=dba
  -included_list=d:\workdir\in_file.txt
  ```

  The content of the **in_file.txt** file is:
  ```
  drill_inch
  drill_metric
  turning_inch
  turning_metric
  ```

  Only four templates, **drill_inch**, **drill_metric**, **turning_inch**, and **turning_metric**, in the **in_file.txt** file are replaced.

- To replace all templates in the **CAM Setup Templates** folder except the templates listed in the **ex_file.txt** file in the **d:\workdir** folder:
  ```
  upgrade_nx_cam_templates -u=infodba -p=infodba -g=dba
  -excluded_list=d:\workdir\ex_file.txt
  ```

  The content of the **ex_file.txt** file is:
  ```
  drill_inch
  drill_metric
  turning_inch
  turning_metric
  ```

  Four templates, **drill_inch**, **drill_metric**, **turning_inch**, and **turning_metric**, in the **ex_file.txt** file are **not** replaced.
mrm_export_resources

Exports resources from Teamcenter classification. This is useful if you manage your resource and classification data in Teamcenter but run NX in its native mode. In this situation, you can use this utility to export tooling classification and data from Resource Manager so it can be used by NX CAM in native mode.

For more information about using Resource Manager tooling data with native NX CAM, see Getting Started with Manufacturing.

**SYNTAX**

```
mrm_export_resources [-u=user-id [-p=password | -pf=password-file] -g=group] -class=root-class-ID
  -def_file=definition-file [-class_graphics_dir=directory
    [-class_graphics_option=all | changed]]
  -dat_file=database-file [-dat_graphics_dir=directory
    [-dat_graphics_option=all | changed]] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the user-ID value to be the password.

  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see Manage password files.

  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user’s default group is assumed.
-class
Exports the classification hierarchy and/or instance data from the specified root class ID. Use the -def_file and -dat_file arguments to specify whether classification hierarchy, and/or instance data, is exported, respectively.

-def_file
Exports the specified definition file. The file is based on the class hierarchy structure.

Note The definition file includes the list of required attributes and key-LOV definitions. It also includes the hierarchical structure of the nested classes.

For each class, the list of available attributes for the Search dialog box and the resulting table must be defined. If a definition for the RSET attribute set is defined, the attributes specified for the Search dialog box is used for the RSET attribute set.

For an example of the definition file, see the Examples section.

-class_graphics_dir
Exports classification graphics used for the Search and the RSET dialog boxes to the specified directory.

-class_graphics_option
Specifies whether to export all classification graphics or only those graphics that are modified. Valid values are all, which exports all graphics, and changed, which exports only graphics that are modified.

-dat_file
Exports the specified ASCII database file. The file includes parameter values for all instances. Each data line also specifies the tool classification.

-dat_graphics_dir
Exports resource graphics to the local file system.

-dat_graphics_option
Specifies whether to export all resource graphics or only those graphics that are modified. Valid values are all, which exports all graphics, and changed, which exports only graphics that are modified.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
To export the definition file for the Manufacturing Tooling Library:

mrn_export_resources -u=infodba -p=infodba -g=dba -class=TLCUA
-def_file=dbc_mfg_toollib_customer_tlas.def

To export the ASCII tool database file for all tool assemblies, including all updated graphic files:
mrm_export_resources -u=infodba -p=infodba -g=dba -class=TOOL02
-dat_file=tool\metric\tool_database.dat -dat_graphics_dir= tool\metric\graphics\ -dat_graphics_option=changed

A sample definition file:

```
DB_ALIAS DCII
{
  DB_ID    -500118
  DB_ID_TYPE s
  DIALOG_NAME "Cutting diameter Dc"
  RSET_NAME "Cutting diameter Dc"
}

DB_ALIAS PartType
{
  DB_ID    -3651
  DB_ID_TYPE s
  OPTIONS    "Right" "Left"
  OPTIONS_IDS "R" "L"
  DIALOG_NAME "Type"
  RSET_NAME "Type"
}

CLASS TOOL
{
  TYPE QRY
  QUERY "[DB(Type)] == [TOOL01] && [DB(Type)] == [TLCUA]"
  DIALOG libref
  RSET  libref
  UI_NAME "Tool"
}

CLASS TOOL_MRM
{
  TYPE QRY
  QUERY "[DB(Type)] == [TOOL01]"
  DIALOG libref Holder
  RSET  libref Descr MaterialDes Holder
  UI_NAME "MRM Tooling"
}

CLASS MILLS
{
  TYPE QRY
  QUERY "[DB(Type)] == [TAM02]"
  DIALOG libref Diameter Holder
  RSET  libref Descr Diameter MaterialDes Holder
  UI_NAME "Milling"
}
```
Chapter 10  Manufacturing utilities

**gcs_import**

Imports GCS connection types and connection point definitions from an XML file.

For more information about using the guided component search, see the *Resource Manager Guide*.

**SYNTAX**

```bash
gcs_import [-u=user-id [-p=password | -pf=password-file] -g=group] 
-xml_file=xml_file_name -import_mode=ignore | overwrite [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  [Note] If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-xml_file**
  Specifies the name of an XML file containing connection types and connection point definitions. The syntax of this file is explained in the *EXAMPLES* section.

- **-import_mode**
  Specifies how existing data is handled by the import. Valid values are:
  **ignore** The existing data is skipped by the import.
  **overwrite** The existing data is replaced by the contents of the XML file.
-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.

EXAMPLES
- To import the connection type and connection point definition found in an XML file named **GCS_data.xml**, enter the following command on a single line:

  ```
  GCS_import -u=user-id -p=password -g=group -xml_file=GCS_data.xml
  -import_mode=ignore
  ```

  The **GCS_data.xml** file must have the following format:

  ```xml
  <GCS_import>
  <ConnectionType>
     <Name>CT_Cylinder</Name>
     <Attribute>
        <ID>-40032</ID>
        <ComparisonCriterion>&lt;=</ComparisonCriterion>
     </Attribute>
     <Attribute>
        <ID>-40033</ID>
        <ComparisonCriterion>&gt;=</ComparisonCriterion>
     </Attribute>
  </ConnectionType>
  <ConnectionType>
     <Name>CT_Square</Name>
     <Attribute>
        <ID>-40127</ID>
        <ComparisonCriterion>=</ComparisonCriterion>
     </Attribute>
  </ConnectionType>
  <ConnectionType>
     <Name>CT_Insert</Name>
     <Attribute>
        <ID>-40920</ID>
        <ComparisonCriterion>=</ComparisonCriterion>
     </Attribute>
  </ConnectionType>
  </GCS_import>
  ```

  ```xml
  <ConnectionPointDefinition>
     <ClassID>TC_MILL_10_10_100</ClassID>
     <ConnectionTypeName>CT_Cylinder</ConnectionTypeName>
     <Index>1</Index>
     <Quantity>1</Quantity>
     <Direction>Upwards</Direction>
     <Shape>Plug</Shape>
     <Attribute>
        <ID>-40032</ID>
        <Mapping>#-40235</Mapping>
     </Attribute>
     <Attribute>
        <ID>-40033</ID>
        <Mapping>#-40235</Mapping>
     </Attribute>
  </ConnectionPointDefinition>
  ```

  ```xml
  <ConnectionPointDefinition>
     <ClassID>TC_DRILL_12_10_100</ClassID>
     <ConnectionTypeName>CT_Cylinder</ConnectionTypeName>
     <Index>1</Index>
     <Quantity>1</Quantity>
     <Direction>Upwards</Direction>
     <Shape>Plug</Shape>
     <Attribute>
        <ID>-40032</ID>
        <Mapping>#-40235</Mapping>
     </Attribute>
     <Attribute>
        <ID>-40033</ID>
        <Mapping>#-40235</Mapping>
     </Attribute>
  </ConnectionPointDefinition>
  ```

  ```xml
  <ConnectionPointDefinition>
     <ClassID>TC_MILL_10_10_100</ClassID>
     <ConnectionTypeName>CT_Cylinder</ConnectionTypeName>
     <Index>1</Index>
     <Quantity>1</Quantity>
     <Direction>Upwards</Direction>
     <Shape>Plug</Shape>
     <Attribute>
        <ID>-40032</ID>
        <Mapping>#-40235</Mapping>
     </Attribute>
     <Attribute>
        <ID>-40033</ID>
        <Mapping>#-40235</Mapping>
     </Attribute>
  </ConnectionPointDefinition>
  ```

  ```xml
  <ConnectionPointDefinition>
     <ClassID>TC_DRILL_12_10_100</ClassID>
     <ConnectionTypeName>CT_Cylinder</ConnectionTypeName>
     <Index>1</Index>
     <Quantity>1</Quantity>
     <Direction>Upwards</Direction>
     <Shape>Plug</Shape>
     <Attribute>
        <ID>-40032</ID>
        <Mapping>#-40235</Mapping>
     </Attribute>
     <Attribute>
        <ID>-40033</ID>
        <Mapping>#-40235</Mapping>
     </Attribute>
  </ConnectionPointDefinition>
  ```

  ```xml
  <ConnectionPointDefinition>
     <ClassID>TC_MILL_10_10_100</ClassID>
     <ConnectionTypeName>CT_Cylinder</ConnectionTypeName>
     <Index>1</Index>
     <Quantity>1</Quantity>
     <Direction>Upwards</Direction>
     <Shape>Plug</Shape>
     <Attribute>
        <ID>-40032</ID>
        <Mapping>#-40235</Mapping>
     </Attribute>
     <Attribute>
        <ID>-40033</ID>
        <Mapping>#-40235</Mapping>
     </Attribute>
  </ConnectionPointDefinition>
  ```

  ```xml
  <ConnectionPointDefinition>
     <ClassID>TC_DRILL_12_10_100</ClassID>
     <ConnectionTypeName>CT_Cylinder</ConnectionTypeName>
     <Index>1</Index>
     <Quantity>1</Quantity>
     <Direction>Upwards</Direction>
     <Shape>Plug</Shape>
     <Attribute>
        <ID>-40032</ID>
        <Mapping>#-40235</Mapping>
     </Attribute>
     <Attribute>
        <ID>-40033</ID>
        <Mapping>#-40235</Mapping>
     </Attribute>
  </ConnectionPointDefinition>
  ```
Chapter 10   Manufacturing utilities

<Index>1</Index>
<Quantity>1</Quantity>
<Direction>Upwards</Direction>
<Shape>Plug</Shape>
<Attribute>
  <ID>-40032</ID>
  <Mapping>#-40235</Mapping>
</Attribute>
<Attribute>
  <ID>-40033</ID>
  <Mapping>#-40235</Mapping>
</Attribute>
</ConnectionPointDefinition>

<ConnectionPointDefinition>
  <ClassID>TC_HOLDER_20_00_190</ClassID>
  <ConnectionTypeName>CT_Cylinder</ConnectionTypeName>
  <Index>1</Index>
  <Quantity>1</Quantity>
  <Direction>Upwards</Direction>
  <Shape>Socket</Shape>
  <Attribute>
    <ID>-40032</ID>
    <Mapping>#-40032</Mapping>
  </Attribute>
  <Attribute>
    <ID>-40033</ID>
    <Mapping>#-40033</Mapping>
  </Attribute>
</ConnectionPointDefinition>

<ConnectionPointDefinition>
  <ClassID>TC_HOLDER_10_00_110</ClassID>
  <ConnectionTypeName>CT_Square</ConnectionTypeName>
  <Index>1</Index>
  <Quantity>1</Quantity>
  <Direction>Upwards</Direction>
  <Shape>Socket</Shape>
  <Attribute>
    <ID>-40127</ID>
    <Mapping>#-40127</Mapping>
  </Attribute>
</ConnectionPointDefinition>

<ConnectionPointDefinition>
  <ClassID>TC_TURN_10_10_100</ClassID>
  <ConnectionTypeName>CT_Square</ConnectionTypeName>
  <Index>1</Index>
  <Quantity>1</Quantity>
  <Direction>Upwards</Direction>
  <Shape>Plug</Shape>
  <Attribute>
    <ID>-40127</ID>
    <Mapping>#-40238</Mapping>
  </Attribute>
</ConnectionPointDefinition>

<ConnectionPointDefinition>
  <ClassID>TC_TURN_10_10_100</ClassID>
  <ConnectionTypeName>CT_Insert</ConnectionTypeName>
  <Index>2</Index>
  <Quantity>1</Quantity>
  <Direction>Downwards</Direction>
  <Shape>Socket</Shape>
  <Attribute>
    <ID>-40920</ID>
    <Mapping>#-40920</Mapping>
  </Attribute>
</ConnectionPointDefinition>
<ClassID>TC_INSERT_10_00_110</ClassID>
<ConnectionTypeName>CT_Insert</ConnectionTypeName>
[Index>1</Index>
<Quantity>1</Quantity>
<Direction>Upwards</Direction>
<Shape>Plug</Shape>
<Attribute>
  <ID>-40920</ID>
  <Mapping #-40920</Mapping>
</Attribute>
</ConnectionPointDefinition>
</GCS_import>
asser_jt_creator

Creates a JT representation of a given Teamcenter assembly. The resulting file is stored in the file system and, optionally, in the database.

You can use the utility to collect the JT files on each node in a configured structure and combine all JT files into a single monolithic assembly JT. You can use a monolithic JT file to view assemblies in Resource Browser.

The utility can also create an assembly JT file that contains pointers to other JT files, each representing a component in an assembly. Each node can have a JT file and a transformation of that node.

Additionally, the utility can create a JT file for use with Tecnomatix eMServer only.

**SYNTAX**

```
assy_jt_creator -u=user-id -p=[password | -pf=password-file] [-g=group ]
[-sc=structure-context ]
[-item=item-id ] -key=[keyAttr1=keyVal1][,keyAttr2=keyVal2][...[,keyAttrN=keyValN]]
-tar_loc=target-location
[-i=batch-file]
[-log=logfile-name]
[-rev=revision]
[-rev_rule=revision-rule]
[-var_rule=variant-rule]
[-tmode=transfer-mode-name]
[-jt_type={1 | 2 | 3} ]
[-pin=0 | 1]
[-cof=0 | 1]
[-dt_type=dataset-type] [-dt_rel=dataset-relation]
[-dt_ref=named-reference]
[-de=n | e | a | r]
[-assy_update={create | replace }]
[-skip_root_dset_with_name=dataset-name]
[-skip_remote_lines]
[-debug]
[-h]
```

**ARGUMENTS**

- **u**

  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **p**

  Specifies the password.

  If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

**-pf**
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see *Manage password files*. This argument is mutually exclusive with the -p argument.

**-g**
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

**-sc**
Specifies the name of the structure context (see *CompoundTools* in the following figure). If you include this argument, item ID, revision ID, revision rule, variant rule, and transfer mode arguments are not required.

For more information about structure contexts, see the *Multi-Structure Manager Guide*.

**-item**
Specifies the item ID of the top line.

If you do not include the -sc argument, either this argument or the -key argument is required.

**-key**
Specifies the key of the top line when multiple attributes are used to form the unique item ID. Use the following format:

```
[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]
```

To find the key of an object, use the `get_key_string` utility.

For more information, see the *Business Modeler IDE Guide*.

**-tar_loc**
Specifies the full operating system path to an existing location where Teamcenter stores the JT assembly file.

This argument is required.

**-i**
Specifies an input batch file. This XML file uses elements that are equivalent to the command line arguments and contains information about the assembly JT files
you want included in the monolithic JT assembly. Use this method to simplify the
input of parameters. This allows you save a set of arguments you can use each
time you run the utility.

This file must contain the following elements as a minimum (all defaults are used in
this file):

**Note** For more information, see the equivalent command line argument
description (identified in comments in the file listings).

```xml
<ParamBatch> <!-- Required root element -->
  <ParamSet id=""> <!-- Element holding JT file parameters -->
    <!-- If a StructureContext element is not included, the <ItemId>
    or <KeyId> element is required. See next file listing. -->
    <StructureContext> </StructureContext> <!-- See -sc argument -->
    <TargetLoc> </TargetLoc> <!-- See -tar_loc argument -->
    <DatasetType> </DatasetType> <!-- See -dt_type argument -->
  </ParamSet>
</ParamBatch>
```

The **ParamBatch** element contains all **ParamSet** elements. A separate **ParamSet**
element with a unique **id** attribute is required for each JT file you include in the
assembly.

This file shows all possible elements that you can specify with empty elements for
informational purposes. No defaults are used. Unless an element contains only
attributes, which is not the case for an input batch file, well-formed XML requires
that you provide a value between the element opening and closing tag. Therefore, do
not include empty elements if you want to use the default value.

```xml
<ParamBatch>
  <ParamSet id="">
    <ItemId> </ItemId> <!-- See -item argument -->
    <!-- If multiple key attributes (multifield key) are used, the <KeyId>
    element replaces the <ItemId> element. See -key -->
    <RevId> </RevId> <!-- See -rev argument -->
    <!-- If the revision rule is not specified, the utility uses the default
    "Latest Working" revision rule. -->
    <VariantRule> </VariantRule> <!-- See -var_rule argument -->
    <!-- If TransferMode is not specified, the utility uses the default
    "JTDataExportDefault" transfer mode -->
    <JtAssyType> </JtAssyType> <!-- See -jt_type argument -->
    <!-- The type of assembly to be created can be specified as:
    1 - Monolithic JT
    2 - Assembly JT
    3 - CoJT.
    The utility uses "Monolithic" if this is not specified -->
    <ProcessIntermediateNode> </ProcessIntermediateNode> <!-- See -pin argument -->
    <!-- ProcessIntermediateNode indicates if the intermediate nodes need to be
    processed. This is a boolean value (1/0). If this is not specified,
    the utility uses 0 - intermediate nodes get processed. -->
    <ContinueOnFail> </ContinueOnFail> <!-- See -cof argument -->
</ParamSet>
</ParamBatch>
```
<ParamSet>

<!-- ContinueOnFail specifies whether the creation of the assembly should continue if any errors are encountered. This is a boolean value (1/0). If this is not specified, the utility uses 1 - continue with creation of the assembly. -->

<ParamBatch>

<!-- The dataset type used for attaching the resulting assembly to the Item revision. If this is not specified or the type is not found, the utility uses a default value based on the JtAssyType value. -->

<ParamBatch>

<!-- The dataset relation used for attaching the dataset to the Item revision. -->

<ParamBatch>

<!-- LogFile identifies the complete path and the file name for the log file the utility generates. -->

<ParamBatch>

<!-- UpdateType determines how to attach the dataset to the Item revision. If this is not specified, the utility replaces the named reference, if one exists, with the dataset. -->

<ParamBatch>

<!-- TargetLoc specifies the path to the location on your operating system where the utility saves the new JT assembly file. -->

<ParamBatch>

<!-- The valid values for CreateDataset are: n - creates a new dataset every time. e - if the dataset already exists it does not revise it. If the dataset does not exist it is create. a - if the dataset already exists it revises it. If the dataset does not exist it is created. r - revises the dataset if it already exists. If the dataset does not exist an error is thrown. If this is not specified, the utility does not create a dataset. -->

<ParamBatch>

<!-- The named reference used for uploading the assembly file to the dataset. If this is not specified, the utility uses the default named reference attached to the dataset type. -->

<ParamBatch>

</ParamSet> <!-- End of JT file parameters -->

| See Examples for a sample XML file listing. |

| Note | If an input XML file is specified, all other command line arguments (with the exception of the log on (-u, -p or -pf, and -g arguments) are ignored. |

- **log**

Specifies the full path file name of the log file that stores PLM XML and load library errors.
-rev
Specifies the revision ID of the top line.
If you do not include the -sc argument, this argument is required.

-rev_rule
Specifies the revision rule for configuring the assembly.

-var_rule
Specifies the variant rule for configuring the assembly.

-tmode
Specifies the name of the transfer mode. The transfer mode is not stored in the system but is created at run time.
If you do not include this argument, the utility uses the default JTDataExportDefault transfer mode.

-jt_type
Specifies the type of assembly to be created. Valid values are:

1
A monolithic JT file is a single file containing all the graphics for a specific assembly.

2
An assembly JT file is an assembly file that contains pointers to other JT files, each representing a component in an assembly.

3
A CoJT file is for use with Tecnomatix eMServer only.

If you do not specify this argument, the utility uses 1 (Monolithic JT).

-pin
Indicates whether to process intermediate nodes. Intermediate nodes are any nodes that are not leaf nodes. Valid values are:

0
Do not process intermediate nodes.

1
Process intermediate nodes.

If you do not specify this argument, the utility uses 1 (process intermediate nodes).

-cof
Indicates whether to terminate assembly creation upon encountering errors. Valid values are:

0
Stop process when encountering an error.

1
Continue processing when encountering an error.

If you do not specify this argument, the utility uses 1 (continue processing).
-dt_type
Specifies dataset type used for attaching the resulting assembly to the item revision.

-dt_rel
Specifies the dataset relation used for attaching the dataset to the item revision.

-dt_ref
Specifies the named reference used for uploading the assembly file to the dataset. If no named reference is given, the default named reference attached to the dataset type is used.

-de
Specifies the behavior of dataset creation.
If you do not enter a value for this parameter, Teamcenter creates a JT file without an associated dataset. Valid value are:

- n
  Creates a new dataset.

- e
  Does not revise an existing dataset. If the dataset does not exist, it creates the dataset.

- a
  Revises an existing dataset. If the dataset does not exist, it creates the dataset.

- r
  Revises an existing dataset. If the dataset does not exist, it generates an error.

-assy_update
Specifies how the assembly JT is added to the dataset.

- create
  Assembly file is uploaded if no named reference is found in the dataset.

- replace
  Assembly file is always created and replaces the current named reference, if it exists.

-skip_root_dset_with_name
Prevents the utility from exporting the dataset of this name that is associated to the root node by an IMAN_Rendering relation.

-skip_remote_lines
Prevents the utility from exporting BOM lines that are not loadable.

-Debug
Turns on the debug mode that creates additional debug information files in the log file location.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.
FILES

As specified in *Log files produced by Teamcenter*.

RESTRICTIONS

None.

EXAMPLES

- The following example is for an input XML file (`robots.xml`) that uses the `StructureContext` element and therefore does not require the `ItemId`, `RevId`, `RevisionRule`, `VariantRule` or `Transfermode` elements. The default `Latest Working` revision rule and `JTDATAEXPORTDEFAULT` transfer mode are used. The default dataset type for a monolithic JT assembly is used to attach the dataset to the JT assembly because the `DatasetType` element is not specified:

```xml
<!-- assy_jt_creator utility robots.xml input file -->
<ParamBatch>
  <ParamSet id="001">
    <StructureContext>CompoundTools</StructureContext>
    <ItemId />
    <RevId />
    <RevisionRule />
    <VariantRule />
    <TransferMode />
    <JtAssyType>1</JtAssyType>
    <ProcessIntermediateNode>1</ProcessIntermediateNode>
    <ContinueOnFail>1</ContinueOnFail>
    <DatasetType />
    <DatasetRelation>IMAN_reference</DatasetRelation>
    <LogFile>c:\temp\monolithicJTUtility\logfile.log</LogFile>
    <UpdateType>create</UpdateType><CreateDataset/>
    <TargetLoc>c:\temp\monolithicJTUtility</TargetLoc>
    <CreateDataSet>n</CreateDataSet>
    <NamedRef>JTPart</NamedRef>
  </ParamSet>
  <!-- uncomment this section to add additional JT file parameters
  <ParamSet id="002">
    ...
  </ParamSet>
  --></ParamBatch>

Use the following command to create the JT assembly using the `robots.xml` file:

```
assy_jt_creator -u=infodba -p=infodba -g=dba -i=robots.xml
```

- The following example shows the same command line version creating the same monolithic JT assembly shown in the previous XML file example. However, the command line version does not continue to create the assembly if an error is encountered during the process, does not revise the dataset if one exists, and uses a custom transfer mode. A debug file is also created in the log directory. The entire command must be entered on a single line.

```
assy_jt_creator -u=infodba -p=infodba -g=dba -sc=Robots -jt_type=1 -tar_loc=c:\temp\monolithicJTUtility -tmode=JTDATAEXPORTCustomTM -pin=1 -cof=0 -dt_rel=IMAN_reference -assy_update=create -de=-dt_ref=JTPart -debug
```
Generates or updates in-process assemblies and updates filtered in-process assemblies in a manufacturing process structure. The input for this utility is a parameter file in which you specify whether to update either the IPA, the FIPA, or both simultaneously. You cannot create FIPAs with this utility. You can only create FIPAs from within the Manufacturing Process Planner application.

**Note** Depending on the size of the structure, running this utility can be time-consuming.

For more information about in-process assemblies, see the *Manufacturing Process Planner Guide*.

**SYNTAX**

```
ipa_b_executer -u=user-id [-p=encrypted-password | -pf=password-file] [-g=group]
[-f=path-to-parameter-file]
[-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user’s password. This password must be encrypted

  You can obtain an encrypted password by typing:

  ```
  ipa_b_executer -p=plain-text-password -encrypt
  ```

  Teamcenter returns the encrypted password as output.

  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

  For more information about managing password files, see *Manage password files*.

  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user’s default group is assumed.
Chapter 10  Manufacturing utilities

-f
Specifies the path to the parameter file (.txt file) that is used as input for this utility. For more information, see Parameter file syntax.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

PARAMETER FILE SYNTAX
The first entry in each line in the parameter file indicates whether an IPA or FIPA is to be updated. Therefore, there are two types of lines in this file:

• The parameter line for an IPA starts with #Item

• The parameter line for a FIPA starts with #Item_FIPA

Given these two types of lines, three cases can exist:

• If only an #Item line is present in the file, Teamcenter updates the IPA only.

• If only an #Item_FIPA line is present in the file, Teamcenter updates the FIPA only.

• If both #Item and #Item_FIPA lines are present in the file, Teamcenter updates both the IPA and the FIPA.

In the line, each parameter must be separated from its value by the % symbol. If there is more than one value for a parameter, each of these values must be separated by a % symbol.

You can use the following parameters to create or update an IPA:

  Item
  Specifies the top process ID.

  Key
  Specifies the top process key in the form of attr=value,attr2=value2....

  Rev
  Specifies the top process revision.

  Rule
  Specifies the configuration rule.

  OG
  Specifies the type of IPA occurrence group.

  Name
  Specifies the name of the IPA.
Occ
Specifies the types of the product occurrences that are included.

Proc
Specifies the types of the processes for which an occurrence group is created.

Use the following parameters to update a filtered IPA:

**Item_FIPA**
Specifies the process ID of the top process of the BOP structure in which FIPAs are to be updated. This parameter can have only one value.

**Rev**
Specifies the top process revision. This parameter can have only one value.

**Rule**
Specifies the revision rule with which the FIPAs are to be updated. This parameter can have only one value.

**Parent_FIPA**
Specifies the process IDs of the processes for which FIPAs are to be updated. This is a mandatory parameter that can have multiple values. In the case of multiple process IDs, the IDs must be separated by a % symbol.

**Name**
Specifies that only this FIPA in the Parent_FIPA process is updated. This is an optional parameter. If no name is specified, then all the FIPAs under the Parent process are updated. This parameter can have multiple values.

**Prod_ID**
Specifies the ID of the top product of the product structure from which items are consumed into the process structure. This parameter can have only one value.

**Prod_Rev**
Specifies the revision of the top product line. This parameter can have only one value.

**Prod_Rule**
Specifies the revision rule applied on the product structure. This parameter can have only one value.

The following is a sample line for updating FIPAs:

```
#Item_FIPA%Top-process-id##Rev%current-revision-level##Rule%current-revision-rule
#Parent%process-id-1[process-id-2..
process-id-n]#Name%fipa-name-1[fipa-name-2..fipa-name-n]
```

**EXAMPLES**
These examples reference the following structure.
• To update only the IPA:

```
#Item%000029##Rev%A##Rule%Latest
#Name%IPA - Jun 30, 2011 12:01:21 PM##Occ%MEConsumed#
#Proc%MEProcess#
```

The file does not contain a line for the FIPA.

• To update only the FIPA for process Proc2:

```
#Item_FIPA%000029##Rev%A##Rule%Latest
#Name%Proc2_fipa##Prod_ID%000013##Prod_Rev%A##Prod_Rule#
#Latest Working#
```

The file does not contain a line for the IPA.

• To update the FIPAs for multiple processes:

```
#Item_FIPA%000029##Rev%A##Rule%Latest
#Parent_FIPA %000031%000034%000035#
#Name%Proc2_fipa%Proc5_fipa%Proc6_fipa#
#Prod_ID%000013##Prod_Rev%A##Prod_Rule##Latest Working#
```

The file does not contain a line for the IPAs.

• To update the FIPA for the top process:

```
#Item_FIPA%000029##Rev%A##Rule%Latest
#Parent_FIPA %000029#
#Name%demoNested_fipa##Prod_ID%000013##Prod_Rev%A##Prod_Rule#
#Latest Working#
```

The file does not contain a line for the IPA.

• To update all the FIPAs present in the process structure:

```
#Item_FIPA%000029##Rev%A##Rule%Latest
#Parent_FIPA %000029#
#Name ##Prod_ID%000013##Prod_Rev%A##Prod_Rule##Latest Working#
```

The file does not contain a line for the IPAs.
If a value for the **#Name#** parameter is not present, then all the FIPAs under the **Parent_FIPA** process are updated. You must always include the **#Name#** parameter even if it has no value.

- To update the IPA and multiple FIPAs in the process structure:

```
#Item%000029##Rev%A##Rule%Latest Working##OG%OccurrenceGroup#
#Name%IPA -Jun 30, 2011 12:01:21 PM##Occ%MEConsumed##Proc%MEProcess#
#Item_FIPA%000029##Rev%A##Rule%Latest Working##Parent_FIPA
%000031%000034%000035#
#Name%Proc2_fipa%Proc5_fipa%Proc6_fipa##Prod_ID%000013##Prod_Rev%A#
#Prod_Rule##Latest Working#
```
Chapter

11 Classification utilities
Chapter 11  

Classification utilities

icsutility

Imports the following types of Classification data:

- Class definitions.
  This can optionally include the attributes, groups, parent classes, subclasses, or the class hierarchy from the root.

- Any individual attribute or Key-LOV object.

- Resource Manager resource assemblies.
  This can optionally include root-level components, intermediate components, bottom-level components, and propagation start points. The hierarchical component positions are maintained.

icsutility also allows you to import class-specific and instance-specific files.

SYNTAX

icsutility [-u=user-id | -p=password | -pf=password-file] -g=group]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note: If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-<mod>
  Specifies the type of modification: **insert**, **update**, or **revise**.

  **insert**
  Creates a new ICO, item, and item revision. If an ICO or item with the corresponding name already exists, nothing is imported.
  Attribute values are imported in the new ICO. Class-specific and instance-specific files (for example, **HPGL** files, **GIF** files, **JT** files, and **PRT** files) are attached to the new item revision.

  **-update**
  Updates the values in the ICO attached to the latest item revision (or to the item) and the assembly structure in the latest item revision (or item), as well as the class-specific and instance-specific files.

  **-revise**
  Creates a new item revision and ICO and imports the attribute values in the new item revision and ICO that classifies the new item revision. Class-specific and instance-specific files are attached to the new item revision.
  You can specify an additional argument, **-forceConversion=1** (default value **0**). In this case, the relationship to the item is converted to a relationship from the ICO to the latest item revision.

-<dbg>
  Specifies the debug level. Any positive integer number up to level **7**. **0** turns off debugging mode. The higher the debug level, the more detailed is the trace being output.

-<del>
  Specifies the list of characters used to delimit multiple search directories and file extensions in the following file path and extension options:

  **-<fid>**
  Specifies the name of a folder into which imported items and datasets are placed. This folder is placed in the **Newstuff** folder.

  **-<sfn>**
  Specifies the name of the SML file to be processed. Do not include the **.sml** file extension.

  **-<sfp>**
  Specifies the path of the directory containing the **.sml** file. Paths must be terminated using the platform-specific path delimiter, as follows:
  \ Windows delimiter
  / UNIX delimiter

  **-<cfp>**
  Specifies the directory path (or paths) containing the class-related files to be imported, such as class image files.
Chapter 11  
Classification utilities

-cfe
Specify the file extension of the class-related files to be imported. Accepts multiple file extensions separated by the delimiter set using the -del argument.

-ofp
Specify the directory path (or paths) of the object-related files to be imported.

-ufe
Specify the file extension of the object-related files to be imported. Accepts multiple file extensions separated by the delimiter set using the -del argument.

-ffp
Specify the directory path containing the file types configuration file to be used.

-ffn
Specify the name of the file types configuration file to be used, including the file extension.

-clr
If used, specifies that item revisions are classified when importing data. If not used, items are classified upon import.

When you specify the -clr argument and try to import an ICO that is already in the database and the item, but not the item revision, was classified, an error message is output when insert mode is used. When update mode is used, the relationship to the item is converted to a relationship from the ICO to the latest item revision.

-cit
Creates items of the specified item type, rather than the standard items.

ENVIRONMENT

This utility must be run in the Teamcenter shell environment.

FILES

As specified in Log files produced by Teamcenter and the filetypeDefaults.txt configuration file.

The entries in the filetypeDefaults.txt configuration file map the extensions of all imported files to specific Teamcenter data structures: GRM relationship type, dataset type, named reference, optional default tool, and optional subdirectory name. The mapping of file extensions to specific Teamcenter data structures can be configured per import directory/subdirectory combination.

RESTRICTIONS

You must have the corresponding privileges (create/modify) to start the import process. If you do not have the privileges, the data is not imported and a message is written to the log file.

Only the initial population of an empty Resource Manager database is fully supported.

EXAMPLES

To import the C:\import\sml\test.sml file using the file type configuration file C:\import\config\filetypeDefaults.txt together with GIF class image files residing in the C:\import\class\ directory and object-related JT, GIF, and Word files residing in the C:\import\object\ directory, enter the following command on a single line:

icsutility -u=smith -p=secret -g=admin
Classification utilities

-mod=update -dbg=1 -del=, -fid=import01 -ffp=C:\import\config\ -ffn=filetypeDefaults.txt -sfp=C:\import\sml -sfn=test -cfp=C:\import\class\ -cfe=gif -ofp=C:\import\object\ -ofe=jt,gif,doc
Chapter 11  
Classification utilities

icsxml

Exports the following types of Classification data through XML files:

- Class definitions.
  This can optionally include the attributes, subclasses, parent classes, or the class hierarchy from the root.

- Any individual attribute or Key-LOV object.

INPUT FILE FORMAT

The format of the input and output file for the icsxml utility must comply with the XML standard. This standard defines five special characters used to structure the content. If these characters are included in the body of the XML file, they must be replaced, as shown in the following table.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Replacement characters</th>
</tr>
</thead>
<tbody>
<tr>
<td>&amp;</td>
<td>&amp;amp</td>
</tr>
<tr>
<td>&lt;</td>
<td>&amp;lt</td>
</tr>
<tr>
<td>&gt;</td>
<td>&amp;gt</td>
</tr>
<tr>
<td>'</td>
<td>&amp;apos</td>
</tr>
<tr>
<td>“</td>
<td>&amp;quote</td>
</tr>
</tbody>
</table>

The following example illustrates the use of the special XML characters:

```xml
<KeyLOV keyLOVId="-123451">
  <Name>Space & test</Name>
  <Values>
    <Key>01 22</Key>
    <Value>Value & 01</Value>
  </Values>
</KeyLOV>
```

SYNTAX

```
-\u=user-id  \-p=password  \-pf=password-file  \-g=group
icsxml -import import-flags
icsxml -export export-flags
```

ARGUMENTS

-\u
  Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note**  If Security Services single sign-on (SSO) is enabled for your server, the -\u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.
-p
 Specifies the password.
 If used without a value, the system assumes a null value.
 If this argument is not used, the system assumes the user-ID value to be the password.
 This argument is mutually exclusive with the -pf argument.

-pf
 Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
 For more information about managing password files, see Manage password files.
 This argument is mutually exclusive with the -p argument.

-g
 Specifies the group associated with the user.
 If used without a value, the user's default group is assumed.

-export
 Exports the given subset of Classification data into an XML file.

-import
 Imports Classification data from a given XML file into the Teamcenter database.

-update
 Updates existing objects while importing the Classification data. If this argument is not used, the utility does not import data for existing objects. This argument is only valid in conjunction with the -import argument.

-file=xml-file-path
 Specifies the physical path of the XML file.
 For the -export option, the utility generates the given XML file.
 For the -import option, the utility reads the given XML file.

-filter= A, K, C, V, I, all
 Specifies the object types to be considered for the import/export operation. One or more of the following characters can be specified:
 A Attributes
 K Key-LOV
 C Classes
 V Views
 I Instances
 all All types of objects are accepted for import or export
 If filter options are not specified, all is used as the default.
Chapter 11 Classification utilities

-class= class-id
Specifies the ID of the class definition object to be exported. This argument is valid only in conjunction with the -export argument.

-objtype= A|K|C|I
Specifies the type of object for which an ID is given using the -objid argument.

One the following values can be specified for the -objtype argument:
A Attributes
K Key-LOV
C Classes
I Instances

-objid= object-id
Specifies the ID of the object. Used in conjunction with the -objtype argument.

Note The -objtype and -objid arguments are valid only in conjunction with the -export argument.

-parent -parentviews -subclass -subclassviews -hierarchy
These arguments are valid only in conjunction with the -export and -class arguments. These options specify the associated objects to be exported with the specified class object.

-parent
Enables the export of parent classes.

-parentviews
Enables the export of the parent classes and associated views.

-subclass
Enables the export of associated subclasses.

-subclassviews
Enables the export of associated subclasses and views.

-hierarchy
Enables the export of the Classification hierarchy, from the root to the given class.

ENVIRONMENT
This utility should be run from a shell where the Teamcenter environment is set.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
• To import Classification data from the ics_data1.xml file with the update option and to import objects of only the types attribute, class, and view, enter the following command on a single line:

    icsxml -file=ics_data.xml -filter=ACV -import -update
    -u=infodba -p=pwd -g=dba
• To import Classification data from the `ics_data1.xml` file without the update option, and to import all types of objects, enter the following command on a single line:

```
icsxml -file=ics_data.xml -filter=all -import -u=infodba -p=pwd -g=dba
```

• To export Classification data for the `ugc101` class into the `ugc101.xml` file with the option to export parent classes with associated views and subclasses, enter the following command on a single line:

```
icsxml -file=ugc101.xml -filter=all -export -class=ugc101 -parentviews -subclass -u=infodba -p=pwd -g=dba
```

• To export Classification data for the `-2005` attribute into the `-2005.xml` file with the option to export the associated Key-LOV objects, enter the following command on a single line:

```
```
ics_connect

Associates classification objects (ICOs) with workspace objects, based on item ID. You can list multiple workspace objects, or you can create a text file containing a list of item IDs.

For example, when you use the smlutility utility to import classification data into Teamcenter, the ICOs are created as specified in the input file, but they are not attached to the items defined in the input file via their workspace object uid. Use the ics_connect utility to associate all your ICOs (not already connected to any item) to the specified item of the same ID.

Caution If you use multifield keys to define item IDs, you cannot use ics_connect to connect a standalone ICO to an existing item because multiple items with the same ID exist.

SYNTAX

ics_connect [-u=user-id {-p=password | -pf=password-file} -g=group] [-names=item1-ID,item2-ID,... | -file=file-name] [-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the user's password.

If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.
-**names**
Specifies the item IDs of the items to be associated with the ICOs of the same ID.

-**file**
Specifies the name of the file containing the list of item IDs to be associated with the ICOs. Place one item or item revision ID per line.

-**h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**

- To associate the ICOs with IDs of *item2* and *item3* with the items with IDs of *item2* and *item3*:

  ics_connect -u=infodba -p=infodba -g=dba -names=item2,item3

  The system searches for items with the ID *item2* and *item3*, connecting them to ICOs with the same ID, as long as the ICOs are not attached to any other workspace object.

- To associate the ICOs with the *item4/A* and *item5/C* item revisions:

  ics_connect -u=infodba -p=infodba -g=dba -names=item4/A,item5/C

  The system searches for item revisions with the ID *item4/A* and *item5/C*, connecting them to ICOs with the same ID, as long as the ICOs are not attached to any other workspace object.

- To associate the ICOs with the item IDs contained in the *wso_names.txt* file:

  ics_connect -u=infodba -p=infodba -g=dba -file=wso_names.txt

  The file must contain item and item revision IDs, one per line.
smlutility

Updates shared Classification hierarchy definitions to all sites with which they are shared.

Use this command if you do not want to run the subscriptionmgrd daemon in the background. This utility can also be used to share specific definitions immediately, for example, if you modify a definition and want to share it with a colleague at a different site. In such cases, you can execute the command by specifying the definitions you want to share and the sites to which you want to update these definitions.

When you import classification data into Teamcenter using the smlutility utility, the ICOSs that are created are not attached to the items defined in the input file using a workspace object UID. Use the ics_connect utility to associate all the ICOSs not already connected to any item to the specified item of the same ID.

**Caution** The smlutility program overwrites all attributes when run in -update mode. This program does not support the update of individual attributes.

**SYNTAX**

```
smlutility [-u=user-id [-p=password | -pf=password-file] -g=group]
([-import | -export | -delete | -list_hierarchy | -sync | -reassign_to_rev | -ask_shared_sites | -add_shared_sites | -update_shared_sites | -list_local_icos | -migrate | -update_unit_system | -lost_icos | -list_invalid_class_ids | -repair_default_value | -h])
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user’s password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.
-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-import
Imports definitions from the specified file into the database.
  -insert
  Appends the definitions to the existing definitions.
  -update
  Overwrites the existing definitions with those specified in the file.

-export
Exports definition data to a specified file. For example:
  smlutility -export user password group file-name...[-select:object-selection]
  [-objects:object-details]

  object-selection
  dictionary | keylov | class=cid[... | ::sid] | all

  object-details
  dictionary | keylov | class | data | hierarchy | all

-delete
Deletes definitions based on class, view, ICO ID, or attribute. For example:
  smlutility -delete SA user SA password SA group
  -class -id=class-ID [-icos] [-recurse]|
  -view -id=class-ID [-icos]|
  -ico (-cid=class-ID|-id=object-ID)|
  -attribute -id=ID-number
  -keylov

-class
Removes the identified class.
  -icos
  Removes all instances of the specified class.

-recurse
Removes all children of the specified class.

-view
Removes the specified view.
  -icos
  Removes all instances of the specified view if the view is a subclass.

-ico
Removes the identified instances (ICOs).

-attribute
Removes the specified attribute.
Chapter 11  Classification utilities

-keylov
Removes the specified key-LOV.

-list_hierarchy
Displays the classification hierarchy starting from the specified class.
For example:

```
smlutility -list_hierarchy [-u=SA user -p=SA password -g=SA group]
-id=class|groupID [-icos [-wso]] [-views]
[-attr] [-norecurse] [-nodescribe]
```

-icos
Displays basic information about the ICOs of each class.

-wso
Displays information about the classified workspace object.

-norecurse
Lists direct children only.

-nodescribe
Displays less information.

-sync
Synchronizes Classification definition data with remote sites, for example:

```
smlutility -sync SA-user SA-password SA-group [-definitions]
[-sites] [-verbose]
```

-definitions=
VIEW | CLASS | GROUP | DICTIONARY):ID [,ID[,...]]

```
VIEW:
Class-ID::View-ID

DICTIONARY:
Attribute-ID

CLASS:
Class-ID

KEYLOV:
KeyLOV-ID

GROUP:
Group ID
```

Note  You can specify multiple definitions. If no definition is specified, all objects are synchronized.

Examples
-`-definition=VIEW:myClass::myView,myClass::mySecondView`
-`-definition=CLASS:myClass,mySecondClass,MyThirdClass`
-`-definition=KEYLOV:-20000`
**Classification utilities**

- **-sites**
  Specifies the sites to which the data is updated. If you do not specify sites, synchronization takes place between all sites with which definitions are shared.
  For example:
  
  ```
  -sites=site-name[,site-name[,...]]
  ```

- **Example**
  ```
  -sites=IMC-12345,IMC-56789
  ```

- **-reassign_to_rev**
  Modifies ICOs that classify an item so that they classify the latest item revision.
  For example:
  ```
  smlutility -reassign_to_rev -u=SA-user -p=SA-password -g=SA-group class -id=class ID [-recurse]|view -id=view-ID|ico -id=object-ID
  ```

- **class**
  Identifies the class for which all ICOs will be reassigned. For example, using `class -id=ugc010101` indicates that all ICOs in the `ugc010101` class that classify an item will be changed so that they classify the latest revision of the item. You can use the `-recurse` option to reassign all ICOs of the class and all subclasses of the identified class. For example, using `class -id=ugc010101 -recurse` indicates that all ICOs in the `ugc010101` class that classify an item will be changed so that they classify the latest revision of the item. In addition to changing the ICOs of the class, the ICOs in all subclasses of the given class are changed as well.

- **view**
  Reassigns all ICOs of the identified view. For example, using `class -id=ugc010101 view -id=DefaultView` reassigns all ICOs in the `DefaultView` of class `ugc010101` so that the latest revision of the item is classified.

- **ico**
  Reassigns the identified Classification instances (ICOs). For example, using `ico -id=ugc010101_001` changes the specific ICO (`ugc010101_001`) so that it classifies the latest revision of the item.

**General rules**

If an ICO to be reassigned has no associated item or already classifies an item revision, the ICO is not reassigned.

When an ICO is reassigned, the ICO object ID is changed automatically. For example, ICO `ugc010101_001` changes to `ugc010101_001/A` if `A` is the latest revision of the item.

- **-ask_shared_sites**
  Returns the names of the sites to which the specified object is shared.
  ```
  smlutility -add_shared_sites [-u=SA-user] [-p=SA-password] [-g=SA-group] -objectType=class | view | attribute | key-LOV] -objectId=object-ID
  ```

- **-objectType**
  Specifies the type of object whose site you want to know. You can request the site of a class, view, attribute or key-LOV.
-objectID
Specifies the ID of the object whose site you request. If you request a view’s site, the ID has the following format:

    class-ID::view-ID

-add_shared_sites
Shares a class, and optionally including its descendants and parents, to one or more sites.

    smlutility -add_shared_sites
    -u=user -p=password -g=group -classes=class-ID -sites=site-name -options=options

    -classes
classid[,classid[,...]]

    -sites
sitename[sitename[,...]]

    -options
option[,option[,...]]

    shareChildClasses
    Specifies to share child classes.

    shareDefaultViews
    Specifies to share default views.

    shareSubclasses
    Specifies to share subclasses.

    shareSpecificViews
    Specifies to share specific views. The ICS_share_viewtypes preference, which can be set to a combination of user, group, or role, is evaluated.

    shareParents
    Specifies that the parents of the classes named in the argument classes are also shared. If this option is not set, the share operation fails for classes whose parents are not shared to the selected site.

    shareViews
    Use to share default views, subclasses, and specific views, that is, specifying shareViews includes the shareDefaultViews, shareSubclasses, and shareSpecificViews options.

    shareAll
    Use to include the shareViews, shareChildClasses, and shareParents options.

For example:

    smlutility -add_shared_sites -classes=myClass1,myClass2 -sites=Vienna
    -options=shareChildClasses,shareDefaultViews

-update_shared_sites
Changes the site name in all groups, classes, views, attributes, and key-LOVs when updating a site name in Multi-Site.
smlutility -update_shared_sites [-u=SA-user] [-p=SA-password] [-g=SA-group] -oldSite=site-name -newSite=site-name

-oldSite
Specifies the original site name that is to be replaced by a new name.

-newSite
Specifies the new site name to replace the old one in all groups, classes, views, attributes, and key-LOVs.

-list_local_icos
Lists all ICOs that are owned locally.

smlutility -list_local_icos [-u=SA-user] [-p=SA-password] [-g=SA-group] -cid=Class-ID [-verbose]

-cid
Specifies the unique ID of a classification class or group whose local ICOs should be listed.

-verbose
Displays additional information.

-migrate
Assigns the measurement system to each individual ICO within a class.

If an ICO previously exists within a solely metric or nonmetric class, the measurement system is not directly assigned to the ICO but is contained in the class definition. When you move from a metric or nonmetric class to one that contains both, Teamcenter assigns the measurement system to each individual ICO within the class.


-dryrun
Displays results of running the utility without making any changes and tests if all ICOs of the class can be accessed and changed.

-verbose
Displays additional information. The value for this argument must be one of the following:

0   No output
1   Output on error
2   Information and error output

-remote
Updates remote ICOs as well.

-update_unit_system
Changes a class or a class hierarchy that is previously metric or nonmetric to support both unit systems simultaneously.
Chapter 11  Classification utilities

smlutility -update_unit_system [-u=SA-user] [-p=SA-password] [-g=SA-group] [-cid=class-ID] [-unit=both] [-recurse]

- **-cid**
  Specifies the class ID of the class required to support both unit systems.

- **-unit=both**
  Specifies that the class is changed to support both unit systems.

- **-recurse**
  Changes all child classes beneath the class specified by the **-cid** parameter to support both unit systems.

- **-lost_icos**
  Reports and recovers ICOs that do not have a class ID set. If, during creation, Classification crashes, an ICO can already be created, but the attribute specifying in which class it is to be classified not yet saved. This utility finds these unsaved ICOs and can, optionally, classify them in the specified class.


- **-cid**
  Specifies the ID of the class in which the recovered ICOs are to be classified. The ICOs are only classified in this class if **-recover** is also specified.

- **-createClass**
  Creates the specified class if it does not already exist.

- **-recover**
  Moves the found ICOs to the specified class. If this argument is not set, Teamcenter lists the ICOs in the command window or in a file, if you set the **-reportfile** argument.

- **-reportfile**
  Specifies the name of a file in which Teamcenter writes the names of all the ICOs found by the lost ICO search. If you do not use this argument, Teamcenter lists the results in the command window.

- **-list_invalid_class_ids**
  Lists all the group and class IDs in the database that contain invalid characters. By default, the following characters are invalid:

  ```
  %:*|0{}[]\n
  You can specify a subset of these characters to be valid using the **ICS_allowed_chars_for_class_id** preference.
  ```

smlutility -list_invalid_class_ids [-u=user-id [-p=password | -pf=password-file] -g=group] [-reportfile=file-name]
**-reportfile**
Specifies the name of a file in which Teamcenter lists all the invalid group and class IDs. If you do not use this argument, Teamcenter lists the results in the command window.

**-repair_default_value**
Deletes default value for a view attribute if the corresponding class attribute’s value is set to fixed.

**-h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
This utility synchronizes shared definitions but does not change to which sites definitions are shared. If you specify a definition and site for synchronization, but the site is not one for which sharing has been designated, the definition is not sent to the site. For example, if the *myClass* class is only shared to the sites *Rome* and *London*, nothing is synchronized if you execute the following command:

```
  smlutility -sync SA user SA password SA group -definition=CLASS:myClass -sites=Paris
```

**EXAMPLES**

- To import Classification data from a file, perform the following steps:
  1. Enter the following command at a system command prompt:

     ```
     smlutility -import user password group file -insert
     ```

     For example:

     ```
     smlutility -import infodba infodba dba in-CLASSexample.sml -insert
     ```

  2. Press the Enter key.

- To update existing Classification data, perform the following steps:
  1. Enter the following command at a system command prompt:

     ```
     smlutility -import user password group file -update
     ```

     For example:

     ```
     smlutility -import infodba infodba dba in-CLASSexample.sml -update
     ```

  2. Press the Enter key.

- Perform the following steps to remove a class definition:
  1. Enter the following command at a system command prompt:

     ```
     smlutility -delete user password group [class|view|instance] [id]
     ```

     For example:

     ```
     smlutility -delete infodba infodba dba class screws
     ```
Chapter 11  Classification utilities

2. Press the Enter key.
   • Perform the following steps to remove a specific attribute with ID 1643:
     1. Enter the following command at a system command prompt:
        
        smlutility -delete user password group attribute -id=ID number
        
        For example:
        
        smlutility -delete infodba infodba dba attribute -id=1643
      
      2. Press the Enter key.
   • Perform the following steps to remove all unreferenced attributes:
     1. Enter the following command at a system command prompt:
        
        smlutility -delete infodba infodba dba attribute -id=*
      
      2. Press the Enter key.

Sample files for smlutility and icsutility

To help you become familiar with the sml file format and the process of importing and exporting the data necessary to create your Classification hierarchy, a directory of sample files, along with a brief instructional page entitled Readme.txt, is included in your Teamcenter installation and can be found in the following location:

tcdata\sample\in-CLASS

You must install this directory using the Teamcenter Environment Manager.

Understanding the smlutility and SML file format

The smlutility program provides a variety of utilities related to Classification, including the capability to import and export the Classification hierarchy and related instances to and from an ASCII text format. These import/export features are useful for the bulk loading of Classification data and for transferring a Classification hierarchy tree from one database to another.

Although import/export data can be contained in one file or distributed over multiple files, the order in which the elements are imported is important. For example, attribute definitions can reference lists. Therefore, the lists must already be defined. Additionally, classes and subclasses make reference to attributes that must first be defined in the attribute (UNCT) dictionary. To avoid dependency problems, Siemens PLM Software recommends that the following elements be imported in the following order:

• List

• Attribute

• Class

• Subclass
Data

Each line of the import/export file starts with a three-character keyword followed by the appropriate arguments. Each field of the command line is separated by the vertical bar (|) character.

For example:

Keyword | argument1| argument2| argument3|

The following table lists reserved characters, their purpose, and a description:

<table>
<thead>
<tr>
<th>Character</th>
<th>Purpose</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>! (exclamation mark)</td>
<td>Comment</td>
<td>All characters after the ! character are comments. You can place the ! symbol anywhere within the command line.</td>
</tr>
<tr>
<td>&amp; (ampersand)</td>
<td>Line continuation</td>
<td>Continues the command on the following line. Place the &amp; symbol at the end of a line.</td>
</tr>
<tr>
<td></td>
<td>(vertical bar)</td>
<td>Field separation</td>
</tr>
</tbody>
</table>

Elements of an import/export file

An import/export file contains the following elements:

File header

A file header is not required for import files, however, it is recommended. The file header includes information that helps you identify the data contained within the file. The file header is information-only.

The export function automatically generates a file header. The export file header contains information, such as the Teamcenter version number, user, node, database server, and creation date.

List definitions

A list of values is associated with an attribute, such that when a user clicks the down-arrow in the Attribute field, the system displays a list of valid values for that attribute. Teamcenter uses lists when an attribute has a finite set of legal values. The list is more efficient than manual entry because it eliminates the need for the user to memorize the valid values. Lists also enforce consistency.

Lists are defined prior to the attribute definition and are associated with the attribute at the time of its definition.

A list definition is composed of the menu definition (STV keyword) and one or more menu item definitions (STD keyword).
Chapter 11  Classification utilities

Attribute definitions  Attributes are placeholders for values that distinguish one instance of a class/subclass from another. For example, within the sheet metal screws subclass, the length, diameter, and thread attributes distinguish one screw from another. Attributes are defined prior to the class definition and are associated with the class at the time of its definition.

Once defined, attributes, like lists, are stored in a dictionary. They are only defined once and can be used as many times as needed.

Attribute definitions use the SMV keyword.

Group definitions  Groups are defined in the import/export file to organize a large set of classes. Groups are essentially classes with no attributes.

Group definitions use the SML keyword.

Class definitions  The class section of the import/export file defines the class, associates the class with a group, and associates a list of attributes with the class.

A class definition is composed of the class (SML keyword) and the association of one or more attributes using the STD keyword.

Subclass definitions  The subclass section of the file defines subclasses, associates each subclass with a class, and associates a subset of the class attributes with each subclass.

A subclass definition is composed of the subclass (BLD keyword) and the association of one or more attributes using the BSM keyword.

Instances  Instances of Classification objects are normally created by classifying a Teamcenter object, but can also be imported or exported. This is useful when loading third-party part or tool libraries, copying a Classification scheme from one database to another, or performing bulk loads of existing data.

Instances of Classification objects are created using the DAT keyword.

SML import file and BOM line syntax

The following figure illustrates the SML file format required to support import of assembly structures.

```plaintext
DAT |mc0101_001|mc01|01|0| |2005: 01
BOM |mc0101_001|mc01|01| &
  NO;  1;mc0101_002;mc01;01;  1;1;  0.0;0.0;0.0;90.0;0.0;-0.0;0.0;0.0;0.0;0.0;0.0;|-&
  NO.0;  2;mc0101_003;mc01;01;  1;1; -54.0;-84.0;0.0;-0.0;-0.0;90.0;0.0;0.0;0.0;0.0;0.0;|&
  NO.0.0;  6;mc0101_004;mc01;01;  1;1; -47.227;-77.227;0.0;0.0;0.0;0.0;0.0;0.0;0.0;0.0;0.0;|&
  NO.0.0.0;  7;C1;;  1;1; +0.0;+0.0;+0.0;+0.0;+0.0;+0.0;+0.0;+0.0;+0.0;+0.0;+0.0;|&
  NO.0.1;  2;mc0101_005;mc01;01;  1;1; 10.0;+104.0;0.0;0.0;0.0;0.0;0.0;0.0;0.0;0.0;0.0;|&
  NO.0.1.0;  6;mc0101_006;mc01;01;  1;1; 3.121;+97.121;1.590;0.0;0.0;0.0;0.0;0.0;0.0;95.0;0.0;|&
  NO.0.1.0.0;  7;C2;;  1;1; +0.0;+0.0;+0.0;+0.0;+0.0;+0.0;+0.0;+0.0;+0.0;+0.0;+0.0;|
```

Assembly structure BOM line syntax example

As shown in this example, each line containing an assembly structure definition begins with a BOM tag. The three columns that follow the BOM tag contain the
record, class, and subclass identifiers of the database record that defines a resource assembly. The remaining columns contain information pertaining to different components of the assembly.

The record identifier is equivalent to the ICO-ID and the item ID.

The first entry encodes the position of the component within the hierarchical assembly structure.

The second entry defines the node type for the component. Supported node types are:

<table>
<thead>
<tr>
<th>Node type value</th>
<th>Node type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Root Component</td>
</tr>
<tr>
<td>2</td>
<td>Intermediate Component</td>
</tr>
<tr>
<td>6</td>
<td>Bottom level Component</td>
</tr>
<tr>
<td>7</td>
<td>Propagation Start Point</td>
</tr>
</tbody>
</table>

For component nodes, the third, fourth and fifth entries contain the record, class, and subclass identifiers of the database record representing the component.

For propagation start points (PSPs), the third entry contains the number of the propagation start point prefixed by the letter C. In this case, the fourth and fifth entries remain empty.

The sixth entry contains a component quantity field. Multiple components of the same type, for example mc0101_002, must be listed on subsequent lines, each indicating a quantity of one, which allows each line to define its own component transformation.

The seventh entry indicates whether the component graphics are to be displayed in the context of the Genius4000 XTM assembly. This value is not yet mapped to any attribute of the ICS data model.

The remaining entries, including and beyond the eighth entry, define the position of a component in terms of coordinates x, y and z as well as the orientation of the component using the Euler rotation angles a, b and c. This information generally applies only to a single component, thus diluting the interpretation of the component quantity field.

Import/export file example

```plaintext
!##################################################################
! Copyright (C) Siemens PLM Software
!----------------------------------------------------------------------
! SML-IMPORT-EXPORT-HEADER
!----------------------------------------------------------------------
! File : in-class_example.sml
!----------------------------------------------------------------------
! Version : V1.0
! User : andre
! Node : kwnc16
! DB Server : iman
! Date : 06/07/2000 20:48:59
!----------------------------------------------------------------------
! in-CLASS Classification Example
!
! This file includes the definition of
```
Classification utilities

! - attributes
! - menus
! - groups
! - classes/subclasses
! - and some sample data records
!

!#################################################################
!

I CM -> I CM Classification Root
! myhl -> My Highest Level
! myg1 --> Subgroup 1
! 2001 2002 2003 2004 2005 2006 2007
! mc01 --> My Class 1 Diam Thk Descr Angl Dir
! mc01:00 --> All Data X X X
! mc01:01 --> Subclass 1-01 X X X X
! mc01:02 --> Subclass 1-02 X X X X
!
! mc02 --> My Class 2 Diam Thk #Hls Descr Mat AnglDir
! mc02:00 --> All Data X X X
! mc02:01 --> C2 with material X X X X X
! mc02:02 --> C2 including all X X X X X X
! mc02:03 --> C2 limited X X X
!
! myg2 --> Subgroup 2
!

!#################################################################

! Attributes ---

!SMV| UNCT | Format F:2| Text-Description| Short-Text| Ref| Unit U.2| FL| EX1| EX2|
SMV | 2001| 20307 20509| Diameter | Diam | mm inch | 0 | |
SMV | 2002| 20408 20509| Thickness | Thckn. | mm inch | 0 | |
SMV | 2003| 10002 0 | Number Of Holes | Num Holes | | 0 | |
SMV | 2004| 00080 0 | Description | Descr. | | 0 | |
SMV | 2005| -2005 0 | Material | Mat | | 0 | |
SMV | 2006| 20307 0 | Angle | Angle | | 0 | |
SMV | 2007| -2007 0 | Direction | Dir | | 0 | |

!Popups ---

! STV |=2005| Material Popup |
STD | 01 | Lexan |
STD | 02 | Alloy Steel |
STD | 03 | HS Steel |
STD | 04 | Aluminium |
STD | 05 | Copper |

! STV |=2007| Direction Popup |
STD | N | Neutral |
STD | L | Left |
STD | R | Right |

! Classes ---

!Class mc01 : My Class 1 (UNIT: english) ------------------------

! SMID| UNCT| ID | min | max | Flags | EX1 | EX2 |
SMD | 2001| D1 | | 0 | |
SMD | 2002| TH | | 0 | |
SMD | 2004| REM | | 0 | |
SMD | 2006| A1 | | 0 | |
SMD | 2007| DIR | | 0 | |

!Subclass 00 : All Data for "My Class 1"
Classification utilities

! BLD| BLDID| Description | ShortDesc | Graphic | Flags | EX1 | EX2 |
BLD | 00 | All Data | | 0 | | |

! BSM| SML-Id | min | max | Flag | TXT | Flag1 | TXT1 | Flag2 | TXT2 | EX1 | EX2 |
BSM | 2001 | | 0 | 0 | 0 | 0 | | |
BSM | 2004 | | 0 | 0 | 0 | 0 | | |
BSM | 2007 | | 0 | 0 | 0 | 0 | | |

! Subclass 01 : "My Class 1" Subclasses 01

! BLD| BLDID| Description | ShortDesc | Graphic | Flags | EX1 | EX2 |
BLD | 01 | My Subclass 1-01 | | 0 | | |

! BSM| SML-Id | min | max | Flag | TXT | Flag1 | TXT1 | Flag2 | TXT2 | EX1 | EX2 |
BSM | 2001 | | 0 | 0 | 0 | 0 | | |
BSM | 2006 | | 0 | 0 | 0 | 0 | | |
BSM | 2004 | | 0 | 0 | 0 | 0 | | |
BSM | 2007 | | 0 | 0 | 0 | 0 | | |

! Subclass 02 : "My Class 1" Subclasses 02

! BLD| BLDID| Description | ShortDesc | Graphic | Flags | EX1 | EX2 |
BLD | 02 | My Subclass 1-02 | | 0 | | |

! BSM| SML-Id | min | max | Flag | TXT | Flag1 | TXT1 | Flag2 | TXT2 | EX1 | EX2 |
BSM | 2002 | | 0 | 0 | 0 | 0 | | |
BSM | 2004 | | 0 | 0 | 0 | 0 | | |
BSM | 2007 | | 0 | 0 | 0 | 0 | | |

! Class mc02 : My Class 2 (UNIT: metric) -----------------------------

! SML| SMLID | Typ | Group | Description | ShortDesc | Graphic | Flags | EX1 | EX2 |
SML | mc02 | ICM | myg1 | My Class 2 | | 0 | | |

! Attributes for "My Class 2"

! SMD| UNCT | ID | min | max | Flags | EX1 | EX2 |
SMD | 2001 | D1 | 0 | | |
SMD | 2002 | TH | 0 | | |
SMD | 2003 | NH | 0 | | |
SMD | 2004 | REM | 0 | | |
SMD | 2005 | MAT | 0 | | |
SMD | 2006 | A1 | 0 | | |
SMD | 2007 | D2 | 0 | | |

! Subclass 00 : All Data for "My Class 2"

! BLD| BLDID| Description | ShortDesc | Graphic | Flags | EX1 | EX2 |
BLD | 01 | C2 with material | | 0 | | |

! BSM| SML-Id | min | max | Flag | TXT | Flag1 | TXT1 | Flag2 | TXT2 | EX1 | EX2 |
BSM | 2003 | | 0 | 0 | 0 | 0 | | |
BSM | 2004 | | 0 | 0 | 0 | 0 | | |
BSM | 2005 | | 0 | 0 | 0 | 0 | | |
BSM | 2007 | | 0 | 0 | 0 | 0 | | |

! Subclass 02 : "My Class 2" C2 including all

! (Attributes displayed in different order)

! BLD| BLDID| Description | ShortDesc | Graphic | Flags | EX1 | EX2 |
BLD | 02 | C2 including all | | 0 | | |

! BSM| SML-Id | min | max | Flag | TXT | Flag1 | TXT1 | Flag2 | TXT2 | EX1 | EX2 |
BSM | 2004 | | 0 | 0 | 0 | 0 | | |
BSM | 2005 | | 0 | 0 | 0 | 0 | | |
BSM | 2001 | | 0 | 0 | 0 | 0 | | |
Chapter 11  Classification utilities

smlutility keyword syntax and description

STV and STD keywords (lists)

The STV keyword defines a list. Lists associated with an attribute provide a method by which the Classification administrator defines a list of values for a given attribute.
One or more **STD** statements defining the list of values for the list follow the **STV** statement defining the list.

<table>
<thead>
<tr>
<th>Element name</th>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STV</td>
<td>Keyword</td>
<td></td>
</tr>
<tr>
<td>STTXT-ID</td>
<td>List ID number</td>
<td>Always negative.</td>
</tr>
<tr>
<td>Name</td>
<td>List title</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Element name</th>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STD</td>
<td>Keyword</td>
<td>Key for list.</td>
</tr>
<tr>
<td>Key</td>
<td></td>
<td>Value</td>
</tr>
<tr>
<td>Value</td>
<td></td>
<td>Text for list item</td>
</tr>
</tbody>
</table>

The following example creates a list to be used with a **Cut Direction** attribute. The resulting list contains the **Left Hand Climb** and **Right Hand Climb** options.

<table>
<thead>
<tr>
<th>Keyword</th>
<th>STTXT-ID</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>STV</td>
<td>-9110</td>
<td>Cut Direction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Key</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>STD</td>
<td>LHC</td>
<td>Left Hand Climb</td>
</tr>
<tr>
<td>STD</td>
<td>RHC</td>
<td>Right Hand Climb</td>
</tr>
</tbody>
</table>

**SMV keyword (attributes)**

The **SMV** keyword defines an attribute and adds the attribute definition to the attribute (UNCT) dictionary. Once an attribute is defined in the dictionary, it can be used and reused as needed.

<table>
<thead>
<tr>
<th>Element name</th>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMV</td>
<td>Keyword</td>
<td>Uniquely identifies an attribute and is the key field for associating the attribute with a class or subclass. UNCT numbers can be positive or negative.</td>
</tr>
<tr>
<td>UNCT</td>
<td>Attribute identifier</td>
<td>Positive numbers from 0 to 999 are reserved for Siemens PLM Software.</td>
</tr>
<tr>
<td>Element name</td>
<td>Definition</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| Format       | Value format | Defines the type of value that is stored for the attribute. The major types of values are:  
  Integer  
  Real  
  Date  
  Time  
  List  
  Zero, one, or two formats can be entered in the Format field. For more information about units and formats, see Units and formats. |
| Name         | Attribute name | Describes the attribute that is being defined. The name can be a maximum of 63 alphanumeric characters in length and is case sensitive. |
| Short Name   | Short name   | Short name for an attribute can consist of up to 10 alphanumeric characters. When there is limited space available, Teamcenter uses the short name for creating reports. |
| Ref          |             | Not used. |
| Units        | Units       | Units are entered as a string that appear after the attribute value in the Classification pane located on the Properties tab.  
  Zero, one or two unit descriptions can be entered in the Units field. For more information about units and formats, see Units and formats. |
| Flags        |             | Not used, always 0. |
| EX1          |             | Not used. |
| EX2          |             | Not used. |

**Units and formats**

To identify the units and control the format of a numeric attribute, use the Units and Format parameters of the SMV command line.

For numeric attributes that change between measuring systems dependent on the class to which they are assigned, you can enter two formats and two units.

For example, if the numeric attribute `diameter` is used in the *inch* class and *metric* class, the following definition can be used:

```
SMV | -2491 | 21309 21308| Diameter | Dia | | mm inch | 0 | |
```
This definition describes a +/-6.3 format with units of mm for the metric class and a +/-3.3 format with units of inch for the inch class. For example:

For + or - REAL(6.3) use 21311. Where 11 is the sum of: (6 plus 3=9) plus .=10 plus - which gives 11.
For a forced pos. REAL(6.3) use 20310. Where ( 6 plus 3 plus . )=10.
For a Real(3.3) that forces pos. numbers, use the code 20307.
For a Real(6.3) that forces pos. numbers, use the code 20310.

The value in the Flags parameter of the SML (class) command determines which of the two definitions are used with that class.

**Note**  Negative format numbers are the STXT-ID of a list.

The first digit of a positive format number defines what types of values are expected in the field and controls the format of the value. The format number can be up to five digits in length. The following figure explains the meaning of the digit in the format number:

![Digit in format number](image)

Digit in format number

In the following tables, the system creates a list with two entries and then defines two Cut Direction attributes. The first Cut Direction attribute (UNCT number
3001) represents a string attribute that allows the user to enter a 40-character text string representing the cut direction. In this case, the user is responsible for entering valid strings for the attribute value within the Classification interface.

In the second attribute definition (UNCT number 3002) creates a Cut Direction attribute that allows the user to choose predefined values from a list.

**Note** The negative format number matches the STXT-ID of the list definition and associates the attribute to the previously defined list.

### List definition

<table>
<thead>
<tr>
<th>Keyword</th>
<th>STXT-ID</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>STV</td>
<td>-3002</td>
<td>Direction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Keyword</th>
<th>Key</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>STD</td>
<td>L</td>
<td>Left</td>
</tr>
<tr>
<td>STD</td>
<td>R</td>
<td>Right</td>
</tr>
</tbody>
</table>

### Cut direction attribute definition

<table>
<thead>
<tr>
<th>Keyword</th>
<th>UNCT</th>
<th>Format</th>
<th>Name</th>
<th>Short Name</th>
<th>Ref</th>
<th>Units</th>
<th>Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMV</td>
<td>3001</td>
<td>00040</td>
<td>Cut Direction</td>
<td>Cut Dir</td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>SMV</td>
<td>3002</td>
<td>-3002</td>
<td>Cut Direction</td>
<td>Cut Dir</td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

### SML and SMD keywords (class/group)

The SML keyword defines a class or group. A class definition consists of an SML definition statement followed by up to 60 SMD lines to associate attributes with the class. A group is essentially a class with no attributes; the group definition consists of an SML statement only with the Flags parameter set to 2.

**Note** The attributes are associated with the class because they immediately follow the SML statement. There is no explicit reference to the class in the SMD statements.

<table>
<thead>
<tr>
<th>Element name</th>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SML</td>
<td>Keyword</td>
<td>Keyword</td>
</tr>
<tr>
<td>SML-ID</td>
<td>Class or group ID</td>
<td>Class or group ID</td>
</tr>
<tr>
<td>Type</td>
<td>Module name</td>
<td>Module name</td>
</tr>
<tr>
<td>Group</td>
<td>Parent class or group</td>
<td>Parent class or group</td>
</tr>
</tbody>
</table>

For class definitions, the Group parameter defines the ID of the class or group that the current class or group belongs to in the hierarchy. You can only nest a group underneath another group. You can add a class to a group or to another class.
<table>
<thead>
<tr>
<th>Element name</th>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description</td>
<td>Class name</td>
<td>Name displayed in the Classification user interface.</td>
</tr>
<tr>
<td>Short Description</td>
<td>Short name</td>
<td></td>
</tr>
<tr>
<td>Graphics File</td>
<td>Associated image file name</td>
<td></td>
</tr>
<tr>
<td>Flags</td>
<td>Special case flags</td>
<td>Flags denote the options that you set when creating a class or group.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For more information, see Understanding SML flags.</td>
</tr>
<tr>
<td>EX1</td>
<td></td>
<td>Not used.</td>
</tr>
<tr>
<td>EX2</td>
<td></td>
<td>Not used.</td>
</tr>
</tbody>
</table>

**Understanding SML flags**

Flags denote the following options that you set when creating a class or group using the `smlutility` utility.

<table>
<thead>
<tr>
<th>Flag</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Class with metric unit system</td>
</tr>
<tr>
<td>1</td>
<td>Class with nonmetric unit system</td>
</tr>
<tr>
<td>2</td>
<td>Group definition</td>
</tr>
<tr>
<td>4</td>
<td>Class with both unit systems (metric and non-metric)</td>
</tr>
<tr>
<td>16</td>
<td>Storage class (Abstract option not selected)</td>
</tr>
<tr>
<td>32</td>
<td>Assembly class</td>
</tr>
<tr>
<td>512</td>
<td>Class that prevents remote classified object creation (Prevent remote ICO creation selected)</td>
</tr>
</tbody>
</table>
You can also specify any meaningful combination of these options by adding the flags. For example, 17 denotes a nonmetric storage class (16 + 1). This is equivalent to setting the following options.

Specifying a flag of 20 denotes a storage class containing both systems of measure (16 + 4) and is equivalent to setting the following options.

**SMD keyword (class attributes)**

The SMD keyword associates attributes with a class. The class definition must associate all of the attributes that will be used by any subordinate subclass. A subclass can only associate attributes that have been previously associated with the parent class.

<table>
<thead>
<tr>
<th>Element name</th>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMD</td>
<td>Keyword</td>
<td></td>
</tr>
<tr>
<td>UNCT</td>
<td>Unique attribute ID</td>
<td>Specifies the ID of an attribute defined in the UNCT dictionary. It associates the attribute with the class. For more information, see <em>SMV keyword (attributes)</em>.</td>
</tr>
</tbody>
</table>
Classification utilities

<table>
<thead>
<tr>
<th>Element name</th>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Designation</td>
<td>Standard dimensional designation DIN or ASCII standard designation for attribute</td>
<td>The <strong>Standard Designation</strong> and <strong>Attribute Name</strong> (from the attribute definition) appear next to the respective attribute value field in the Classification pane located on the <strong>Properties</strong> tab.</td>
</tr>
<tr>
<td>Min</td>
<td>Minimum numeric value</td>
<td></td>
</tr>
<tr>
<td>Max</td>
<td>Maximum numeric value</td>
<td></td>
</tr>
<tr>
<td>Flags</td>
<td></td>
<td>Not used, always 0.</td>
</tr>
<tr>
<td>EX1</td>
<td></td>
<td>Not used.</td>
</tr>
<tr>
<td>EX2</td>
<td></td>
<td>Not used.</td>
</tr>
</tbody>
</table>

For example, the following lines define the **Fasteners** group (essentially a class without any attributes), add the **Nuts01** class, and associate the **ID**, **OD**, and **THRD** predefined attributes with the class:

```
SML |Fasteners|FSTNRS| |Fasteners|FSTNRS| | | | | 2 | | | | | | !Fasteners Group
SML |Nuts01 |NT | |Fasteners|Nuts | |Nts |nuts.gif| 0 | | | | | | !Nuts Class
SMD |-25011 |ID | | | | | | | | !ID attribute
SMD |-25011 |OD | | | | | | | | !OD attribute
SMD |-25011 |Thread| | | | | | | | !Thread attribute
```

**BLD and BSM keywords (subclass)**

The **BLD** keyword defines a subclass. A subclass definition consists of a **BLD** definition statement followed by up to 60 **BSM** lines that associate attributes with the subclass. The selected attributes must be a subset of the class attributes.

**Note** A subclass is similar to a view of a class. It is comprised of a subset of the attributes used to define the class. The order of the attributes does not have to be the same as the order of the attributes at the class level. Classification displays the attributes in the order defined by the subclass. The attributes are associated with the class because they immediately follow the **BLD** statement. There is no explicit reference to the class in the **BLD** statements.

<table>
<thead>
<tr>
<th>Element name</th>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLD</td>
<td>Keyword</td>
<td></td>
</tr>
<tr>
<td>BLD-ID</td>
<td>Subclass ID</td>
<td>Internal unique subclass identifier.</td>
</tr>
<tr>
<td>Description</td>
<td>Description</td>
<td>Subclass name displayed in the Classification user interface.</td>
</tr>
<tr>
<td>Short Description</td>
<td>Short description</td>
<td></td>
</tr>
<tr>
<td>Graphics File</td>
<td>Graphics file</td>
<td></td>
</tr>
<tr>
<td>Flags</td>
<td>Not used, always 0.</td>
<td></td>
</tr>
<tr>
<td>EX1</td>
<td>Not used.</td>
<td></td>
</tr>
<tr>
<td>EX2</td>
<td>Not used.</td>
<td></td>
</tr>
</tbody>
</table>
### Chapter 11  Classification utilities

<table>
<thead>
<tr>
<th>Element name</th>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSM</td>
<td>Keyword</td>
<td></td>
</tr>
<tr>
<td>UNCT</td>
<td>Attribute ID</td>
<td>Specifies the ID of an attribute defined in the UNCT dictionary. It associates the attribute with the subclass. The list of attributes assigned to a subclass must be a subset of the attribute list defined for the class.</td>
</tr>
<tr>
<td>Min</td>
<td>Minimum numeric value</td>
<td></td>
</tr>
<tr>
<td>Max</td>
<td>Maximum numeric value</td>
<td></td>
</tr>
<tr>
<td>Flags</td>
<td>Not used, always 0.</td>
<td></td>
</tr>
<tr>
<td>TXT</td>
<td>Not used.</td>
<td></td>
</tr>
<tr>
<td>Flags1</td>
<td>Not used, always 0.</td>
<td></td>
</tr>
<tr>
<td>TXT1</td>
<td>Not used.</td>
<td></td>
</tr>
<tr>
<td>Flags2</td>
<td>Not used, always 0.</td>
<td></td>
</tr>
<tr>
<td>TXT2</td>
<td>Not used.</td>
<td></td>
</tr>
<tr>
<td>EX1</td>
<td>Not used.</td>
<td></td>
</tr>
<tr>
<td>EX2</td>
<td>Not used.</td>
<td></td>
</tr>
</tbody>
</table>

For example, the following lines define the **HexNuts01** and **SquareNuts01** subclasses and associate a predefined attribute named ID:

```
BLD|00 |Nuts |Fasteners|nuts.gif|Nts|nuts.gif| 0 | | |!Subclass
BLD|01 |HXNuts|Fasteners|nuts.gif|Nts|nuts.gif| 0 | | |!Subclass
BSM|-25011|ID | | | | |0 | | |!ID attribute
```

### DAT keyword (instances)

The **DAT** keyword represents a Classification instance. Each **DAT** statement represents one instance.

An instance is a set of attribute values corresponding to an attribute list that defines a particular subclass. Any number of instances can exist for a specific subclass. Along with a relation to a Teamcenter object (for example, item, item revision, and dataset), the system creates a complete classification. The import/export function of the **smlutility** provides the ability to import or export Classification instances.

<table>
<thead>
<tr>
<th>Element name</th>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAT</td>
<td>Keyword</td>
<td></td>
</tr>
<tr>
<td>DATA-ID</td>
<td>Instance ID</td>
<td></td>
</tr>
<tr>
<td>SML ID</td>
<td>Class ID</td>
<td></td>
</tr>
<tr>
<td>BLD ID</td>
<td>Subclass ID</td>
<td></td>
</tr>
<tr>
<td>Flags</td>
<td>Not used, always 0.</td>
<td></td>
</tr>
<tr>
<td>POM-TAG</td>
<td>E Refs &amp; I Refs</td>
<td></td>
</tr>
</tbody>
</table>
For example, the following statement defines the **ucg010101_001** Classification instance that belongs to the **Subclass 01** subclass of the **ugc0101** class. The 13 attribute values are entered for this subclass.

Attribute values are stated in terms of pairs of attribute ID and values separated by a colon (:) character as follows:

```
DAT | ugc010101_001 | ugc0101 | 01 | 0 | &
| -2605: 001.500| -2603: 04| -2619: R| -2503: TMc0_00006 &
| -18032: HSS-Co8-TiN | -2553: 000.000| -2637: 050.000 &
| -2618: 006.000| -4110: 006.000| -4110: 006.000| -4100: B | -2690: 0| -2691: 1 &
| -1200: Parallel shank cutter
```

When creating a classification instance in a class that contains both metric and nonmetric units of measure, you must specify the unit of measure for the instance. Do this by adding **-630:0** for a metric instance and **-630:1** for a nonmetric instance to the attribute/value list.
Chapter

12 Query utilities
build_fts_index

Builds keyword indexes for the Autonomy search engine on an object-by-object basis. These indexes enable the Teamcenter full-text keyword search and can index both the properties of Teamcenter dataset objects and the contents of dataset files.

- If a dataset file is not of a document type supported by Autonomy, the utility invokes a user-specified filter program to convert the file to a supported format.

- You do not need to specify languages to index. The Autonomy software automatically detects the language used in a file, and Teamcenter determines the metadata language.

- A file attached to a dataset must contain enough words for the Autonomy software to detect the language.

**Note** Before running this utility, add the `TC_fts_indexed_types` preference to the database. This preference defines a list of the dataset types that you want to index. For more information about managing options and preferences, see the *Rich Client Interface Guide*.

For more information about all the preferences required to index the Autonomy search engine, see the *Application Administration Guide*.

Autonomy supports a wide range of file types for word processing, spreadsheet, and presentation graphics applications.

**WORD PROCESSING**

The following word processing file types are supported:

- HTML
- SGML
- XML
- TEXT
- RTF
- WML
- Adobe PDF
- ASCII text
- ANSI text
- Unicode V2.x
- Microsoft RTF
- Microsoft Word for Windows V3.x and later
• Microsoft Word Mac V4.x to V6.x
• Microsoft Word PC V2.0 to V5.5
• Microsoft Word 2007 (MSWordX)
• Quark QXD

SPREADSHEET

The following spreadsheet file types are supported:
• Microsoft Works V3.x and later
• Microsoft Excel V3.x and later
• Microsoft Excel 2007 (MSExcelX)

PRESENTATION GRAPHICS FORMATS

The following presentation graphics file formats are supported:
• Shockwave Flash (with Autonomy Flashslave)
• Microsoft PowerPoint V4 and later
• Microsoft PowerPoint 2007 (MSPowerpointX)

SYNTAX

build_fts_index.exe [-u=user_id | -p=password | -pf=password-file | -g=group]  
| -type=variable_name | -ext=extension | -filter=/path/scriptfile |  
| -workdir=work_directory | -db=Autonomy_database |  
| -filenumber=number_of_files | -log=logfile | -f=index | delete |  
| update | -maxresults=number_of_queries | -query=query_name |  
| -entry=entry_name | -value=entry_name_value | -report

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.
-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-type
Specifies the dataset type to index. Specified dataset types must be defined by the TC_fts_indexed_types preference.
If this argument is not specified, all dataset types defined by the TC_fts_indexed_types preference are indexed.
This argument can be specified multiple times to index multiple dataset types in a single utility session, for example:

   -type=Text -type=HTML

   Note If the TC_fts_indexed_types preference is used, the WSOM_find_list_separator value must be set in the tc_env file.

-ext
Specifies the extension pattern of the files to be indexed. This argument can be specified multiple times to index multiple file types in a single session. This argument can contain wildcard characters.
If not specified, the default value is an asterisk (*), and all files associated with datasets are indexed.

-filter
Specifies a filter program requiring that two arguments, input file and output file, be specified. The input file is read and its contents are output in a file format that is supported by Autonomy. By default, no filter is applied.

   Note The -filter argument must be entered immediately following the -ext argument to which it applies.

-workdir
Specifies the full path to the directory under which an autonomy subdirectory is created to store all exported dataset files and any immediate files to be indexed by Autonomy.

   • This directory must have large scratch spaces to support indexing of a large number of datasets in a single run.

   • All exported files and any immediate files are removed from the directory after the utility is run.

   • The user must have the write privilege into the work directory.
If this argument is not specified, the default is the current directory.

-\texttt{db}
Defines the Autonomy database where index data is stored.

If this argument is not specified, the data is stored in the database defined by the
\texttt{TC\_fts\_database\_name} preference.

-\texttt{filenumber}
Defines the number of files that can be exported and stored in the directory before
being indexed in to Autonomy. Use this argument to allow the utility program to
index datasets at intervals without consuming large amounts of disk space.

If this argument is not specified, the default file number is \texttt{100}.

-\texttt{log}
Specifies the name of the file into which the import statistics are written. The file is
created and stored in the \texttt{TC\_TMP\_DIR/fts} directory, with the Teamcenter process
ID appended to it.

The log file provides the following information:

- Number of calls made to Autonomy during the utility run
- Number of datasets found
- Number of datasets indexed
- Number of datasets that failed to be indexed and the corresponding failure
  messages

If this argument is not specified, the default log file is \texttt{tc\_index\_processId.log}.

-\texttt{f}
Specifies one of the following operations:

- \texttt{index}
  Indexes datasets for all languages.

- \texttt{delete}
  Deletes invalid index entries from the Autonomy database.
  This option does not support the \texttt{-query} argument.

- \texttt{update}
  Deletes invalid index entries, if applicable, and regenerates new entries if
datasets have not yet been indexed. This option supports the cases in which
datasets have either been modified or created after the last index or were not
indexed. Siemens PLM Software recommends using the \texttt{-update} option once the
entire database has been indexed using the \texttt{-index} option.

If this argument is not specified, the default operation is \texttt{f=index}.

-\texttt{maxresults}
Defines the number of query results that can be returned by the search engine.
This option is useful if you want to control how often to place query calls to the Autonomy server and allow the utility to process invalid index entries at intervals without consuming large amounts of memory. For example, use `-maxresults` to control how often to make query calls to Autonomy server during the `-f=delete` operation.

**Note**  This option works only in conjunction with the `-f=delete` argument.

If this argument is not specified, the default maximum number is **5000**.

**-query**
Defines the name of the Teamcenter saved query that can be run to find all dataset objects that need to be indexed.

This argument is useful when you select a few individual datasets to be indexed with special options, such as a different language type.

- Datasets returned by the query are indexed only if their dataset types are defined by the `TC_fts_indexed_types` preference.
- Invalid dataset types are ignored.

**Note**  When used with the `-f` argument, `-query` works only with the `-f=index` and `-f=update` options.

**-entry**
Specifies the user entry name for the saved query for which the search value is being defined.

**-value**
Specifies the value corresponding to the entry name.

**Note**  The `-entry` and `-value` arguments must be supplied in pairs.

**-report**
Prints all the datasets that are reindexed when the utility is run using the `-update` option. The `-report` argument can be used to report datasets that were not indexed during the last indexing run.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
- The following example indexes all dataset types defined by the `TC_fts_indexed_types` preference:

  ```bash
  $TC_BIN/build_fts_index
  -u=user-name -p=password -g=group-name\n  -filename=500
  ```

  **Note**  If a query is not included, each use of the `build_fts_index` utility indexes all datasets.
• The following example indexes Text type datasets. Only the dataset files with .txt extensions are indexed.

```
$TC_BIN/build_fts_index
-u=user-name -p=password -g=group-name\n-type=Text
-filenumber=500
```

• The following creates index entries in the Autonomy database for dataset objects modified after the specified date (in this case, 11-Aug-2011):

```
$TC_BIN/build_fts_index
-u=user-name -p=password -g=group-name\n-query="Dataset...”
-entry="Modified After”
-value="11-Aug-2011”
```

**Note**  The query value must exactly match a name value as shown in Query Builder.

For information about using Query Builder, see the *Query Builder Guide*.

• The following example deletes invalid index entries from the Autonomy database for all dataset types defined by the `TC_fts_indexed_types` preference:

```
$TC_BIN/build_fts_index
-u=user-name -p=password -g=group-name\n-f=delete
```

• The following example deletes invalid index entries from the Autonomy database for Text type datasets:

```
$TC_BIN/build_fts_index
-u=user-name -p=password -g=group-name\n-f=delete
-type=Text
```
default_queries

Reinstalls one or more of the default query forms. When you run the utility, it searches for these default query forms and automatically reinstalls any that have been deleted. If a default query form has become corrupted, you must delete it from the database before running this utility.

This utility can operate in one or more locales provided the locales are supported by the encoding of the TCServer machine. To set the correct locale, use the preferences_manager utility to set the TC_language_default preference as shown in the following example:

```
preferences_manager -u=infodba -p=password -g=dba
-mode=import -scope=SITE -preference=TC_language_default
-values=xx -action=OVERRIDE
```

xx is one of the supported locales.

For more information about the TC_language_default preference and a list of supported locales, see the Preferences and Environment Variables Reference.

**Caution** Siemens PLM Software recommends that you run this utility as the default Teamcenter system administration user (infodba). This ensures that the query forms are protected from unauthorized modification by other users because they are owned by the infodba user.

**SYNTAX**

```
default_queries [-u=user-id [-p=password | -pf=password-file] -g=group]
-locales=locale-code | ALL [-recreate] [-validate_query_name]
[validate_query_deses] [-modify_queries query_name(s) | ALL] [-v] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the user-ID value to be the password.

  This argument is mutually exclusive with the -pf argument.
-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-locales
Specifies the locale, using locale codes or ALL, for which translated query names and descriptions are installed. You can specify a single locale or you can specify multiple locales in a comma-separated list, for example en_US,de_DE,fr_FR. Using the ALL value installs all locales supported by your Teamcenter system.

For a list of locale codes, see the Localization Guide.

-recreate
Optional parameter. Recreates the default query.

-validate_query_name
Optional parameter. Validates the query name does not exceed the maximum length.

-validate_query_descs
Validates the query description does not exceed the maximum length.

-modify_queries
Updates the query clauses of the specified queries with the default query clause. You can specify a single query or you can specify multiple queries in a comma-separated list, for example, ItemRevision, Item, Dataset. Use the ALL value to modify all your queries.

-v
Specifies verbose mode.

-h
Displays help for this utility.
findAppearances

Queries the database for information about appearances. Arguments can be specified to restrict the search, as follows:

- Search for a specific appearance set or all appearance sets.
- Search for appearances configured on a given date.
- Search for appearances configured for a particular unit number.
- Search for the appearance associated with a specific component by item ID, key, or other attribute.

**Note** The output of this utility can be configured to print effectivity values.

**SYNTAX**

```bash
find_appearances [-u=user-id | -p=password | -pf=password-file] -g=group
[-item_id=item-id] | [-key=[keyAttr1=keyVal1][,keyAttr2=keyVal2]...[keyAttrN=keyValN]]
[-config_rule=config-rule] [-view_type=view-type] [-root_only]
[-date=date | now | today] [-unit_no=unit-number]
[-component_item_id=component-item-id]
[-query=saved-query | -query_entries=entry=value [entry=value,...]]
[-list | -verbose] [-print_cols=all | col[col,...]] [-history | -attrs]
[-single_line] [-no_transform] [-print_queue] [-timing]
[-validate] [-check] [-queue_check] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externality through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the `user-ID` value to be the password.

  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
Query utilities

For more information about managing password files, see Manage password files. This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-item_id
Tracks the given item to find appearances for the appearance roots.

-key
Tracks the given item, specified by key, to find appearances for the appearance roots. Use the following format:

[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]

To find the key of an object, use the get_key_string utility.
For more information, see the Business Modeler IDE Guide.

-config_rule
Tracks the given configuration rule to find appearances for the appearance roots.

-view_type
Tracks the given view type to find appearances for the appearance roots.

-root_only
Lists only the appearance roots, not the appearances.

-date
Locates appearances configured on the specified date. Valid values are:

date  Specifies a date in the format yyyy MM dd hh mm ss.
now   Specifies appearances configured at this moment.
today Specifies appearances configured from midnight until the present time of the current day.

-unit_no
Locates appearances configured for the specified unit number.

-component_item_id
Specifies that appearances be filtered corresponding to the specified component item.

-query
With component Item(Revision) satisfying the given query, either:

-  -ics=class[,class,...]
   OR

-  -ics=class,attr-id: attr-id: value-clause[,attr-id: value-clause,...]]
   With component Item(Revision) satisfying the given Classification data:
   
mapped_attrs=name operator value[,name operator value,...]]
   
   Where operator is one of the following:
   
   =, !=, >, >=, < or <=
... with the given mapped attribute values.

-**list**
Specifies that the appearances are output in a simple list.

-**verbose**
Specifies that the appearances are output as an indented BOM.

-**print_cols**
Use with the -**verbose** argument to specify the columns to display. Valid values are all or column-id, where column ids are comp, dates, unit_nos, occ, parent, creation_date, precise, Component Item Rev.

-**history**
Use with the -**verbose** argument to include appearance history in the output.

-**attrs**
Use with the -**verbose** argument to print mapped attributes in the output.

-**single_line**
Use with the -**attrs** argument to output mapped attributes on the same line as main appearance attributes.

-**no_transform**
Use with the -**attrs** argument to print mapped attributes but not the transform matrix.

-**print_queue**
Prints information about all the primary queue entries affecting the appearance root (includes the processed entries).

-**timing**
Prints timing information in the output.

-**validate**
Compares the appearances with the equivalent product structure.

[Note] You must also supply the -**date** argument, -**unit_no** argument, or both arguments, depending on the revision rule.

-**check**
Checks each appearance for duplication.

-**queue_check**
Places entries in the queue to check the appearance root.

-**h**
Displays help for this utility.

**ENVIRONMENT**
As specified in Manually configuring your environment for Teamcenter utilities.

**FILES**
As specified in Log files produced by Teamcenter.

**RESTRICTIONS**
None.
The following code segment shows the invocation of this utility.

```
L:\>find_appearances -item_id=APPR_0720_I1_BH -print_cols=dates,precise
  -verbose -date=now Found 1 AppearanceRoot
AppearanceRoot[0] = 00000d93 = q5QF18KcAAgcRA (Item ID: APPR_0720_I1_BH (View: view)
APPR extent took 0.41 real-secs, 0.01 cpu-secs, 0.00 child-cpu-secs
```

<table>
<thead>
<tr>
<th>Appearance</th>
<th>In Date</th>
<th>Out Date</th>
<th>Precise</th>
<th>Component</th>
<th>Item</th>
<th>Rev</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJDFI85zAAgcRA</td>
<td>04/10/28</td>
<td>09/12/30</td>
<td>23:59:59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A5FFI87ZAAgcRA</td>
<td>04/10/28</td>
<td>09/12/30</td>
<td>23:59:59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QJNFI8qKAgcRA</td>
<td>04/10/28</td>
<td>09/12/30</td>
<td>23:59:59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QJFDFI87ZAAgcRA</td>
<td>04/10/28</td>
<td>09/12/30</td>
<td>23:59:59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QBFIF18KcAAgcRA</td>
<td>04/10/28</td>
<td>09/12/30</td>
<td>23:59:59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QBFIF18KcAAgcRA</td>
<td>04/10/28</td>
<td>09/12/30</td>
<td>23:59:59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QBFIF18KcAAgcRA</td>
<td>04/10/28</td>
<td>09/12/30</td>
<td>23:59:59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QBFIF18KcAAgcRA</td>
<td>04/10/28</td>
<td>09/12/30</td>
<td>23:59:59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QBFIF18KcAAgcRA</td>
<td>04/10/28</td>
<td>09/12/30</td>
<td>23:59:59</td>
<td></td>
<td></td>
<td></td>
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<td>QBFIF18KcAAgcRA</td>
<td>04/10/28</td>
<td>09/12/30</td>
<td>23:59:59</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QBFIF18KcAAgcRA</td>
<td>04/10/28</td>
<td>09/12/30</td>
<td>23:59:59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There were 9 notes and 0 errors during this run
Please see log file in \teamcenter_wnti\log\find_appearancescc10df80.syslog

find_appearances utility
**find_recently_saved_item_rev**

Allows you to search for item revisions with a UGMASTER dataset or BOM view revision that has been modified during a range of dates. Use a date before the earliest assembly was created to ensure a listing of all changed items.

**SYNTAX**

```
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the *user-ID* value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-start_date**
  Defines the date and time from which the item revisions are searched. The time specifies a time in the current time zone for the machine where the program is running. Use the following format: *dd-mmm-yyyy hh:mm:ss*. For example, 01-Jan-2002 13:00:00.
  This argument is required.
-end_date
Defines the date and time before which the item revisions are searched. The time specifies a time in the current time zone for the machine where the program is running.

Use the following format: dd-mmm-yyyy hh:mm:ss. For example, 01-Jan-2002 13:00:00.

If this argument is not defined, the item revisions are searched until the current date.
This argument is optional.

-obj_type
Specifies the item revision type to be searched. This argument is optional; if not defined, objects of all item revision types are searched.

-out_file
Specifies the name of the file to which the list of item revisions is sent. This argument is optional; if not defined, the output is written to the standard output.

The output includes key values.

-outItemRevKeyFile
Specifies the name of the item revision key file to which the list of item revisions is sent. This argument is optional; if not defined, the output is written to the standard output.

-h
Displays help for this utility.

ENVIRONMENT
This utility should be run from a shell where the Teamcenter environment is set.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
To list the item revisions saved after January 01, 2002:

```
$TC_ROOT/bin/find_recently_saved_item_rev
-start_date="01-Jan-2002 00:00:00" -out_file=saved_items.txt
```
Chapter 12  Query utilities

find_released_item_rev

Allows you to create a query based on date and object type. The query is performed on the Teamcenter database and generates the released item revision list to identify released item revisions. Use a date before the earliest assembly was created to ensure a listing of all released items.

SYNTAX

find_released_item_rev [-u=user-id [-p=password | -pf=password-file] -g=group]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

[Note] If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
 Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-start_date
Defines the date and time from which the item revisions are searched. The time specifies a time in the current time zone for the machine where the program is running. This argument is required.

Use the following format: dd-mmm-yyyy hh:mm:ss. For example, 01-Jan-2002 13:00:00.
-**end_date**
Defines the date and time before which the item revisions are searched. The time
specifies a time in the current time zone for the machine where the program is
running.

Use the following format: *dd-mmm-yyyy hh:mm:ss*. For example, 01-Jan-2002
13:00:00.

If this argument is not defined, the item revisions are searched until the current date.
This argument is optional.

-**-obj_type**
Specifies the object type to be searched. This argument is optional; if not defined,
objects of all types are searched.

-**-out_file**
Specifies the name of the file to which the list of item revisions is sent. This
argument is optional; if not defined, the output is written to the standard output.

The output includes key values.

-**-outItemRevKeyFile**
Specifies the name of the item revision key file to which the list of item revisions
is sent. This argument is optional; if not defined, the output is written to the
standard output.

-**-h**
Displays help for this utility.

**ENVIRONMENT**
This utility should be run from a shell where the Teamcenter environment is set.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
To list all the item revisions released after January 01, 2002:

```
$TC_ROOT/bin/find_released_item_rev -start_date="01-Jan-2002 00:00:00"
-obj_type="" -out_file="released_items.txt"
```
Chapter 12  Query utilities

query_xml

Creates, modifies, writes, deletes, and runs queries from an XML formatted file.

SYNTAX

query_xml [-u=user-id [-p=password | -pf=password-file] -g=group] -v -f=xml-command-file [-o=output-file-name] [-h]

ARGUMENTS

-u=
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p=
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g=
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-f= xml-command-file
Specifies the fully qualified name of the XML file used to control processing. This argument is mandatory.

-o= output-file-name
Specifies the name of the file to which the output from the write and execute processes are written. This argument is optional. If unspecified, the output is sent to the console. This parameter is required for the execute and execute_tuple command types.
The -o argument specified for outputting a generated query result file does not support appending the results of multiple queries to the specified output file. If you
have more than one query specified in the `query_xml` utility, only the last query is included in the defined output file. The documentation for `-o` usage is correct for a single query but does not describe the scenario or required parameter for multiple queries and output files.

If you execute multiple queries using `query_xml`, add a parameter called `outputFileName` to the query definition to specify a unique output file for each query. Because queries can result in structurally different XML content per context, queries cannot be appended together and must be treated as unique files per query.

For example:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<ImanQueryCommandFile site_name="arh" site_id="id">
  <ImanQueryCommand command="execute">
    <name value="Dataset Name"/>
    <query_input_parameter name="Dataset Name" value="test1"/>
    <query_pff_post pffName="Admin - Objects By Status" outputFileName="d:\outpff1.xml"/>
  </ImanQueryCommand>
  <ImanQueryCommand command="execute">
    <name value="Dataset Name"/>
    <query_input_parameter name="Dataset Name" value="test2"/>
    <query_pff_post pffName="Admin - Objects By Status" outputFileName="d:\outpff2.xml"/>
  </ImanQueryCommand>
  <ImanQueryCommand command="execute">
    <name value="Dataset Name"/>
    <query_input_parameter name="Dataset Name" value="test3"/>
    <query_pff_post pffName="Admin - Objects By Status" outputFileName="d:\outpff3.xml"/>
  </ImanQueryCommand>
</ImanQueryCommandFile>
```

Running `query_xml -u=infodba -p=infodba -input=myfile` generates three output files (`outpff1.xml`, `outpff2.xml`, `outpff3.xml`).

- **v**
  Specifies verbose mode.

- **h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*. If the `TC_TMP_DIR` variable is not set, set it to a temporary location.

**FILES**

As specified in *Log files produced by Teamcenter* and the following files:

- **qry_filerunner_def.dtd**
  Defines the format of the driving file.

- **pffdef.dtd**
Chapter 12  Query utilities

Defines the output format when the PFF option is used.

RESTRICTIONS

None.

RETURN VALUES

Return value upon success  0

Return value upon failure  Nonzero

EXAMPLES

To create a query, enter the following command on the command line:

```
query_xml -f=xml-file-name -u=infodba -p=infodba -o=output-file
```

Note: To receive output for the `execute` and `execute_tuple` command types, you must supply a `pffName` in the input XML command file and an output file name in the `-o=output-file-name` parameter on the `query_xml` call. Output file names specified in the input XML command file are ignored.
The XML file must conform to the format shown in the following code segments.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE ImanQueryCommandFile [ 
<!-- this is all we need to drive the iman query command line processor query_xml -->
<!-- the redundant query definition -->
<!ELEMENT name EMPTY>
<!ATTLIST name value CDATA #REQUIRED>
<!ELEMENT description EMPTY>
<!ATTLIST description value CDATA #REQUIRED>
<!ELEMENT class EMPTY>
<!ATTLIST class value CDATA #REQUIRED>
<!ELEMENT clauses_real (#PCDATA)>
<!ELEMENT clauses_display (#PCDATA)>
<!ELEMENT uniqueid EMPTY>
<!ATTLIST uniqueid value CDATA #REQUIRED>
<!ELEMENT iflag EMPTY>
<!ATTLIST iflag value CDATA #REQUIRED>
<!ELEMENT ImanQueryDefinition (name, description, class, clauses_real, clauses_display?, uniqueid, iflag)>
<!-- if we are executing a query - the name and value of the search parameters... -->
<!ELEMENT query_input_parameter EMPTY>
<!ATTLIST query_input_parameter name CDATA #REQUIRED>
<!ATTLIST query_input_parameter value CDATA #REQUIRED>
<!-- if we want the output of the query put through a pff and written to a file... -->
<!ELEMENT query_pff_post EMPTY>
<!ATTLIST query_pff_post pffName CDATA #REQUIRED> <!-- the pff to use (must be in db)-->
<!ATTLIST query_pff_post outputFileName CDATA #REQUIRED> <!-- file to write data (no longer used)-->
<!-- the encapsulation of the command. the attribute says it all. -->
<!-- for the create and modify the program expects the ImanQueryDefinition -->
<!-- for the execute delete and write the name is sufficient though the -->
```
Chapter 12  Query utilities

XML file format

```xml
<!-- full definition of the query will work. -->
<!ELEMENT ImanQueryCommand ((name | ImanQueryDefinition), (query_input_parameter)*, (query_pff_post)?) -->
<!ATTLIST ImanQueryCommand command (create | modify | execute | execute_tuples | delete | write_query) #REQUIRED>
<!-- the command file can contain a list of commands... -->
<!-- the site_name and site_id allow sys-admins to -->
<!-- reconcile attribute differences based on site -->
<!ELEMENT ImanQueryCommandFile (ImanQueryCommand)*>
<!ATTLIST ImanQueryCommandFile site_name CDATA #IMPLIED site_id CDATA #IMPLIED>

<ImanQueryCommandFile site_name="fred" site_id="id">
  <ImanQueryCommand command="create">
    <ImanQueryDefinition>
      <name value="mjsABCXML_commandfilein"/>
      <description value="no description"/>
      <class value="ItemRevision"/>
      <clauses_real>
        SELECT qid FROM ItemRevision WHERE "Form:IMAN_specification.ECOSample:data_file.charge_number" = "${charge = }">
      </clauses_real>
      <uniqueid value="0"/>
      <iflag value="0"/>
    </ImanQueryDefinition>
  </ImanQueryCommand>

  <ImanQueryCommand command="modify">
    <ImanQueryDefinition>
      <name value="mjsABC"/>
      <description value="a better description"/>
      <class value="ItemRevision"/>
      <clauses_real>
        SELECT qid FROM ItemRevision WHERE "Form:IMAN_specification.ECOSample:data_file.charge_number" = "${charge = }">
      </clauses_real>
      <uniqueid value="0"/>
      <iflag value="0"/>
    </ImanQueryDefinition>
  </ImanQueryCommand>

  <ImanQueryCommand command="execute">
    <name value="i2ir"/>
    <query_input_parameter name="ID" value="*"/>
    <query_input_parameter name="Revision" value="B"/>
    <query_pff_post pffName="PFF Name 2" outputFileName="z:\junkpff.xml"/>
  </ImanQueryCommand>

  <ImanQueryCommand command="execute_tuples">
    <name value="i2ir"/>
    <query_input_parameter name="ID" value="*"/>
    <query_input_parameter name="Revision" value="B"/>
  </ImanQueryCommand>

  <ImanQueryCommand command="write_query">
    <name value="i2ir"/>
  </ImanQueryCommand>

  <ImanQueryCommand command="delete">
    <name value="mjsABCXML_commandfilein"/>
  </ImanQueryCommand>
</ImanQueryCommandFile>
```
XML file example

<xml version="1.0" encoding="UTF-8"?>
<ImanQueryCommandFile site_name="arh" site_id="id">
  <ImanQueryCommand command="create">
    <ImanQueryDefinition>
      <name value="command2file"/>
      <description value="no description"/>
      <class value="ItemRevision"/>
      <clauses_real>
        SELECT qid FROM ItemRevision
        WHERE "object_name" = "$\{Name\}"
        AND "item_revision_id" = "$\{Revision\}"
      </clauses_real>
      <uniqueid value="0"/>
      <iflag value="0"/>
    </ImanQueryDefinition>
  </ImanQueryCommand>
  <ImanQueryCommand command="execute">
    <name value="command2file"/>
    <query_input_parameter name="Name" value="newnewnew"/>
    <query_pff_post pffName="Admin - Objects By Status" outputFileName="d:\temp\outpff4.xml"/>
  </ImanQueryCommand>
  <ImanQueryCommand command="delete">
    <name value="command2file"/>
  </ImanQueryCommand>
</ImanQueryCommandFile>

XML file example

<xml version="1.0" encoding="UTF-8"?>
<ImanQueryCommandFile site_name="arh" site_id="id">
  <ImanQueryCommand command="execute">
    <name value="Item Revision..."/>
    <query_input_parameter name="Revision" value="A"/>
    <query_pff_post pffName="Admin - Objects By Status" outputFileName="d:\Users\outpff.xml"/>
  </ImanQueryCommand>
  <ImanQueryCommand command="write_query">
    <name value="Item Revision..."/>
  </ImanQueryCommand>
</ImanQueryCommandFile>

QUERY TYPES

Create, modify, and delete the following query types using the query_xml utility. Use the following values in the iflag field to specify the query type in the .xml file for create and modify tasks. The value for delete remains the same.

- **Local Query**
  - "0"
- **Remote Query**
  - "1"
- **User Exit Query**
  - "8"
- **User Query**
  - "16"
- **Keyword Search Query**
  - "24"
- **Structure Query**
  - "40"

For information about where these query types are applicable, see the Query Builder Guide.

The following code is an example for a BOM structure query modification.
Chapter 12  Query utilities

```xml
<?xml version="1.0" encoding="UTF-8"?>
<ImanQueryCommandFile site_name="arh" site_id="id">
  <ImanQueryCommand command="modify">
    <ImanQueryDefinition>
      <name value="mjsABC"/>
      <description value="a better description"/>
      <class value="ItemRevision"/>
      <clauses_real>
        SELECT qid FROM ItemRevision WHERE
        "Form:IMAN_specification.ECOSample:data_file.charge_number"
        = "${charge = }"  </clauses_real>
      </ImanQueryDefinition>
    </ImanQueryCommand>
  </ImanQueryCommandFile>
```

BOM structure query modification
**tc_set_query_where_run**

Runs a saved query. You can choose to run the saved query using a user exit.

See the `TC_ROOT\sample\examples\user_query.c` file for user exit sample code that can be used with this utility.

**SYNTAX**

```
tc_set_query_where_run [-u=user-id [-p=password | -pf=password-file] -g=group] -query=query-name -run={iman | query | user} [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-query**
  Specifies the name of saved query to run.

- **-run**
  Specifies how to run the query:
  - **iman**
    Run the query normally.
  - **query**
Chapter 12  Query utilities

Run using a user exit.

- **user**
  Run using a user exit and display results in a text table.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.
Chapter

13 Maintenance utilities

Installation
install

Performs limited Teamcenter maintenance and Oracle database administration.

SYNTAX

install
   [-p=password | -pf=password-file]
   [-add_func_index user-id password grp class index-name unique-flag fn class-name attr1 attr2...]
   [-add_index user-id password group class index-name unique-flag class-name attr1 attr2...]
   [-ask_version]
   [-ask_xmit_file user-id password group object-file]
   [-drop_index user-id password group class-name index-name]
   [-encrypt]
   [-encryptpwf -e=environment-variable-name -f=pw-file-name]
   [-find_control_chars user-id password group class-name attribute]
   [-gen_xmit_file user-id password group]
   [-h]
   [-lock_db user-id password group]
   [-pom_object_index user-id password group]
   [-regen_schema_file user-id password group]
   [-replace_control_chars user-id password group class hex-bad-char replacement-string]
   [-reset_last_login_time user-id password group]
   [-temp_table user-id password group list]
   [-unlock_db user-id password group]

ARGUMENTS

-p
Specifies the password associated with the user-ID value.
This argument is mutually exclusive with the -p argument. One of the two mutually
exclusive password elements is required.

-pf
Specifies the password file.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument. One of the two mutually
exclusive password elements is required.

-add_func_index user-id password grp class index-name unique-flag fn class-name attr1 attr2...
Generates an index on the upper field name of the given attribute to allow
case-insensitive search. Other functions should only be used upon guidance from
Siemens PLM Software. The following values must be supplied in order:
   user-id
   Specifies a system administration user ID. In most case, this is infodba or
   another user ID with similar privileges.
   password
   Specifies the password or password file associated with the user-ID value.
For more information, see the descriptions of the `-p` and `-pf` arguments.

`grp`
Specifies the group associated with the `user-ID` value. In most cases, the group is `dba`.

`index-name`
Specifies the name of the index. This is internal to POM and not the name used in Oracle.

`unique-flag`
1 indicates that the index is unique. 0 indicates that the index allows duplicates.

`fn`
If this argument is omitted, the **upper** field name is assumed.

`class-name`
Specifies the name of the class.

`list-of-attributes`
Specifies the list of attributes of the class separated by a blank space.

**Note**
- The order of attributes is important. Take care when creating indexes on a group of attributes.
- The user, password, and group arguments can alternatively be supplied in one of the following forms:
  - `-u=user-id -p=password -pf=password file`
  - `-g=group`

`-add_index user-id password group class index-name unique-flag class-name attr1 attr2...`
Generates a new POM schema file. Requires Teamcenter system administration privileges. The following values must be supplied in order:

`user-id`
Specifies a system administration user ID. In most case, this is `infodba` or another user ID with similar privileges.

`password`
Specifies the password or password file associated with the `user-ID` value.

For more information, see the descriptions of the `-p` and `-pf` arguments.

`group`
Specifies the group associated with the `user-ID` value. In most cases, the group is `dba`.

`index-name`
Specifies the name of the index. This is internal to POM and not the name used in Oracle.

`unique-flag`
1 indicates that the index is unique. 0 indicates that the index allows duplicates.
Chapter 13  Maintenance utilities

class-name
Specifies the name of the class.

list-of-attributes
Specifies the list of attributes of the class separated by a blank space.

Note  The order of attributes is important. Take care when creating indexes on a group of attributes.

-assemble
Returns the current version of Teamcenter stored in the Oracle database.

-add_xmit_file  user-id password group object-file
Returns the transmit file required by a Classic Multi-Site objects.meta file. This requires POM_TRANSMIT_DIR to be set. The following arguments must be supplied in order:

user-id
Specifies a system administration user ID. In most case, this is infodba or another user ID with similar privileges.

password
Specifies the password or password file associated with the user-ID value.

For more information, see the descriptions of the -p and -pf arguments.

group
Specifies the group associated with the user-ID value. In most cases, the group is dba.

object-file
Specifies the object file to transmit. Alternatively, use this syntax: -f=object-file.

Note  The order of attributes is important. Take care when creating indexes on a group of attributes.

- The user, password, and group arguments can alternatively be supplied in one of the following forms:

  o  -u=user-id -p=password -pf=password file
  o  -g=group

-drop_index  user-id password group class-name index-name
Drops an index to revert a change made using install -add_index. The following arguments must be supplied in order:

user-id
Specifies a system administration user ID. In most case, this is infodba or another user ID with similar privileges.

password
Specifies the password or password file associated with the user-ID value.

For more information, see the descriptions of the -p and -pf arguments.
group
Specifies the group associated with the user-ID value. In most cases, the group is dba.

class-name
Specifies the name of the class.

index-name
Specifies the name of the index to drop.

[Note]
- The order of attributes is important. Take care when creating indexes on a group of attributes.
- The user, password, and group arguments can alternatively be supplied in one of the following forms:
  - -u=user-id -p=password -pf=password file
  - -g=group

-encrypt
Reads a database connect string from the TC_DB_CONNECT environment variable and displays on the console that connect string with the password encrypted.

To change the database password, you need to change the password (see the System Administration Guide), set the TC_DB_CONNECT environment variable to contain that new password, run this utility specifying the -encrypt option, and copy the new version of the connect string it outputs into the tc_profilevars file.

-encryptpwf
Creates an encrypted password file. Requires the -e argument to identify the environment variable that contains the password to encrypt and the -f argument that indicates the name and location of the file containing the encrypted password.

- e= environment-variable-name
Specifies the environment variable that contains the password to encrypt. This argument is valid only if you specify the -encryptpwf argument. You can specify any environment variable that contains a clear text password value that you want to encrypt. For security reasons, choose an obscure and unique name for the environment variable and immediately unset the environment variable after you run the utility.

- f= password-file-name
Specifies the name and location for the file containing the encrypted password used to connect to the Teamcenter database. This file is used by Teamcenter utilities when using the -pf argument and by some other Teamcenter functions. This argument is valid only if you specify the -encryptpwf argument. If the -f= argument is omitted, the utility uses the fourth command line argument as the file name. For example, the following commands are considered equivalent:

  •
  ```
  install -encryptpwf -e=ENV_VAL -f=pwd.txt
  ```

  •
  ```
  install -encryptpwf -e=ENV_VAL pwd.txt
  ```
find_control_chars user-id password group class-name attribute

Finds control characters in the Teamcenter database. Control characters can enter the Teamcenter database through ITK operations that are legitimate codes for the server or database code pages, but cause problems for XML because they are illegal characters and thus cause problems for SOA based integrations in particular. To find such characters, the following arguments must be supplied in order:

user-id
Specifies a system administration user ID. In most case, this is infodba or another user ID with similar privileges.

password
Specifies the password or password file associated with the user-ID value. For more information, see the descriptions of the -p and -pf arguments.

group
Specifies the group associated with the user-ID value. In most cases, the group is dba.

class-name
Specifies the name of the class.

attribute
Specifies the attribute.

Note
• The order of attributes is important. Take care when creating indexes on a group of attributes.

• The user, password, and group arguments can alternatively be supplied in one of the following forms:
  o -u=user-id -p=password -pf=password file
  o -g=group

gen_xmit_file user-id password group

Generates the transmit file containing a copy of the Teamcenter schema that is used by POM during import to compare the exporting site schema definition to the importing site schema definition for all classes. The file resides in the $POM_TRANSMIT_DIR directory.

user-id
Specifies a system administration user ID. In most case, this is infodba or another user ID with similar privileges.

password
Specifies the password or password file associated with the user-ID value. For more information, see the descriptions of the -p and -pf arguments.

group
Specifies the group associated with the user-ID value. In most cases, the group is dba.
The user, password, and group arguments can alternatively be supplied in one of the following forms:

- `-u=user-id` `-p=password` `-pf=password file`
- `-g=group`

-`h`
Displays help for this utility.

-`lock_db`
Locks the sites against further use. The lock remains in place until unlocked with the `-unlock_db` argument. The following values must be supplied in this order:

user-id
Specifies a system administration user ID. In most cases, this is `infodba` or another user ID with similar privileges.

password
Specifies the password or password file associated with the `user-ID` value.

For more information, see the descriptions of the `-p` and `-pf` arguments.

group
Specifies the group associated with the `user-ID` value. In most cases, the group is `dba`.

See restrictions #1 and #4.

-`pom_object_index user-id password group`
Specifies an optional index on the `POM_object` class that allows queries to answer high frequency queries directly from the indexes (instead of referring to the table row). This is not a default argument because it requires additional database server memory.

This affects the following indexes:

- `PPOM_OBJECT_SLN` on `puid` and `ptimestamp`
- `PPOM_OBJECT_UPI` on `puid` and `ppid`

user-id
Specifies a system administration user ID. In most case, this is `infodba` or another user ID with similar privileges.

password
Specifies the password or password file associated with the `user-ID` value.

For more information, see the descriptions of the `-p` and `-pf` arguments.

group
Specifies the group associated with the `user-ID` value. In most cases, the group is `dba`.
The user, password, and group arguments can alternatively be supplied in one of the following forms:

- \(-u=user-id\) \(-p=password\) \(-pf=password\) file
- \(-g=group\)

**-relen_schema_file**
Generates a new POM schema file. Requires Teamcenter system administration privileges. The following values must be supplied in order:

**user-id**
Specifies a system administration user ID. In most cases, this is infodba or another user ID with similar privileges.

**password**
Specifies the password or password file associated with the user-ID value.

For more information, see the descriptions of the -p and -pf arguments.

**group**
Specifies the group associated with the user-ID value. In most cases, the group is dba. See restrictions #1 and #3.

**-replace_control_chars** user-id password group class hex-bad-char replacement-string

Replaces control characters found by the **-find_control_chars** argument.

An temporary alternative to fixing the data in the database is to set an environment variable (in the TC\_DATA\tcprofilevars.bat file) to replace control characters. For example, to replace control characters with spaces (ASCII character 32), set the following variable:

**POM\_STRIP\_CTRL\_CHARS=32**

To use the **-replace_control_chars** argument, the following values must be supplied in this order:

**user-id**
Specifies a system administration user ID. In most case, this is infodba or another user ID with similar privileges.

**password**
Specifies the password or password file associated with the user-ID value.

For more information, see the descriptions of the -p and -pf arguments.

**group**
Specifies the group associated with the user-ID value. In most cases, the group is dba.

**class**
Specifies the class.

**hex-bad-char**
Specifies the hexadecimal code of the control character to replace.
replacement-string
Specifies the string to insert in place of control characters.

Note The user, password, and group arguments can alternatively be supplied in one of the following forms:

- `-u=user-id -p=password -pf=password file`
- `-g=group`

-reset_last_login_time user-id password group
Updates the last login time for the user authenticating through a command line. This argument is suitable for batch processing. The following values must be supplied in this order:

user-id
Specifies a system administration user ID. In most case, this is infodba or another user ID with similar privileges.

password
Specifies the password or password file associated with the user-ID value.

For more information, see the descriptions of the `-p` and `-pf` arguments.

Note The user, password, and group arguments can alternatively be supplied in one of the following forms:

- `-u=user-id -p=password -pf=password file`
- `-g=group`

-temp_table user-id password group list
Specifies periodic checking of whether Oracle temporary table definitions are accumulating.

Oracle temporary table definitions can accumulate when the server exits abruptly, for example, when a database connection is lost.

You can list these table definitions using the list option or purge them using the drop option with a specific name or date, or purge all.

The following values must be supplied in this order:

user-id
Specifies a system administration user ID. In most case, this is infodba or another user ID with similar privileges.

password
Specifies the password or password file associated with the user-ID value.

For more information, see the descriptions of the `-p` and `-pf` arguments.
**group**
Specifies the group associated with the *user-ID* value. In most cases, the group is *dba*.

**list**
Specifies to list accumulated temporary table definitions.
Alternatively, use the **drop** option instead of **list** to drop temporary table definitions:

- **drop all**
  Drops all definitions

- **drop older_than_date=YYYY/MM/DD HH:MI:SS**
  Drops definitions older than the specified date and time.

- **drop table_name=temp-table-name**
  Drops the specified temporary table.

**Note** The user, password, and group arguments can alternatively be supplied in one of the following forms:

- `-u=user-id -p=password -pf=password file`
- `-g=group`

**-unlock_db user-id password group**
Releases locks set with the **-lock_db** argument. The following values must be supplied in this order:

- **user-id**
  Specifies a system administration user ID. In most cases, this is **infodba** or another user ID with similar privileges.

- **password**
  Specifies the password or password file associated with the *user-ID* value.
  For more information, see the descriptions of the **-p** and **-pf** arguments.

- **group**
  Specifies the group associated with the *user-ID* value. In most cases, the group is *dba*.
  See restriction #1.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities* and the following environment variables:

- **TC_DB_CONNECT**
- **POM_SCHEMA**
- **POM_TRANSMIT_DIR**

For more information, see the *Preferences and Environment Variables Reference*. 
FILES

As specified in *Log files produced by Teamcenter* and the following:

- **$TC\_DATA/tc\_profilevars**
  Stores site environment variable settings. This file is modified by the `-encrypt` argument.

- **POM schema file data file created by the install utility with the**
  `-regen_schema_file` argument.
  Full file specification (directory path and file name) is set by the `POM\_SCHEMA` environment variable.

- **POM transmit schema file data file created by the install utility with the**
  `-gen_xmit_file` argument.
  Full file specification (directory path and file name) is set by the `POM\_TRANSMIT\_DIR` environment variable.

RESTRICTIONS

1. Common command line argument syntax for *user-id, password, and group* arguments is not supported. Values for these arguments must be separated by an equal sign (`=`). For example, the following syntax works:
   
   `$TC\_BIN/install -regen_schema_file infodba password dba`
   `$TC\_BIN/install -regen_schema_file -u=infodba -p=password -g=dba`

2. Requires Teamcenter system administration privileges and exclusive access to the system for this operation.

3. Common `-regen_schema_file` failures:
   
   - **POM\_db\_connect\_fail**
     Unable to connect to database.
   
   - **POM\_logins\_are\_disabled**
     Login to database is disabled.
   
   - **POM\_invalid\_site\_id**
     Database is not populated.
   
   - **POM\_not\_installed**
     Database missing data.
   
   - **POM\_find\_schema\_failed**
     Unable to create new POM schema file. Directory does not exist, cannot be written to, or the `POM\_SCHEMA` environment variable is not set.
   
   - **POM\_schema\_exists**
     File pointed to by the `POM\_SCHEMA` environment variable already exists. Delete or move this file and retry.

4. The `-lock\_db` does not force logout of existing users, but does prevent additional users from logging on.

5. Only the following tokens can be changed on an existing (saved class):
Chapter 13  Maintenance utilities

POM_attr_export_as_string
POM_attr_follow_on_export
POM_attr_is_candidate_key
POM_null_is_valid
POM_public
POM_public_read
POM_public_write

For additional information, see the Server Customization Programmer's Guide.

6. When adding a new custom privilege, you must have previously added that privilege to the am_text.uil file and recompiled the file.

For additional information, see the Server Customization Programmer's Guide.

7. Rules-based object protection must be enabled in order to add and use new custom privileges.

EXAMPLES

To regenerate the POM transmit schema file, enter the following command on a single line:

$TCROOT/bin/install -gen_xmit_file infodba password dba
tem.sh/.bat

Starts the Teamcenter Environment Manager utility. Use the -s to bypass the Teamcenter Environment Manager user interface and run the installation in the background. There is no feedback when the silent install is running.

**SYNTAX**

`application_root/install/tem -s=file-name`

**ARGUMENTS**

- **-s**
  Performs a silent install. Teamcenter Environment Manager (TEM) looks in the current working directory for the configuration file to use. If a file name is specified for this argument, TEM uses the specified file as input for the silent install.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

None.

---

**Audit Manager**
Chapter 13  Maintenance utilities

migrate_audit_auditdefinitions

Exports audit definition objects from the legacy Audit Manager to an XML file which is a Business Modeler IDE template.

In addition to the XML file containing audit definition data, this utility also generates a file containing localization data. This file has a _lang suffix and is generated in a folder called lang.

You can later migrate these files to the new Audit Manager application by importing and deploying it using the Business Modeler IDE.

**Note** If the names of the logged properties in the legacy Audit Manager are the same as the properties in Fnd0AuditLog object and its sub classes, this utility adds a _local suffix to the legacy Audit Manager property. This is done so that the legacy Audit Manager properties do not overwrite the meta definitions of various Fnd0AuditLog classes.

**SYNTAX**

```bash
migrate_audit_auditdefinitions [-u=user-id { -p=password | -pf=password-file }] -g=group] -outfile
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administrator privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-id value to be the password.
  This argument cannot be replaced with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-id value to be the password.
  For more information about managing password files, see the Utilities Reference.
  This argument is mutually exclusive with the -p argument.
-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-outfile
Specifies the path and filename where the XML file containing the audit definition
data language file is generated. The language file is also generated in the same path.

-h
Displays help for this utility.

RESTRICTIONS
Requires Teamcenter administrator privileges.

EXAMPLES
• To export audit definition objects from the old Audit Manager application:

    migrate_audit_auditdefinitions -u=userid -p=password -g=group -outfile=
    D:\audit_export\audit_configs.xml
Exports data from the legacy Audit Manager application in a TC XML file that you can then migrate to the new Audit Manager data model. The contents of the TC XML file are based on the arguments you specify when you run this utility.

To migrate the audit data to the new Audit Manager data model, you must import the TC XML file using the bulk loader option and use TIE to create instances in the database.

You must successfully execute the `migrate_audit_auditdefinitions` utility before you run this utility.

**SYNTAX**

```
migrate_audit_data [-u=user-id [-p=password | -pf=password-file] -g=group] 
-path=location-to-export-the-TC-XML-file 
[-create_before=date-before-which-audit-logs-were-created] 
[-create_after=date-after-which-audit-logs-were-created] 
[-proc_history=] 
[-object_type=name-of-the-object] 
[-log_type=name-of-the-audit-log-object-in-the-new-Audit-Manager-application] 
[-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administrator privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-id` value to be the password.
  This argument cannot be replaced with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-id` value to be the password.
  For more information about managing password files, see the Utilities Reference.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-path
Specifies the location to export the TC XML file.
If you do not specify the -path argument, this utility exports the TC XML to the location from where the utility is generated.

-create_before
Specifies the date before which the audit logs were created.
The date format is %d-%b-%Y %H:%M. For example, 20-May-2010 12:00.

-create_after
Specifies the date after which the audit logs were created.
The date format is %d-%b-%Y %H:%M. For example: 20-May-2010 12:00.

proc_history
Specifies the process history audit log

-object_type
Specifies the object type of the audit log.

-log_type
Specifies the audit log object of the new Audit Manager application. The old audit logs will be migrated to this audit log object.
The valid log types are:
- Fnd0GeneralAudit
- Fnd0FileAccessAudit
- Fnd0LicenseChangeAudit
- Fnd0LicenseExportAudit
- Fnd0OrganizationAudit
- Fnd0ScheduleAudit
- Fnd0StructureAudit
- Fnd0WorkflowAudit

-h
Displays help for this utility.

RESTRICTIONS
Requires Teamcenter administrator privileges.

EXAMPLES
To export all the audit data to the D:/audit_logs location:
migrate_audit_data -u=userid -p=password -g=group -path=D:/audit_logs

To export audit data by date range:
migrate_audit_data -u=userid -p=password -g=group -path=D:/audit_logs
-create_after='20-May-2010 12:00' -create_before='20-May-2012 12:00'

To export audit data of specific object type:
migrate_audit_data -u=userid -p=password -g=group -path=D:/audit_logs

If used without a value, the user’s default group is assumed.

-path
Specifies the location to export the TC XML file.
If you do not specify the -path argument, this utility exports the TC XML to the location from where the utility is generated.

-create_before
Specifies the date before which the audit logs were created.
The date format is %d-%b-%Y %H:%M. For example, 20-May-2010 12:00.

-create_after
Specifies the date after which the audit logs were created.
The date format is %d-%b-%Y %H:%M. For example: 20-May-2010 12:00.

proc_history
Specifies the process history audit log

-object_type
Specifies the object type of the audit log.

-log_type
Specifies the audit log object of the new Audit Manager application. The old audit logs will be migrated to this audit log object.
The valid log types are:
- Fnd0GeneralAudit
- Fnd0FileAccessAudit
- Fnd0LicenseChangeAudit
- Fnd0LicenseExportAudit
- Fnd0OrganizationAudit
- Fnd0ScheduleAudit
- Fnd0StructureAudit
- Fnd0WorkflowAudit

-h
Displays help for this utility.

RESTRICTIONS
Requires Teamcenter administrator privileges.

EXAMPLES
To export all the audit data to the D:/audit_logs location:
migrate_audit_data -u=userid -p=password -g=group -path=D:/audit_logs

To export audit data by date range:
migrate_audit_data -u=userid -p=password -g=group -path=D:/audit_logs
-create_after='20-May-2010 12:00' -create_before='20-May-2012 12:00'

To export audit data of specific object type:
migrate_audit_data -u=userid -p=password -g=group -path=D:/audit_logs
Chapter 13  

**Maintenance utilities**

- `object_type='Item'`

- **To export process audit history:**
  
  ```
  migrate_audit_data -u=userid -p=password -g=group -path=D:/audit_logs
  -proc_history
  ```

- **To export audit data of a specific log type:**
  
  ```
  migrate_audit_data -u=userid -p=password -g=group -path=D:/audit_logs
  -log_type='Fnd0GeneralAudit'
  ```
### audit_purge

Archives audit logs in TC XML format based on retention period and audit log type. This utility also purges audit log records.

**SYNTAX**

```bash
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administrator privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-id` value to be the password.

  This argument cannot be replaced with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-id` value to be the password.

  For more information about managing password files, see the Utilities Reference. This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-logtype**
  Specifies the name of the audit log business object. For example, Fnd0WorkflowAudit, Fnd0ScheduleAudit.
Chapter 13  Maintenance utilities

Note  If the audit log is **Fnd0WorkflowAudit**, you must also use the **-sublogtype** argument.

-**purge**
Purges the specified audit logs

If you do not specify the retention period with this argument, Teamcenter selects the retention period from the **Fnd0RetentionPeriod** business constant.

-**archive**
Archives the audit log in TC XML format.

If you do not specify the archive location, Teamcenter uses the archive location specified in the **Fnd0ArchiveLocation** constant.

If you do not specify the retention period, Teamcenter uses the retention period specified in the **Fnd0RetentionPeriod** constant.

-**sublogtype**
Specifies the sublog types of the **Fnd0WorkflowAudit** object. The sublog types of the **Fnd0WorkflowAudit** object are **process_audit** and **signoff_audit**.

-**retentionperiod**
Specifies the retention period of the audit log.

The **-retentionperiod** argument overrides the retention period specified in the **Fnd0RetentionPeriod** constant.

-**archivelocation**
Specifies the path of the archive location.

The **-archivelocation** argument overrides the retention period specified in the **Fnd0ArchiveLocation** constant.

-**force_retraverse**
Re-archives audit logs. Use this argument with the **-archive** argument to archive the same objects again.

-**h**
Displays help for this utility.

**RESTRICTIONS**
Requires Teamcenter administrator privileges.

**EXAMPLES**

**Note** When archiving or purging the **Fnd0WorkflowAudit** audit log, you must use the **-sublogtype** argument with the **-logtype** argument.

The sublog types of the **Fnd0WorkflowAudit** audit log are **process_audit** and **signoff_audit**.

- To purge the process audit logs of the **Fnd0WorkflowAudit** audit log:

  
  audit_purge -u=userid -p=password -g=group -logtype=Fnd0WorkflowAudit
  -sublogtype=process_audit -purge

- To purge the process audit logs of the **Fnd0WorkflowAudit** audit log with a retention period of 90 days:
audit_purge –u=userid -p=password -g=group -logtype=Fnd0WorkflowAudit -sublogtype=process_audit -purge -retentionperiod=90

- To archive the process audit logs of the **Fnd0WorkflowAudit** audit log:
  
audit_purge –u=userid -p=password -g=group -logtype=Fnd0WorkflowAudit -sublogtype=process_audit -archive

- To archive the process audit logs of the **Fnd0WorkflowAudit** audit log with a retention period 90 days:
  
audit_purge –u=userid -p=password -g=group -logtype=Fnd0WorkflowAudit -sublogtype=process_audit -archive -retentionperiod=90

- To archive the process audit logs of the **Fnd0WorkflowAudit** audit log with the archive location specified as c:\archive:
  
audit_purge –u=userid -p=password -g=group -logtype=Fnd0WorkflowAudit -sublogtype=process_audit -archive -retentionperiod=90 -archivelocation=c:\archive
audit_archive

**Note**  This utility is deprecated and will be removed in a future version.

Searches the database for audit log records based on input criteria. Once it finds the records that must be archived, it processes the archive. If the `-delete_record` argument is given, the utility deletes the audit log records. Audit log entries with an audit definition with a **days kept** value of `-l` are not archived, because `-l` indicates that the log record is permanent.

**SYNTAX**

```plaintext
audit_archive [-u=user-id [-p=password | -pf=password-file] | -g=group]
[ -delete_record] [-type=type-name] [-class=class-name] [-event=event-type]
[ -id=object-id]
[ -revid=object-revid] [-name=object-name] [-owner=object-owner-id]
[ -created_before=archive date] [-created_after=archive date]
[ -group_name=owner-group-name]
[ -obj_seqno=object sequence number] [-secobj_type=secondary object type name]
[ -secobj_id=secondary-object-id]
[ -secobj_name=secondary object type name]
[ -secobj_revid=secondary-object-revid]
[ -secobj_seqno=secondary-object-seq-no]
[ -error_code=error-code-of-failed-action]
[ -project_id=project-id] [-project_name=project-name]
[ -overwrite] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument cannot be replaced with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see *Manage password files*.
This argument is mutually exclusive with the `-p` argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-delete_record
Specifies that audit log records are deleted after being archived.

-type
Specifies that the audit logs of the specified object type needs to be archived.

-class
Specifies that the audit logs of the specified class of the object type needs to be archived.

-event
Specifies that the audit logs of the specified event type needs to be archived.

-id
Specifies that the audit logs of the specified ID of the object needs to be archived.

-revid
Specifies that the audit logs of the specified revision ID of the object needs to be archived.

-name
Specifies that the audit logs of the specified name of the object needs to be archived.

-owner
Specifies that the audit logs of the specified user who created the object needs to be archived.

-created_before
Specifies that the audit logs of objects created before the specified date need to be archived.

-created_after
Specifies that audit logs of objects created after the specified date need to be archived.

-group_name
Specifies that the audit logs of the specified group name associated with the user who created the object needs to be archived.

-obj_seqno
Specifies that the audit logs of the specified sequence number of the object needs to be archived.

-secoobj_type
Specifies that the audit logs of the specified type of the secondary object associated with the object needs to be archived.
-secobj_ID
Specifies that the audit logs of the specified ID of the secondary object associated with the object needs to be archived.

-secobj_name
Specifies that the audit logs of the specified name of the secondary object associated with the object needs to be archived.

-secobj_revid
Specifies that the audit logs of the specified revision ID of the secondary object associated with the object needs to be archived.

-secobj_seqno
Specifies that the audit logs of the specified sequence number of the secondary object associated with the object needs to be archived.

-error_code
Specifies that the audit logs of the specified error code associated with the failed actions on the object needs to be archived.

-proj_id
Specifies that the audit logs of the specified ID of the project needs to be archived.

-proj_name
Specifies that the audit logs of the specified project name needs to be archived.

-overwrite
Archives permanent audit records (those with days kept value of -1). When used in conjunction with the -delete_record argument, the permanent audit records are removed from the database.

-h
Displays help for this utility.

ENVIRONMENT
As specified in the Manually configuring your environment for Teamcenter utilities.

FILES
As specified in the Log files produced by Teamcenter.

RESTRICTIONS
Requires Teamcenter administrator privileges.

EXAMPLES
- To archive audit log entries associated with the ITAR_license_01ITAR license for actions performed by the user1 user belonging to ADASiteAdministrator group and created before 30th June 2009:
  
  ```
  audit_archive -u=admin -p=admin -g=dba -class=ADA License -type=ITAR License
  -id=ITAR license 01 -owner=user1 -group=ADASiteAdministrator
  -created_before=30-jun-2009 12:00
  ```

- To archive audit log entries related to all Attach_License events associated with ITAR licenses attached to the Part12 item, revision A, sequence 2, created after 31st January 2009:
  
  ```
  audit_archive -u=admin -p=admin -g=dba -class=ADA License -type=ITAR License
  -event=__Attach_License -sec_id=Part12 -sec_revid=A -sec_seqno=2
  -created_after=31-jan-2009 12:00
  ```
• To archive audit log entries associated with **project1** project name for actions performed by **user1** user belonging to **ProjectAdministrator** group and created before 30th September 2010:

```
audit_archive -u=admin -p=admin -g=dba -class=Requirement -type=Requirement
-project_name=project1 -owner=user1 -group=ProjectAdministrator
-created_before=30-sep-2010 12:00
```
**combine_audit_files**

**Note**  This utility is deprecated and will be removed in a future version.

Combines all the log files into an **TcAuditLog.txt** or **TcAuditLog.xml** file.

**SYNTAX**

```plaintext
combine_audit_files.pl
```

**ARGUMENTS**

**source_dir**

Specifies the source directory containing audit log files generated during Teamcenter sessions.

**target_dir**

Specifies the target directory containing the combined audit log file. The target directory must not be the same as the source directory, because the program tries to move the audit files from the source directory to the target directory, combine them, and delete them. The **source_dir** and **target_dir** values can be either an absolute path or a relative path.

**ENVIRONMENT**

This utility works on any UNIX or Windows platforms that install Perl, and the program is in their path.

**FILES**

The audit log files to be combined (**tc_auditlog_****.txt**, **tc_auditlog_****.xml**) are at **source_dir** directory. The combined master log files (**TcAuditLog.txt**, **TcAuditLog.xml**) are at **target_dir** directory. If the master files **TcAuditLog.txt**, **TcAuditLog.xml** are not found when running this utility, first create them, then append the original audit files to them.

**RESTRICTIONS**

None.

**EXAMPLES**

- Suppose the utility **combine_audit_files.pl** and all original audit files are in the current directory, and the master audit files are in the **C:|temp|audit** directory. The program searches all **tc_auditlog_****.xml** and **tc_auditlog_****.txt** files, moves them to the **C:|temp|audit** directory, combines them, and appends them to the **TcAuditLog.xml** and **TcAuditLog.txt** files in the **C:|temp|audit** directory. Finally, all the original audit files that are moved and appended are deleted.

  ```shell
  perl combine_audit_files.pl . C:|temp|audit
  ```

- Here, source and target are subdirectories of the current directory. Suppose the utility program is in the current directory, original audit files are in the source directory, and the master audit files are in the target directory. It will look for all **tc_auditlog_****.txt** and **tc_auditlog_****.xml** files in the source directory, move them to the target directory, combine them, and append them to the **TcAuditLog.txt** and **TcAuditLog.xml** files in the target directory. Finally, all original audit files that are moved and appended are deleted.
In general, all audit files are generated by the program and you should not manually edit them. However, in the following situations, you must manually modify the master files using any text editor, such as vi or Notepad:

perl combine_audit_files.pl source target

- If the **TC_audit_delimiter** preference is changed to a value other than the default value (^
  ), you must manually edit the first line of the **TcAuditLog.txt** master audit file to reflect the new delimiter.

  For example, if the new delimiter is a dollar sign ($), the first line of the **TcAuditLog.txt** file must be changed to:

  ```
  ObjectUID$objectId$objectName$revision$objectTypeName$eventTypeName
  $userId$loggedDate$properties
  ```

- If the **TC_XML_ENCODING** environment variable in the **tc_profilevars.bat** file is changed to a value other than the default value **iso-8859-1**, you must edit the first line of the **TcAuditLog.xml** master audit file and the **TcAuditLog.xsl** and **TcAuditLogSchema.xsd** files in the sample/audit directory.

  For example, if the new encoding is **Shift_JIS** (Japanese), the first line of the **TcAuditLog.xml** file is changed to:

  ```
  <?xml version="1.0" encoding="Shift_JIS"?>
  ```

Siemens PLM Software recommends that you run this utility and archive the master audit file periodically, daily, weekly, or monthly, depending upon the data growth. If the master file grows too big it would be difficult to open.

A sample of the XML program files is provided in the sample/audit directory to view the XML audit data in the web browser. The four files (**TcAuditLog.xml**, **TcAuditLog.xsl**, **TcAuditLogSchema.xml**, and **TcAuditLog.js**) must be in the same directory. Opening **TcAuditLog.xml** in Microsoft Internet Explorer 5.5 or higher presents audit data in a table similar to the following that can be sorted and filtered by column.
Audit Log Table

The files are described as follows:

**TcAuditLog.xml**
XML data source of audit records. The file is produced by executing the `combine_audit_files.pl` script.

**TcAuditLog.xsl**
XML style sheet for displaying the `TcAuditLog.xml` file in the Microsoft Internet Explorer Web browser.

**TcAuditLogSchema.xsd**
XML schema for defining XML data structure and data types.

**TcAuditLog.js**
JavaScript for adding dynamic effects to the HTML presentation.

If you use the `TcAuditLog.xml` for purposes other than displaying the audit log on a Web browser, you can modify any of the files. For example, you can modify the `TcAuditLog.xml` file so that the style sheet or schema is not loaded.

None of the files introduced in this section (`combine_audit_files.pl`, `TcAuditLog.xml`, `TcAuditLog.xsl`, `TcAuditLogSchema.xsd`, and `TcAuditLog.js`) require a Teamcenter environment. You can run them anywhere as long as you have Perl and Microsoft Internet Explorer.
This utility is deprecated and will be removed in a future version.

Creates **AuditDefinition** objects in the Teamcenter database. It scans the input file given by the argument `-f` argument.

The input file contains records to define each AuditDefinition object in the database. Each record is separated by a blank line and conforms to the following format:

- `TYPE_NAME=object-type-name`
- `CLASS_NAME=object-class-name`
- `EVENT_TYPE=event-type-name`
- `PROP_COUNT=property-count /* number of PROP_NAME entries */`
- `PROP_NAME=property-list /* Optional entry */`
- `PROP_NAME=property-list /* Optional entry */`
- `MAX_DAY=max-days-kept /* Optional entry */`
- `MEDIA_NAME=media-name /* Optional entry */`
- `HANDLER_ID=handler-id /* Optional entry */`

You can see the list of available events in the **Event Type** editor of Business Modeler IDE.

For more information, see the **Business Modeler IDE Guide**.

**SYNTAX**

`define_auditdefs [-u=user-id | -p=password | -pf=password-file] -g=group] [-v] [-f=input-file-name] [-h]`

**ARGUMENTS**

- **-u**
  
  Specifies the user ID.
  
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  
  Specifies the password.
  
  If used without a value, the system assumes a null value.
  
  If this argument is not used, the system assumes the **user-ID** value to be the password.
  
  This argument is mutually exclusive with the **-pf** argument.
-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-f
Specifies the name of the text file containing the audit definition records.

-v
Specifies verbose mode.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
None.
**pom_audit_manager**

Allows a site to configure a list of users for whom failed authentication attempts must be logged and provides the ability to later extract that information for analysis.

**SYNTAX**

```
pom_audit_manager [-u=user-id [ -p=password | -pf=password-file ] -g=group] [-install ] [-report [-before]] [-purge [-before]] [-auditable] [-set event-name user-name ON|OFF ] [-delete event-name user-name] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value. This argument is mutually exclusive with the **-pf** argument.
  If this argument is not used, the system assumes the *user-ID* value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.

  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-install**
  Installs audit functionality.
-report [-before]
Shows audit reports. Optionally, you can use the -before argument to show only those records before the specified date.

The -before argument must be followed by an 8 digits ISO date such as 20071225 for Christmas day 2007.

-purge [-before]
Permanently removes event records from the user access logging list. Optionally, you can use the -before argument to filter purging to only those records before the specified date.

The -before argument must be followed by an 8 digits ISO date such as 20071225 for Christmas day 2007.

-auditable
Shows which events are auditable.

Currently POM_AUDIT_purge_audit, POM_AUDIT_bad_password_login, POM_AUDIT_bad_password_check, POM_AUDIT_change_password events are auditable.

-set event-name user-name ON|OFF
Adds or removes audit functionality on an event.

-delete event-name user-name
Deletes audit logs for specific events and users.

You can specify the ALL value for either event-name or user-name.

Currently POM_AUDIT_purge_audit, POM_AUDIT_bad_password_login, POM_AUDIT_bad_password_check, POM_AUDIT_change_password events are auditable.

-h
Displays help for this utility.

ENVIRONMENT
Standard runtime environment only.

FILES
None.

RESTRICTIONS
None.

EXAMPLES
- To see audit reports before a particular date:
  pom_audit_manager -u=admin -p=admin -g=dba -report -before 20071201

- To add audit functionality on an event:
  pom_audit_manager -u=admin -p=admin -g=dba -set POM_AUDIT_bad_password_login ON
backup_modes

Manages the hot backup of the Teamcenter database and volumes by third-party backup systems. Use hot backup to avoid shutting down Teamcenter for routine backups, and to run the system in a near-continuous mode. Manage hot backup functionality by using this utility to set different backup modes (read-only, blobby volume, normal) on Teamcenter volumes.

SYNTAX
backup_modes [-u=user-id [-p=password | -pf=password-file] -g=group]
[-m={rdonly | normal | blobby | current}] [-f=opencent] [-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-m
Sets Teamcenter volumes to read-only, normal, or blobby mode. This argument can also be used to obtain the current backup mode.

rdonly	Placing Teamcenter into read-only state. This state holds writing files to the volume during backup.
normal  Places Teamcenter back in normal mode from read-only or blobby volume mode.

blobby  Places Teamcenter in blobby (temporary) volume mode. Teamcenter can be switched into this mode after the third-party backup software takes a snapshot of the data. This allows continuous Teamcenter availability.

current  Returns the current Teamcenter mode.

-f  Obtains information about the Teamcenter volume files opened for the write operation.

-h  Displays help for this utility.

ENVIRONMENT
The proper values must be set for the following preferences:

•  blobbyVolume_NT
•  blobbyVolume_UNX
•  TC_enable_backup_modes

FILES
As specified in Log files produced by Teamcenter.

REstrictions
•  Before setting Teamcenter to blobby volume mode, ensure that Teamcenter is in read-only mode.

•  You must assign values to the blobbyVolume_NT and blobbyVolume_UNX preferences even if you are not operating in a heterogeneous environment.

EXAMPLES
•  To place Teamcenter volumes in read-only mode, enter the following command:

    backup_modes -u=infodba -p=password -g=dba -m=rdonly

•  To place Teamcenter volumes in normal mode, enter the following command:

    backup_modes -u=infodba -p=password -g=dba -m=normal

•  To place Teamcenter volumes in blobby volume mode, enter the following command:

    backup_modes -u=infodba -p=password -g=dba -m=blobby

•  To obtain the current Teamcenter backup mode, enter the following command:

    backup_modes -u=infodba -p=password -g=dba -m=current

•  To obtain information about Teamcenter volume files opened for write, enter the following command:

    backup_modes -u=infodba -p=password -g=dba -f=opencnt
backup_xmlinfo

Provides information about Teamcenter volumes defined for a site in XML format. Third-party backup systems require this information for 24x7 hot backup of Teamcenter volumes and databases. The program creates two output files, `backup.xml` and `backup.dtd`, in the directory from which the utility is executed.

SYNTAX

```
backup_xmlinfo [-u=user-id [-p=password | -pf=password-file -g=group] -h
```

ARGUMENTS

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  [Note] If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-h**
  Displays help for this utility.

ENVIRONMENT

As specified in `Manually configuring your environment for Teamcenter utilities`.

FILES

As specified in `Log files produced by Teamcenter`.

RESTRICTIONS

None.
EXAMPLES

Generate backup information for Teamcenter volumes by executing the following command:

```
backup_xmlinfo -u=infodba -p=infodba -g=dba
```

The following example illustrates a sample XML output file:

```xml
<?xml version="1.0" standalone="yes" ?>
<!-- Backup Info : XML File -->
<!DOCTYPE backupInfo SYSTEM "backup.dtd">
<backupInfo>
  <volumeinfo>
    <VolumeName>tokra_vol</VolumeName>
    <VolumeUid>03640c558e9f42</VolumeUid>
    <NodeName>ustrw1sun002</NodeName>
    <UnixPath>/netap/tceapps/Tce/Tcevolks/tokra_vol</UnixPath>
  </volumeinfo>
  <volumeinfo>
    <VolumeName>satish1_vol</VolumeName>
    <VolumeUid>037840d68ac558e9f42</VolumeUid>
    <NodeName>us1vw1097a011</NodeName>
    <WntPath>c:\satish1_vol</WntPath>
  </volumeinfo>
</backupInfo>
```
sfr_instances

Creates and deletes single file recovery instances.

**SYNTAX**

```
sfr_instances [-u=user-id [-p=password | -pf=password-file] -g=group]
[-d=dataset-type] [-ou=owning-user] [-og=owning-group]
[-v=volume-name [-ib=any-previous-backupLabel] -b=new-backup-label [-f=function]
{create | delete | list} [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-d**
  Specifies the dataset type to which the specified function applies.

- **-ou**
  Specifies the owning user of the datasets to which the specified function applies.

- **-og**
  Specifies the owning group of the datasets to which the specified function applies.
-v  
Specifies the volume to which the specified function applies.

-ib  
Specifies the previous backup label.

-b  
Specifies the backup label associated with the create, list or delete function. Use -b=ALL to delete all single file recovery instances.

-f function  
Specifies the function for the utility. create creates the single file recovery instance. delete deletes the single file recovery instances.

-h  
Displays help for this utility.

ENVIRONMENT  
As specified in *Manually configuring your environment for Teamcenter utilities*. In case this is not already initialized, set the proper values for the following variables to enable further recovery:

TC_sfr_recovery_interval

TC_sfr_process_life_time

FILES  
As specified in *Log files produced by Teamcenter*.

RESTRICIONS  
None, however it is a good practice to run this utility after putting Teamcenter in read-only mode and before putting Oracle in Hot backup mode.

EXAMPLES  
- To create single file recovery instances associated with the backup_1 backup label, enter the following command:

  sfr_instances -u=infodba -p=password -g=dba -b=backup_1 -f=create

- To delete single file recovery instances associated with the backup_2 backup label, enter the following command:

  sfr_instances -u=infodba -p=password -g=dba -b=backup_2 -f=delete

- To delete all single file recovery instances in the database, enter the following command:

  sfr_instances -u=infodba -p=password -g=dba -b=ALL -f=delete

Dispatcher
dispatcher_create_rqst

Provides the ability to create a dispatcher request using command line arguments.

SYNTAX

The syntax of the dispatcher_create_rqst utility has two forms:

```
dispatcher_create_rqst
   -i=item-ID
   -r=revision-ID
   [-rn=relation]
   -dn=dataset-name
   [-dv=dataset-version-number]
   -dt=dataset-type-name
   -pr= 1  | 2  | 3
   -pn=translator-provider-name
   -tn=service-name
   -ty=type-string
   [-ta1=translation-argument1
   [-ta2=translation-argument2
   [-ta3=translation-argument3]]]
   [-u=user-id  -p=password  |  -pf=password-file  -g=group]
   -verbose  |  -debug
```

OR

```
dispatcher_create_rqst
   -f=path-name
   -dt=dataset-type-name
   -pr= 1  | 2  | 3
   -pn=service-provider-name
   -tn=service-name
   -ty=type-string
   [-u=user-id  -p=password  |  -pf=password-file  -g=group]
   -verbose  |  -debug
```

ARGUMENTS

**Note**  
If a relation is not specified, the **IMAN_specification** relation is used.

- **-u**
  Specifies the user ID.

This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note**  
If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.
-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-i
Specifies the item.

-r
Specifies the item revision.

-rr
Specifies the relation name to be used to find the dataset for the given item revision. This argument is optional. If the relation is not specified, the value of IMAN_specification is used.

-dn
Specifies the dataset name. This argument is optional.

-dv
Specifies the dataset version. This argument is optional. If no version number is specified, the latest version is used.

-dt
Specifies the type of the dataset to be translated

-pr
Specifies the translation priority. Accepted values are 1, 2, or 3 corresponding to low, medium and high translation scheduler priority.

-pn
Specifies the name of the translator provider, for example, Siemens.

-tn
Specifies the name of the translator service, for example ideastojt.

-ty
Specifies the type name, for example COMMANDLINE.
-verbose
Provides additional information. This argument is optional.

-f
Specifies an input file used to create one or more dispatcher requests. This argument is used in lieu of the item, revision, relation name, dataset name, and dataset version arguments. This argument is optional.

The format for the input file is as follows:

```
<item ID>,<revision ID>,[relation name],[dataset name],
[version number]
```

**Note** Commas are required.

-ta1
Specifies a translation argument.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**

- To create a dispatcher request for the latest version of the I-deas part dataset related to the Block/A item revision, enter the following command on a single line:

  ```
  dispatcher_create_rqst -u=infodba -p=infodba -g=dba
  -i=Block -r=A -dt=IdeasPart -pr=2 -pn=Siemens
  -tn=ideastojt -ty=COMMAND_LINE
  ```

- To create a dispatcher request for version 2 of the Block/A item revision, enter the following command on a single line:

  ```
  dispatcher_create_rqst -u=infodba -p=infodba -g=dba
  -i=Block -r=A -dv=2 -dt=IdeasPart -pr=2 -pn=Siemens
  -tn=ideastojt -ty=COMMAND_LINE
  ```

- To create two Siemens PLM Software ideastojt dispatcher requests with a priority of 2:

  - One request for the latest version of the Block dataset, an IdeasPart or IdeasAssembly type dataset, associated with item revision Block/A by an IMAN_specification relation;

  ```
  dispatcher_create_rqst -u=infodba -p=infodba -g=dba
  -f=ctrl -dt=IdeasPart,IdeasAssembly -pr=2 -pn=Siemens
  -tn=ideastojt -ty=COMMAND_LINE
  ```

  - One for the latest version of the Asm dataset, an IdeasPart or IdeasAssembly type dataset associated with item revision Asm/A by an IMAN_specification relation, enter the following command on a single line:

  ```
  dispatcher_create_rqst -u=infodba -p=infodba -g=dba
  -f=ctrl -dt=IdeasPart,IdeasAssembly -pr=2 -pn=Siemens
  -tn=ideastojt -ty=COMMAND_LINE
  ```

  The lines in the input file are:

  ```
  Block,A,,Block,
  Asm,A,,Asm,
  ```
Chapter 13  Maintenance utilities

**Note**  All parts in the file are subject to the same translation, because the translator is specified on the command line.
dispatcher_util

Allows you to list, delete or resubmit dispatcher requests.

SYNTAX

dispatcher_util
[u=user-id [p=password | pf=password-file] g=group]
a=list | delete | resubmit
[force]
[export=file:file path]
[taskid=dispatcher task ID | file:file path]
[provider=provider name]
[service=service name]
[priority=priority number]
[state=dispatcher state]
[h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-a
Performs the list, delete or resubmit actions.
Choose from the following action values:

- **list**: Lists dispatcher requests.
- **delete**: Deletes dispatcher requests.
- **resubmit**: Resubmits dispatcher requests.

**-force**
Forces an action without any prompts.

**-export**
Exports the information in a file.

**-taskid**
Specifies the task ID of the dispatcher request.

**-provider**
Specifies the name of the dispatcher provider, for example, Siemens.

**-service**
Specifies the service name, for example, tozipfile.

**-priority**
Specifies the dispatcher priority. Accepted values are 1, 2, or 3 corresponding to low, medium and high priority.

**-state**
Specifies the dispatcher state.

**-h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
- List all high priority dispatcher requests.
  
  
  `dispatcher_util -u=infodba -p=infodba -a=list -priority=3`

- Delete all dispatcher requests in the **INITIAL** state.
  
  `dispatcher_util -u=infodba -p=infodba -a=list -state=INITIAL`

- Resubmit all **tozipfile** dispatcher requests.
  
  `dispatcher_util -u=infodba -p=infodba -a=list -service=tozipfile`
SS_GenSvcRqst

Generates a service request for all datasets that have a translation configuration specified but either do not have a target dataset present or whose target dataset is out of date.

This utility starts at the specified point and recurses down through the child items, item revisions, folders, and so on.

**SYNTAX**

```
SS_GenSvcRqst [-u=user-id [-p=password | -pf=password-file] -g=group]
[-folder=folder-name [-service=service-name] [-priority= 1 | 2 | 3]]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-folder**
  Specifies the folder from which to start the integration.

- **-service**
  Specifies the service name for submitting. Specifying this argument partially limits the dataset types based on configuration. This argument is optional.
Chapter 13  Maintenance utilities

-priority
Specifies the priority to apply to the new task. This value overrides the priority specified in the translation configuration object. This argument is optional. Allowed values are 1 (low), 2 (medium), or 3 (high).

-h
Displays help for this utility.

ENVIRONMENT
This utility must be executed from the Teamcenter console.

FILES
None.

RESTRICTIONS
The user must have permission to create tasks and write to specified objects within the database.

Migration
**convert_distribution_lists**

Converts distribution lists to alias lists. Also allows users to create an alias list by importing data from a text file.

**SYNTAX**

```
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-all**
  Converts all the distribution lists to alias lists.

- **-delete**
  Deletes distribution lists that were converted to alias lists.

- **-dist_list_name**
  Converts a specified distribution list to an alias list.
Chapter 13  Maintenance utilities

-import
Creates an alias list from the addresses specified in the file. The format of the ASCII file is:

    abc1@xyz.com
    abc2@xyz.com
    abc3@xyz.com

-new_list_name
Specifies the name of the new alias list. This argument must be used with the -import option.

-overwrite
Overwrites the existing alias list.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
- To convert all distribution lists in the database to alias lists, enter the following command on a single line:

        convert_distribution_lists  -all

- To create an alias list using the distribution list marketing_list and then delete the distribution list:

        convert_distribution_lists  -dist_list_name=marketing_list  -delete

- To create a new alias list with the name Local_Alias_List, populate the list with the addresses listed in the address_local.txt file, and overwrite the existing address list, enter the following command on a single line:

        convert_distribution_lists  -import=address_local.txt
        -new_file_name=Local_Alias_List  -overwrite
move_mso_forms

Finds all forms of type **OfficeDocForm** that are directly attached to folders, items, or item revisions and moves them to a corresponding dataset as a named reference when upgrading Teamcenter Engineering 8.x and 9.x databases to a Teamcenter 10.1 database. These forms are used for property synchronization between Microsoft Office and the Teamcenter database.

**Note** This utility is called by the upgrade script when upgrading from a previous version of Teamcenter Engineering to Teamcenter 10.1.

**SYNTAX**

move_mso_forms [-u=user-id [-p=password | -pf=password-file] -g=group] [-h]

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the *user-ID* value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*. 
Chapter 13  Maintenance utilities

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

Portfolio, Program, and Project Management
create_project

Creates projects in the database based on command line input or input from a text file.

**SYNTAX**

```plaintext
create_project [-u=user-id [-p=password | -pf=password-file] -g=group] [-id=project-id -name=project-name] [-desc=project-description -status=A | I] [-teams=group1~role1~user1~group2~role2~user2... [-privileged=group1~role1~user1~group2~role2~user2... ]] [-input=full-path-to-input-file [-delimiter=delimiter-character]] -h
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  
  This is generally *infodba* or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user's password.
  
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.

  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.

  For more information about managing password files, see *Manage password files*.

  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  
  If used without a value, the user's default group is assumed.

- **-id**
  Specifies the ID of the project.

- **-name**
  Specifies the name of the project.
-desc
Specifies the project description.

-status
Specifies the status; either active (A) or inactive (I).

-teams
Specifies group members to be on the project team. This argument accepts valid user, role, and group names. Use the tilde character (~) as a delimiter when specifying group, role, and user, as follows:

-teams=group1~role1~user1~group2~role2~user2...

In addition, you can specify all members in a group as follows:

-teams=group1~*~*

-privileged
Defines privileged group members using the following format:

-privileged=group1~role1~user1...

-teamadmin
Defines the team administrator using the following format:

-teamadmin=group~role~user

If not specified, the default team administrator is the logged-on user who is running the utility.

-input
Specifies the path to a text file containing multiple entries of project id, project name, project description, teams, privileged members, and optional team administrator. Use this option to create multiple projects.

The syntax of the input file is as follows:

id|name|desc|A or I|group1~role1~user1~group2~role2~user2...|
group1~role1~user1
id|name|desc|A or I|group1~role1~user1~group2~role2~user2...|
group1~role1~user1
id|name|desc|A or I|group1~role1~user1~group2~role2~user2...|
group1~role1~user1
id|name|desc|A or I|group1~role1~user1~group2~role2~user2...|
group1~role1~user1

-delimiter
Specifies the delimiting character used in the input file to parse ID, name, description, status, and teams.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
Input file must conform to the syntax described in the -input argument description in the Arguments section.

RESTRICTIONS
None.
**RETURN VALUES**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return value upon success</td>
<td>0</td>
</tr>
<tr>
<td>Return value upon failure</td>
<td>&gt;1</td>
</tr>
</tbody>
</table>

**EXAMPLES**

- To create a project with ID **123456**, named **ABC Car 123 Model**, description **A high end version of ABC Car**, with an active status assigned to **Car 1** and **Car 2** groups, enter the following command on a single line:

  ```
  create_project -u=user-id -p=password -g=group-name -id=123456
  -name="ABC Car 123 Model" -desc="A high end version of ABC Car
  -status=A -teams="Car 1"~Designer~Smith
  ```

- To create projects from an input file, enter the following command on a single line:

  ```
  create_project
  -u=user-id -p=password -g=group-name -input=/tmp/project_input_file.txt
  ```
Chapter 13  Maintenance utilities

update_project_data

Updates project data in the Teamcenter database.

**Note** The **-f=update** option initiates the update of all project-related data in a database. This process can take a long time depending on the number of objects assigned to projects. When the project ID (**-pid**) is specified for one or more projects, the action applies only the given projects. When updating specific projects, other project-related data may also need to be updated by running the utility again.

**SYNTAX**

```
update_project_data [-u=user-id [-p=password | -pf=password-file] -g=group]
[-f=function] [-force] [-t=relation-type-name1,[relation-type-name2...]]
[-pid=project-ID1,[ project-ID2...]] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user’s password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-f=**
  Specifies the function performed by the utility. Must be one of the following options:
update
Updates project-related data and is generally used after site propagation rules are modified. This function can also be used to cleanse project-related data that may have been corrupted by system crashes.

This is the default function for this utility.

list
Lists relation types used for site propagation rules. It also lists the IDs, project administrator, and status of projects defined in the database.

add
Adds relation types of the site propagation rules for project assignment propagation and updates project data to reflect the change in the rules. The relation types are given as a comma-separated string.

remove
Removes relation types of the site propagation rules for project assignment propagation and updates all project data to reflect the change in the site propagation rules. The relation types are given as a comma-separated string.

delete
Deletes one or more projects identified by the -pid option.

bomviewon
Enables BOM view propagation. This allows BOM views and BOM view revisions of an item to be added to the project automatically when the item is added to a project.

bomviewoff
Disables BOM view propagation. By disabling BOM view propagation, BOM views and BOM view revisions of an item are not included in the project by default when the item is added to the project.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

EXAMPLES
The following examples illustrate the use of the update function:

- Enter the following command to unconditionally update the specified project in the database using the current site propagation rules:
  
  -f=update -pid=project-id

- Enter the following command to unconditionally update the specified list of projects using the current site propagation rules:

  -f=update -pid=project-id1[,project-id2...]

The project IDs are given as a comma-separated string. For example, -pid="Proj4000,Proj5000" specifies that the action is performed on two projects: Proj4000 and Proj5000.
• Enter the following command to update all projects in the database using the current site propagation rules:
  
  \[-f=\text{update}\]

  This command is normally used to update all project data after site propagation rules have been modified. The update algorithm updates project data for objects with a last project assignment date prior to the last site propagation rule modification date.

• Enter the following command to unconditionally update all projects in the database using the current site propagation rules:
  
  \[-f=\text{update} \ -f=\text{force}\]

  \[\text{Note}\] If the database contains a large number of projects, processing time could be considerable.

The following example illustrates the use of the \textbf{list} function:

• Enter the following command to list the project administrator, project status, and relation types used for site propagation rules:
  
  \[-f=\text{list}\]

  \[\text{Note}\] This function is not used with other parameters.

The following examples illustrate the use of the \textbf{add} function:

• Enter the following command to append relation types to the site propagation rules and update all project data in the database:
  
  \[-f=\text{add} \ -t=\text{relation-type-name1},\text{relation-type-name2}...\]

• Enter the following command to append relation types to the site propagation rules and update the project data related to the projects specified by the \textbf{-pid} option:
  
  \[-f=\text{add} \ -t=\text{relation-type-name1},\text{relation-type-name2}...\]
  \[-\text{pid}=\text{project-id1},\text{project-id2}...\]

  This command is used under special circumstances when a user wants to update specific projects prior to updating the entire database. The database must be updated after the specific projects have been updated to ensure completeness of the project data. To update the remaining project data, run the utility using the \textbf{-update} option.

The following examples illustrate the use of the \textbf{remove} function:

• Enter the following command to remove relation types from the site propagation rules and update all project data in the database:
  
  \[-f=\text{remove} \ -t=\text{relation-type-name1},\text{relation-type-name2}...\]

• Enter the following command to remove relation types from the site propagation rules for specific projects:
  
  \[-f=\text{remove} \ -t=\text{relation-type-name1},\text{relation-type-name2}...\]
  \[-\text{pid}=\text{project-id1},\text{project-id2}...\]

  This command is used under special circumstances when a user wants to update specific projects prior to updating the entire database. The database must be
updated after the specific projects have been updated to ensure completeness of the project data. To update the remaining project data, run the utility using the \texttt{-update} option.

The following example illustrates the use of the \texttt{delete} function:

- Enter the following command to delete specific projects and remove all project data associated with those projects:


\begin{verbatim}
-f=delete -pid=project-id1[,project-id2...]
\end{verbatim}

\textbf{Note} Processing time can be considerable depending on the number of objects in each project.

\section*{Server manager}
installmgr.bat

Installs the J2EE-based server manager for four-tier environments as a Windows service. A copy of this script is created in the directory $TC_ROOT\pool_manager\conf$ by Teamcenter Environment Manager (TEM) for each installed server manager instance. Replace $configuration-name$ with the server manager configuration name. The name consists of the TEM configuration name and the server manager's pool ID. This script is run automatically by TEM but can be run manually if required.

SYNTAX

installmgr

ARGUMENTS

None.

ENVIRONMENT

None.

FILES

None.

RESTRICTIONS

None.

EXAMPLES

To manually install a J2EE server manager named PoolA in a Teamcenter configuration named MyConfig, enter the following command on a single line:

D:\tc_root\pool_manager\confs\MyConfig_PoolA>installmgr
uninstallmgr.bat

Uninstalls the J2EE-based server manager for four-tier environments as a Windows service. A copy of this script is created in the directory TC_ROOT\pool_manager\conf\configuration-name by Teamcenter Environment Manager (TEM) for each installed server manager instance. Replace configuration-name with the server manager configuration name. The name consists of the TEM configuration name and the server manager’s pool ID.

SYNTAX

uninstallmgr

ARGUMENTS

None.

ENVIRONMENT

None.

FILES

None.

RESTRICTIONS

None.

EXAMPLES

To manually uninstall a J2EE server manager named PoolA in a Teamcenter configuration named MyConfig, enter the following command on a single line:

D:\tc_root\pool_manager\conf\MyConfig_PoolA>uninstallmgr
mgrstop

Shell script to cleanly stop the server manager for J2EE four-tier environments. A copy of this script is created in the directory 
TC_ROOT/pool_manager/confs/configuration-name by Teamcenter Environment Manager (TEM) for each installed server manager instance. Replace configuration-name with the server manager name. The name consists of the TEM configuration name and the server manager's pool ID. On UNIX/Linux systems, this script is launched by rc.tc.mgr_config when the stop action is requested.

**Note** This command stops a server manager instance; it does not mark a Windows service as stopped. If the server manager is running as a Windows service, the Windows Services Manager attempts to restart the manager if the service is configured for restarting. A server manager running as a Windows service must be stopped from the Windows Services Manager.

**SYNTAX**

```
mgrstop [-Dimmediate]
```

**ARGUMENTS**

* -Dimmediate
  Specifies whether the manager terminates all servers immediately rather than waiting for them to become idle (which is the default behavior).

**ENVIRONMENT**

None.

**FILES**

Files in the TC_ROOT/pool_manager/confs/config directory.

<table>
<thead>
<tr>
<th>File</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>mgr.tmp</td>
<td>Temporary file written by the manager at startup and deleted when it exits. The file contains the values of the POOL_ID and the JMX_HTTP_ADAPTOR_PORT environment variables, which identify the server manager pool and the port on which it listens.</td>
</tr>
<tr>
<td>password.txt</td>
<td>(optional) Contains the user name and the encrypted password for the server manager administration interface. This file exists only if the user name or password has been changed using the server manager administration interface.</td>
</tr>
</tbody>
</table>

**RESTRICTIONS**

This script must be executed on the machine where the server manager is running.

**EXAMPLES**

To immediately shut down a server manager named PoolA in a server manager configuration named MyConfig, enter the following command on a single line:

```
/tc_root/pool_manager/confs/MyConfig_PoolA>mgrstop -Dimmediate
```
rc.tc.mgr_<config>

Shell script to run the J2EE-based server manager for four-tier environments as a UNIX/Linux daemon. A uniquely-named copy of this script is created in the directory `TC_ROOT/pool_manager/confs/config` by Teamcenter Environment Manager (TEM) for each installed server manager instance. Replace `config` with the server manager name and pool ID. For example, if the server manager name is `MyConfig` and the pool ID is `PoolA`, the script has the following name and location:

`TC_ROOT/pool_manager/confs/MyConfig_PoolA/rc.tc.mgr_MyConfig_PoolA`

To install the daemon, this script must be deployed by the system administrator in the appropriate UNIX/Linux directory as a postinstallation step. The script is usually launched by the UNIX/Linux operating system in response to system administration commands.

SYNTAX

```
rc.tc.mgr_config action
```

ARGUMENTS

`action`

Specifies the daemon control action to be performed:

```
start
```

Starts the server manager daemon.

```
start_msg
```

Displays a message that the daemon is starting.

```
stop
```

Stops the server manager daemon without waiting for servers to become idle.

```
stop_msg
```

Displays a message that the daemon is stopping.

```
status
```

Displays a message indicating whether the server manager daemon is running.

```
log
```

Displays the full output of the server manager.

ENVIRONMENT

None.

FILES

None.

RESTRICTIONS

None.

EXAMPLES

To start a server manager named `PoolA` in a Teamcenter configuration named `MyConfig`, enter the following command on a single line:
Chapter 13  Maintenance utilities

/tc_root/pool_manager/conf/MyConfig_PoolA>rc.tc.mgr_MyConfig_PoolA start

Subscription Manager
purge_invalid_subscriptions

Provides the capability to delete invalid and expired subscriptions. For security reasons, only a system administrator can run this program. The user is also able to get the numbers of invalid and expired subscriptions without deleting them.

A subscription references a target object as an external reference. If the target gets deleted, the subscription becomes invalid. The user can interactively delete invalid subscriptions in the rich client interface. Finding a few invalid subscriptions among a large number of subscriptions in the table sometimes is not easy. In addition, subscriptions expire after their expiration dates.

**SYNTAX**

```plaintext
purge_invalid_subscriptions [-u=user-id | -p=password | -pf=password-file] -g=group]
[ -report] [ -e] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-report**
  Reports the numbers of invalid and expired subscriptions without deleting them.
**Chapter 13  Maintenance utilities**

-e
Deletes expired subscriptions in addition to deleting invalid subscriptions.

-h
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
- To delete invalid subscriptions, enter the following command on a single line:
  
  `purge_invalid_subscriptions -u=infodba -p=infodba -g=dba`

- To delete invalid subscriptions and expired subscriptions, enter the following command on a single line:
  
  `purge_invalid_subscriptions -u=infodba -p=infodba -g=dba -e`

- To report the numbers of invalid and expired subscriptions without deleting them, enter the following command on a single line:
  
  `purge_invalid_subscriptions -u=infodba -p=infodba -g=dba -report`

- To display the help message, enter the following command on a single line:
  
  `purge_invalid_subscriptions -u=infodba -p=infodba -g=dba -h`

**System maintenance**
clearlocks

Clears dead process locks from the database. Dead process locks typically occur when a Teamcenter session terminates abnormally. Process locks are set on an object when it is being modified or deleted. If a Teamcenter session does not terminate gracefully (by logging out), these locks can remain in place.

Dead process locks (locks held by dead sessions) can cause diverse problems that are often difficult to diagnose, and Teamcenter applications make every effort to eliminate or otherwise avoid them. Nevertheless, there are occasions when such dead process locks must be explicitly removed from the database, and the clearlocks utility is used for this purpose.

To use the -assert_dead or -assert_all_dead options, you must specify the administrator’s user name, password, and group.

The clearlocks utility can only obtain general information about the processes in the lock table. Normally, the PID is pulled from the table and a kill is sent to the operating system. If the PID exists, the Alive count is incremented. If the PID does not exist, the Dead count is incremented. A Remote PID count indicates the process was started from a node other than the one that was used to run clearlocks. On some platforms, for example, Solaris, the kill returns a security violation and no specific information about the PID. If this occurs, the Other count is incremented.

SYNTAX

clearlocks [-verbose] [-node_names]

[-assert_dead -u=user-id [-p=password | -pf=password-file] -g=group]

[-assert_all_dead -u=user-id [-p=password | -pf=password-file] -g=group]]

[-h]

Caution The clearlocks utility can be run with active Teamcenter sessions, provided that the -assert_dead or -assert_all_dead arguments are not used. By default, the clearlocks utility discriminates between valid and dead process locks; the -assert_dead and -assert_all_dead arguments defeat this feature.

ARGUMENTS

-u

Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p

Specifies the password.

If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument. One of the two mutually exclusive password elements is required.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

-verbose
Displays a summary of processes and states (dead, alive, and unknown). Locks associated with dead processes are cleared by the clearlocks utility, live processes are not cleared, and the unknown processes are all other processes.

-node_names
Lists nodes upon which the known processes exist.

-assert_dead
Asserts that all processes on a particular node are dead and clears all process locks held by sessions running on that node with the exception of Multi-Site Collaboration transfer locks. If any of those sessions are alive and in use, the locks held by those sessions are compromised.

To use this argument, you must enter the node name and the administrator’s user name, password, and group. To clear Multi-Site Collaboration transfer locks, use the export_recovery utility.

-assert_all_dead
Asserts that all processes in the database are dead and clears all process locks with the exception of Multi-Site Collaboration transfer locks. If any of those sessions are alive and in use, the locks held by those sessions will be compromised. Additionally, this option performs a complete cleanup of the database lock tables, the POM_TIMESTAMP table, and reports on the sessions that were asserted to be dead.

To use this argument, you must enter the administrator’s user name, password, and group. To clear Multi-Site Collaboration transfer locks, use the export_recovery utility.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.
RESTRICTIONS

- Do not run the `clearlocks` utility with the `-assert_dead` or `-assert_all_dead` arguments if there are any active Teamcenter sessions running. Any locks held by active sessions will be lost and these sessions can then potentially modify data for which they no longer hold modify locks.

- The `-assert_dead` and `-assert_all_dead` arguments are powerful and potentially destructive. Therefore, these arguments should only be used to clear process locks that cannot be cleared otherwise. For this reason, you must enter the administrator's user name, password, and group when using these arguments.
Chapter 13  Maintenance utilities

- The `clearlocks` utility cannot clear the `Transfer` lock type, only the `Modify` lock. To clear `Transfer` locks, use the `export_recovery` utility. This behavior is intended to prevent cases where objects that are being transferred are forcibly unlocked and thereby exposing them to the possibility of being modified when their ownership is being transferred.

- When running Clearlocks with the `assert_all_dead` or `assert_dead` option, you may see the message:

  Notice: There are transfer locks detected indicating active
  Multi-Site transfer transactions. All transfers need to complete
  before the upgrade can safely continue. Ensure that
  ensure_site_consistency is successfully executed for any identified
  objects before running Clearlocks.

This message also appears when upgrading a database to a new release if there are existing transfer locks in the database.

**EXAMPLES**

- To clear process locks for dead sessions, enter the following command from that node:

  ```
  $TC_ROOT/bin/clearlocks
  ```

- To obtain a list of all network nodes which have process locks set on the database, enter the following command:

  ```
  $TC_ROOT/bin/clearlocks -node_names
  ```

- To clear all process locks (active and dead) on a single network node, in this example `ntssun9`, enter the following command:

  ```
  $TC_ROOT/bin/clearlocks -assert_dead infodba infodba dba ntssun9
  ```

  In this example, `infodba` is the administrator’s user name and password, and `dba` is the administrator's group.

- To clear all process locks (active and dead) on all nodes, enter the following command:

  ```
  $TC_ROOT/bin/clearlocks -assert_all_dead infodba dba dba
  ```

  In this example, `infodba` is the administrator's user name and password, and `dba` is the administrator's group.

- The following is an example of a line message (report) produced by `clearlocks -verbose`:

  ```
  Processes: 7, Alive: 1, Dead: 6, Remote: 0, Other: 0
  ```
Perform the following steps to clear dead process locks using the `clearlocks` utility.

1. Ensure that all Teamcenter and Teamcenter Integration for NX users are logged out of the system.
   When all users are logged out, all valid process locks are cleared.

2. Create a report of all remaining process locks by entering the following command:
   
   ```
   $TC_ROOT/bin/clearlocks -node_names
   ```
   The system displays a report listing network nodes that still have process locks set against the database. Because all users are logged off, these locks are dead and can be cleared.

3. Run the following command:
   
   ```
   $TC_ROOT/bin/clearlocks
   ```

4. Create a report of all remaining process locks by entering the following command:
   
   ```
   $TC_ROOT/bin/clearlocks -node_names
   ```
   The system displays a report listing network nodes that still have process locks set against the database. Because all users are logged off, these locks are dead and can be cleared.

   Any network nodes listed in this second report will require running the `clearlocks` utility with the `-assert.dead` argument to clear the difficult process locks.

5. Run the following command to clear locks held by the session of the specified nodes:
   
   ```
   $TC_ROOT/bin/clearlocks -assert_dead node-name1 node-name2 node-name3...
   ```
   `node-name` is a network node listed in the report.

6. Create a report of all remaining process locks by entering the following command:
   
   ```
   $TC_ROOT/bin/clearlocks -node_names
   ```
   This report should be clean (empty). If there are any nodes listed in this report, contact the Siemens PLM Software Global Technical Access Center (GTAC) for assistance.
Chapter 13  Maintenance utilities

clean_backpointer

Removes relation_type object references and ImanRelation primary and secondary object references from the backpointer table. As of Teamcenter 10.1, these objects are stored in the ImanRelation table to improve performance.

Run this utility after upgrading from a version previous to Teamcenter 10.1 if your previous deployment stored relation_type object references and ImanRelation primary and secondary object backpointer references the backpointer table, rather than the ImanRelation table.

SYNTAX

clean_backpointer -u=admin-user-id [-p=password  | -pf=password-file]  
[-g=dba-group]  [-s=chunk-size | ALL] [-m= INFO|DELETE] [-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the user's password.
If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument. One of the two mutually exclusive password elements is required.

-g
Specifies the administrative group associated with the user.
If used without a value, the user's default group is assumed.

-s
Specifies how many ImanRelation primary and secondary reference objects to delete from the backpointer table. Valid values are a positive integer (for example, 100000) or ALL.

-m
Specifies whether to provide information about the backpointer table or delete the specified number of objects. Valid values are INFO and DELETE.
Maintenance utilities

-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.

EXAMPLES

- To determine how many **ImanRelation** primary and secondary object references exist in your backpointer table, enter the following command on a single line:

  clean_backpointer -u=infodba -p=password -g=dba -m=INFO

  The utility returns the total number of backpointer entries, as well as the number of **ImanRelation** objects identified for deletion.

- To determine the amount of time it takes to delete **ImanRelation** primary and secondary object references from your backpointer table (as each deployment is unique in terms of database load, network performance, and server configuration), delete a small amount of objects from the backpointer table and time how long the operation takes to complete.

  For example, enter the following command on a single line:

  clean_backpointer -u=infodba -p=password -g=dba -s=10000 m=DELETE

- To delete all **ImanRelation** primary and secondary object references from your backpointer table, enter the following command on a single line:

  clean_backpointer -u=infodba -p=password -g=dba -s=ALL m=DELETE
clean-up_recovery_table

Locates and removes all recipe objects resulting from time-out sessions and client crashes. Typically, recipe objects are deleted when users log off. But during client crashes or session time-outs, recipe objects may remain in the database if the session or objects are not recovered. Run this utility periodically to clear the database of recipe objects.

**SYNTAX**


**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see *Manage password files*.

  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-age**
  Specifies the age (in days) recipe objects must reach to be eligible for deletion. Recipe objects older than the specified age are deleted when the utility is run.

  By default, the age is processed as 30 if you do not specify a value for this argument.

- **-report**
  Specifies the name of the output report file to which a summary of deleted recipe objects are logged. The summary states how many recipe objects were deleted, from how many dead sessions.
Accepts the relative or full path and file name.

**-verbose**
Logs a complete list of all deleted recipe objects (as opposed to a summary) to the file specified by the **-report** argument.

If the **-report** argument is not specified, the report is output to the console.

**-dryrun**
Generates a report stating how many recipe objects exist in the database for how many dead sessions. No recipe objects are deleted.

Siemens PLM Software recommends running this argument first, before actually deleting recipe objects from the database.

If this argument is run with the **-age** argument, the report states how many recipe objects of the specified age exist in the database, relative to the total number of recipe objects.

If the **-report** argument is not specified, the report is output to the console.

**-h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
- To delete all recipe objects older than 30 days and write a summarized report of the deleted objects to the **deletedrecipes.txt** file, enter the following command on a single line:
  ```
  cleanup_recovery_table -age=30 -report=deletedrecipes.txt
  ```

- To delete all recipe objects older than 10 days and write a full report of all deleted objects to the **deletedrecipes.txt** file, enter the following command on a single line:
  ```
  cleanup_recovery_table -age=10 -report=deletedrecipes.txt -verbose
  ```

- To test the removal of all recipe objects older than 30 days and write a summarized report of the deleted objects to the **deletedrecipes.txt** file, enter the following command on a single line:
  ```
  cleanup_recovery_table -age=30 -report=deletedrecipes.txt -dryrun
  ```
convert_license_log

Converts a raw license log file into a space-delimited text file. The file can be read in a text reader or Microsoft Excel. The license log file includes timestamp, license daemon, license checkin/checkout, feature key, and user ID. For example:

```
6:02:45 (lmgrd) TIMESTAMP 5/20/2007
6:02:47 (ugslmd) OUT: "tol_cavity_milling" smeyer@svli6020
6:04:44 (ugslmd) IN: "tol_cavity_milling" smeyer@svli6020
6:04:51 (ugslmd) OUT: "tol_cavity_milling" smeyer@svli6020
6:11:09 (ugslmd) IN: "tol_cavity_milling" smeyer@svli6020
6:11:10 (ugslmd) OUT: "tol_cavity_milling" smeyer@svli6020
6:11:20 (ugslmd) IN: "tol_cavity_milling" smeyer@svli6020
12:02:45 (lmgrd) TIMESTAMP 5/20/2007
12:53:51 (ugslmd) OUT: "gateway" jdahlke@AHI6W022
12:54:02 (ugslmd) OUT: "ufunc_execute" jdahlke@AHI6W022
12:54:02 (ugslmd) IN: "ufunc_execute" jdahlke@AHI6W022
12:58:25 (ugslmd) OUT: "cam_base" jdahlke@AHI6W022
12:58:42 (ugslmd) OUT:
```

The Teamcenter license log file is stored in the path specified when you installed the Siemens PLM Software Common Licensing Server to distribute licenses.

For more information about installing the licensing server, see the Installation on Windows Servers Guide or Installation on UNIX and Linux Servers Guide.

**SYNTAX**

```
convert_license_log -input=log-file -output=file-name -delimiter=character [-h]
```

**ARGUMENTS**

- `-u`
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- `-p`
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- `-pf`
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-input
Specifies the full path and file name of the log file you want to convert into a text file.

-output
Specifies the full path and file name of the output file.

-delimiter
Specifies the delimiter character used in the output file. By default, a comma is used.
Surround the delimiter character with single quotes. For example:
'
-h
Displays help for this utility.

ENVIRONMENT
As specified in Manualy configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.
**generate_client_meta_cache**

Generates the shared client metadata cache. This utility is run during the installation and upgrade. Up to three versions of the client meta cache are saved in the server.

Following are some of the situations when you should run this utility:

- Generate the full client cache (all argument) if the client cache folder has been deleted.

- Generate the style sheet cache (stylesheets argument) after a style sheet is edited. This keeps the style sheet feature in the client cache folder up-to-date.

  For more information, see the *Client Customization Programmer's Guide*.

- Generate the text server cache (textservers argument) after text server data has been updated.

  For more information about working with text server files, see the *Localization Guide*.

Metadata is cached on the client computer, eliminating server calls for the cached metadata. When a client logs on to the server, the client cache is placed at the following location on the client machine:

`home-path\Teamcenter\RAC\session\metacache`

For example on a Windows machine, the metadata cache is in the following location:

`C:\Documents and Settings\user-name\Teamcenter\RAC\session\metacache`

The following features provide additional client caching functionality:

- **Caching refresh notification**

  Notifies you when the cache is refreshed. When you log on to the rich client, a check is made for new metadata on the server. If new metadata is found, the cache on the rich client is refreshed, and the following message is displayed:

  > Synchronizing the Rich Client install files with the Teamcenter Server.

  For more information, see the *Rich Client Interface Guide*.

- **ClientCache** folder

  Stores cached metadata. If you are logged on to the rich client as a database administrator (DBA), you see the folder under the **Home** location.

  For more information, see the *Rich Client Interface Guide*.

  **Warning** If the administrator moves, renames, or deletes this folder, all clients fall back to a nonclient-cached mode.

- **Generate Client Cache** check box

  Runs the `generate_client_meta_cache` utility. The check box appears in Teamcenter Environment Manager (TEM) and the Business Modeler IDE.

  For more information, see the *Teamcenter Environment Manager Help* and the *Business Modeler IDE Guide*. 
• **TC_SKIP_CLIENT_CACHE**

Causes the rich client to run in legacy mode and avoid downloading or using a local client meta cache.

For more information, see the *Preferences and Environment Variables Reference.*

**SYNTAX**

```
generate_client_meta_cache [-u=infodba [-p=password | -pf=password-file] -g=group]
command [generate | update | delete | report | tickets | context]
cache [all | types | lovs | stylesheets | textservers | preferences]
-log=log-file-path
-delta=differences-file-path
-l1=language
-l2=language
-err=error-file-name
-t=timings
-remote
-h
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the user's password.

  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see *Manage password files.*

  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user’s default group is assumed.

  `command`

  Specifies the command to run. (You must run the command with **-u=infodba**.)
Chapter 13  Maintenance utilities

**generate**
Generates the client cache.

**update**
Updates the client cache as needed. This is the default setting.

**delete**
Deletes the client cache.

**report**
Reports on the state of the client cache.

**tickets**
Generates tickets for the feature.

**context**
Checks context for LOVs.

**cache**
Specifies the client cache to work on.

  **all**
  Generates all the available client cache files. This is the default setting.

  **types**
  Generates the types cache. This includes the metadata of business objects, property descriptions, and lists of values.

  **lovs**
  Generates the list of values (LOVs) cache.

  **stylesheets**
  Generates the style sheets cache.

  **textservers**
  Generates the text server cache.

  **preferences**
  Generates the site preferences cache.

**-log**
Specifies file path and name of the log file that contains the results of this execution. The default log file is written to the **TEMP** directory.

This argument is optional.

**-delta**
Specifies the file path and name of the file into which data model differences are written.
-l1
Specifies the first language for which to generate the client cache, for example, en_US, de_DE, es_ES, fr_FR, pt_BR.

-l2
Specifies the second language for which to generate the client cache.

-err
Specifies the error file name. The default error file is written to the TEMP directory.

-t
Specifies time function calls.

-remote
Specifies remote start. This generates log files.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
• To generate or regenerate all the client meta cache, enter the following command on a single line.

  generate_client_meta_cache generate all -u=infodba -p=password -g=dba

  This command keeps the previous version of cache data in the server. Up to three versions for all the client meta cache are retained on the server.

• To generate style sheet client meta cache, enter the following command on a single line.

  generate_client_meta_cache generate stylesheet -u=infodba -p=password -g=dba

• To generate text server files client meta cache, enter the following command on a single line.

  generate_client_meta_cache generate textservers -u=infodba -p=password -g=dba
generate_metadata_cache

Generates the metadata shared server cache dataset. The cache is generated only if constant, type, or property metadata is updated since the last update. The `-force` argument forces regeneration of the cache.

If you receive the following message, an administrator must run this utility on the server:

The schema file is out of date. Please regenerate.

This indicates that when a template containing schema changes was installed to the server, the Generate Server Cache check box was not selected in Teamcenter Environment Manager (TEM) or the Business Modeler IDE. (It is also possible that the error message appears because the server instance the user is attempting to connect to does not have an up-to-date server cache. The user should log off and log on several times to connect to a fresh server instance. If the error message persists, the user should contact the server administrator to regenerate the server cache.)

For more information about managing shared server cache, see the System Administration Guide.

**SYNTAX**

```bash
generate_metadata_cache -u=user-id [-p=password | 
-pf=password-file] [-g=group] 
[-force] 
[-h]
```

**ARGUMENTS**

- `-u`
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- `-p`
  Specifies the user's password.
  If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- `-pf`
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the `-p` argument.
-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-force
Forces creation of the dataset even if a correct version already exists.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.
install_event_types

Defines which event and object types can be subscribed to and/or audited. This utility also add event types to an object type.

**Caution**  The `install_event_types` is deprecated.

Beginning in Teamcenter 10, the `create` parameter used with the `-f` argument is obsolete, and therefore you can no longer create event types using this utility. Now you must create custom event types using the Business Modeler IDE rather than this utility.

For more information, see the *Business Modeler IDE Guide*.

**SYNTAX**

```
install_event_types [-u=user-id [-p=password | -pf=.usuario-declave] -g=group]
-f=function {install | add | remove | modify | listValidEvents | listEventtypes | text-file-name} [-overwrite]
[ -eventtype=eventoId] [-imantype=imanType] [-imanclass=imanClass] [-remove] [-audit] [-noaudit]
[-subscribe] [-nosubscribe] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally *infodba* or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the *user-ID* value to be the password.

  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the *user-ID* value to be the password.

  For more information about managing password files, see *Manage password files*.

  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-f
Specifies the mode in which the utility executes. The mode must be one of the following:

- **install**
  Installs standard event types and event type mappings.

- **add**
  Adds the event type to the specified imantype and imanclass.

- **remove**
  Removes event types or event type mappings.

- **modify**
  Modifies event type mapping.

- **listValidEvents**
  Lists valid event types for the specified imanclass and imantype.

- **listEventtypes**
  Lists all the event types in the database.

- **text-file-name**
  Specifies the file name used to create event type mappings, modify event type mappings, or delete event types and event type mappings.

- **overwrite**
  Overwrites existing definitions, if any, during installation. Valid only with the -f=install and -f=input-file arguments.

- **eventtype**
  Specifies the event type ID when creating or deleting event types or event type mappings.

- **imanclass**
  Specifies the imanclass name when creating or deleting event type mappings or when listing valid event types for that particular imantype.

- **imantype**
  Specifies the imantype name when creating or deleting event types or event type mappings or when listing valid event types for that particular imanclass.

- **remove**
  Use with the -f=file-name option to perform the remove operation (remove event types and event type mapping) on the file data.

- **audit**
  Specifies that the event type can be audited. Valid only with the -f=modify argument.
**-noaudit**
Specifies that the event type cannot be audited. Valid only with the **-f=modify** argument.

**-subscribe**
Specifies that the event type can be subscribed to. Valid only with the **-f=modify** argument.

**-nosubscribe**
Specifies that the event type cannot be subscribed to. Valid only with the **-f=modify** argument.

**-h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
When deleting event types and event type mappings using a file, all event type mappings for the event type must be deleted prior to deleting event type itself. For more information, see the example for using the **-f=file-name -remove** option, below.

**EXAMPLES**

- To install the default event types and event type mapping definitions, enter the following command on a single line:

  ```bash
  install_event_types -f=install -overwrite
  ```

  The **-overwrite** switch causes the install to overwrite any existing definitions.

- To add the **MyEventType** event type as a valid event type for the Teamcenter type **Item**, enter the following command on a single line:

  ```bash
  install_event_types -f=add -imantype=Item -imanclass=Item -eventtype=MyEventType
  ```

- To remove the **MyEventType** event type from the Teamcenter type **Item**, enter the following command on a single line:

  ```bash
  install_event_types -f=remove -imantype=Item -imanclass=Item -eventtype=MyEventType
  ```

  **Note** Users cannot remove Teamcenter internal event types.

- To set the **MyEventType** event type as subscribable but not auditable for the Teamcenter type **Item**, enter the following command on a single line:

  ```bash
  install_event_types -f=modify -imantype=Item -imanclass=Item -eventtype=MyEventType -audit -nosubscribe
  ```

- To list all valid event types for the Teamcenter type **Item**, enter the following command on a single line:

  ```bash
  install_event_types -f=listValidEvents -imantype=Item -imanclass=Item
  ```

- To list all event types defined in the database, enter the following command on a single line:
install_event_types -f=listEventtypes

- To read the specified file, define new event types to install, (each line with an event type name) and defines event type mappings (each line with an event type mapping) in the following format:

  iman_type_name, iman_class_name, event_type_name, subscribable_flag, auditable_flag

install_event_types -f=C:\temp\my_event_types.txt -overwrite

In the C:\temp\my_event_types.txt:

  my_event_type_1
  my_event_type_2
  EngChange,Item,my_event_type_1,true,true
  EngChange,Item,my_event_type_2,true,false
  EngChange Revision,ItemRevision,my_event_type_1,true,true
  EngChange Revision,ItemRevision,my_event_type_2,true,false

- To read the specified file, delete event type mappings, (each line with an event type mapping) and delete event types (each line with an event type name) in the formats shown, enter the following command on a single line:

install_event_types -f=C:\temp\my_event_types.txt -remove

**Format to delete event type mapping**

  iman_type_name, iman_class_name, event_type_name

**Format to delete event type**

  event_type_name

The **my_event_types.txt** file contains the following:

  EngChange,Item,my_event_type_1
  EngChange,Item,my_event_type_2
  EngChange Revision,ItemRevision,my_event_type_1
  EngChange Revision,ItemRevision,my_event_type_2
  my_event_type_1
  my_event_type_2

- To delete the **MyEventType** event type, enter the following command on a single line:

install_event_types -f=remove -eventtype=MyEventType

To set display names for event types:

- Open the **user_property_names.xml** file. This file is located in the **TC_ROOT\lang\textserver\en_US** directory.

- Add the keys for the event names as follows:

  <key id="k_et_event1">Event Name 1</key>
  <key id="k_et_event2">Event Name 2</key>

- Stop the pool manager.

- Delete the Teamcenter shared memory files.
The shared memory files are typically located in the temporary files location. For example, in Windows, the shared files are located in the C:\Temp\Pool\folder number directory.

- Restart the pool manager.
**list_types**

Lists all types in the Teamcenter database. Use the output of this utility as input to the `database_verify` utility for the offline case.

**SYNTAX**

```
list_types [-u=user-id [-p=password | -pf=password-file] -g=group]
[ outfile=output-file-name ] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-outfile**
  Specifies the name of the file to contain the output. If this argument is not specified, all types information is displayed on the console.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*. 
Chapter 13  Maintenance utilities

RESTRICTIONS
None.

EXAMPLES
None.
list_users

Creates a list of users currently logged on to Teamcenter and the node they are using. This information is useful if database maintenance is necessary and all users currently logged on must be notified.

SYNTAX

list_users [-u=user-id [-p=password | -pf=password-file] -g=group] [-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

[Note] If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-h
Displays help for this utility.

ENVIRONMENT

As specified in Manually configuring your environment for Teamcenter utilities.

FILES

As specified in Log files produced by Teamcenter.

RESTRICTIONS

None.
Chapter 13  Maintenance utilities

EXAMPLES

None.
migrate_home_folder

Finds the instances of the home folder for all users in the Teamcenter database and modifies the object_type property value to Fnd0HomeFolder. The Fnd0HomeFolder business object represents the home folder and is a child of the Folder business object.

This utility is run automatically during upgrade. You only need to run it manually if the utility did not complete during upgrade.

By default, this utility finds and process only the unmigrated instances. You can force it to process the objects that are already migrated by specifying the -force_rerun argument. You can rerun the utility any number of times. You can process all the home folder instances in bulk using the -objects argument.

SYNTAX

migrate_home_folder -u=user-ID [-p=password | -pf=password-file] [-g=group]
[-objects=number-of-objects-per-iteration]
[-force-rerun]
[-log=log-file-path]
[-v]
[-h]

ARGUMENTS

-u
Specifies the user ID. The user must have administrative privileges.
If this argument is used without a value, the operating system user name is used.

-p
Specifies the user's password.
If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

-objects
Specifies the number objects to be processed per iteration. The default value is 1000 objects. The input value must be a positive integer. If the number of objects specified exceeds the maximum objects in the database, this utility processes all instances in the first iteration itself.
-force_rerun
Forces the utility to query and migrate the instances that are already migrated along with unmigrated instances.

-log
Specifies the path for the log file. The log file contains the information about the number objects successfully migrated, the number of objects not migrated, the time taken to complete the operation, and so on. If this argument is not specified, the log file is generated under the directory defined by the TC_TMP_DIR environment variable.

-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
Apart from the default log files specified in *Log files produced by Teamcenter*, this utility generates an additional log file with the details of the number of instances migrated, the number of instances that failed to migrate, and the time taken to complete the operation. The additional log file has this format:

    migrade_home_folderYYYY_MM_DD_HH_MM_SS.log

You can find it in the directory specified by the TC_TMP_DIR environment variable.

RESTRICTIONS
You must be a Teamcenter administrator to execute this utility.

EXAMPLES
- To migrate all home folder instances in the database with up to 5000 objects per iteration, enter the following command.

```
migrate_home_folder -u=infodba -p=password -g=dba -objects=5000
```

- To migrate all home folder instances in the database with up to 10000 objects per iteration and to force the utility to rerun the migration on already migrated instances along with unmigrated instances:

```
migrate_home_folder -u=infodba -p=password -g=dba -objects=5000 -force_rerun
```
purge_file_cache

Cleans up the file cache based on last access date of the files in the cache. It also deletes any file from the cache that no longer exists within the Teamcenter volume.

**SYNTAX**

```
purge_file_cache [-u=user-id [-p=password | -pf=password-file] -g=group] [-max=megabytes-to-remain-in-cache] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  [Note] If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-max**
  Specifies the maximum size, in megabytes, of the file cache after the purge is performed. If the parameter is not used, only files that are no longer available in the Teamcenter volume are purged.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in `Manually configuring your environment for Teamcenter utilities`.
As specified in *Log files produced by Teamcenter*.

The `purge_file_cache` utility must be run by a user with the privileges required to delete files from the cache directory at the operating system level.

**Examples**

- The `purge_file_cache` utility can be used to clean up the file cache so that at most only 10 megabytes of data remain after purging, as follows:
  
  ```
  purge_file_cache -u=smith -p=password -g=design -max=10
  ```

- In this example, the files that are no longer available in the Teamcenter volume are purged from the cache.

  ```
  purge_file_cache -u=smith -p=password -g=design
  ```
reset_user_home_folder

Repairs corruption that may occur when deleting a user from the database by redirecting the user's home folder, mailbox folder, and Newstuff folder to the home folder of the administrator running this utility.

If a home folder owned by the administrator is found, the utility points the deleted user's home folder back the administrator's home folder. If the administrator's home folder is not found, the utility creates a new home folder and redirects the deleted user's home folder to it.

**SYNTAX**

```
%TC_BIN%\reset_user_home_folder [-u=user-id [-p=password | -pf=password-file]
-g=group] -id=user-id-whose-home-folder-is-to-be-reset [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-id**
  Specifies the user ID of the user who owns the home folder to be reset.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*. 
Chapter 13  Maintenance utilities

FILES
   As specified in Log files produced by Teamcenter.

RESTRICTIONS
   None.

EXAMPLES
   None.
site_util

Performs site-related maintenance, such as creating and deleting remote sites, setting ownership, and changing the ID of remote sites.

SYNTAX

```
site_util [-u=user-id | -p=password | -pf=password-file] -g=group
-f=function [-site_id=site-id] [-site_name=site-name]
[-node_name=node-name] [-gms_url=gms-url]
[-ods=y | n] [-hub=y | n] [-http=y | n] [-tcxml=y | n] [-offline=y | n]
[-replicaDel=y | n] [-display_only] [-h]
```

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

[Note] If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-f
Specifies one of the following functions:

create
Defines a remote site in the local database.
set_id
Changes the current ID of a remote site. This function corrects errors made while defining sites and must be used with extreme caution.

**Caution** Modifying a site ID can result in serious data sharing problems. This function is not allowed to be run on the local site, because it will corrupt the database.

The **-site_name** argument is required when using the set_id function.

modify
Changes attributes of a site other than the site ID and may be used for local or remote sites. The **-site_id** argument is required to identify the site being modified. Only the given attributes are modified.

delete
Deletes a remote site from the local database. Only those sites not referenced by any object in the local database can be deleted. This function cannot be used for the local site. The **-site_id** argument is required when using the delete function.

list
Lists all defined sites in the database and their attributes. No attribute switch is required.

fix_site_ownership
Sets the ownership of all defined sites in the database as being owned by the local site. Use this when you encounter an error stating that you cannot export a POM_imc object because it is owned by another site. This can be run while users are logged on to the database. No attribute switch is required.

**-site_id**
Specifies the ID of the site to which the specified function applies.

**-site_name**
Specifies the name of the site when creating or modifying sites.

**-node_name**
Specifies the node name when creating a new site. This argument can also be used when modifying site properties. If the value of the **-http** argument is set to y, the value of **-site_name** can be a URL of an SOA.

**-gms_url**
Specifies the URL for Global Services.

**-ods**
Specifies whether the site being created or modified is an Object Directory Services (ODS) site. For more information about Object Directory Services, see *Multi-Site Collaboration Guide*.

**-hub**
Specifies whether the site being created or modified is a hub. For more information about hub configurations, see *Multi-Site Collaboration Guide*.

**-http**
Specifies whether to use the HTTP protocol or remote procedure call (RPC) protocol.
-tcxml
Specifies the utility uses TC XML payload instead of an object manager.

-offline
Specifies that the site has no network connection to the local site. This argument is intended to avoid sending unnecessary messages to a site when a replica is deleted.

-replicaDel
Switch that indicates objects replicated to a given site can be deleted as long as the object is not replicated to other sites that do not have this property.

-display_only
Determines whether it is necessary to fix site ownership. This argument must be used in conjunction with the fix_site_ownership function. A returned count greater than zero indicates that site ownership must be fixed by running the utility using the fix_site_ownership function.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
- To define a new remote site in the local database, enter the following command on a single line:
  ```
  site_util -f=create -site_id=123456789 -site_name=Site1
  -node_name=node1 -ods=y
  ```

- To change the node name of a site, enter the following command on a single line:
  ```
  site_util -f=modify -site_id=123456789 -node_name=node2
  ```

- To indicate that a site is a multisite hub, enter the following command on a single line:
  ```
  site_util -f=modify -site_id=123456789 -hub=y
  ```

  A returned count greater than zero indicates that site ownership must be fixed by running the utility using the fix_site_ownership function.

- To determine if it is necessary to run the fix_site_ownership function, enter the following command on a single line:
  ```
  site_util -f=fix_site_ownership -display_only
  ```

- To define a GMS site, enter the following command on a single line:
  ```
  site_util -f=create -http=y -tcxml=y
  -node_name=http://url_of_the_gs_instance
  ```
runBatch

Script that allows a site to execute a group of translations together. The translations are contained in either the default `testxml\TranslationPerf.xml` file or any other XML file and the path of the XML file must be passed as argument.

SYNTAX

```
-u=user-id  [-p=password | -pf=password-file]  [-g=group]
TranslationManagementRootDir\AdminClient\bin\runBatch
[-help]  input-batch-xml-file-path
```

ARGUMENTS

-u
Specifies the user ID.

This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the `user-ID` value to be the password.

This argument is mutually exclusive with the `-pf` argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

For more information about managing password files, see *Manage password files*.

This argument is mutually exclusive with the `-p` argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

`input-batch-xml-file-path`

Input batch XML file path. This argument is optional. If the path is not specified, the system uses the default path as `..\testxml\TranslationPerf.xml`.

-help
Displays help for this utility.

ENVIRONMENT

None.
FILES
None.

RESTRICTIONS
None.

EXAMPLES
- The following is an example of a translation XML file:

```xml
<?xml version="1.0"?>
<!--
This software and related documentation are proprietary to UGS Corp.
COPYRIGHT 2007 UGS CORP. ALL RIGHTS RESERVED
-->
<TranslationTasks>
  <!-- RootDir is the common directory for all the Input files in this xml file. -->
  <RootDir value="../data"/>
  <!-- To add more tasks to the batch, copy and insert more TranslationTask elements -->
  <TranslationTask Submits="1" Provider="UGS" Service="tozipfile" context="Translation">
    <Priority value="2"/>
    <!-- For time based tasks uncomment Time tag. Time format is "MM/dd/yyyy HH:mm" -->
    <!--Time value="01/25/2007 17:33"/-->  
    <Options>
      <Option key="Test_Key" value="Test_Value"/>
    </Options>
    <!-- If RootDir is specified input file path is value of "RootDir + Input". -->
    <Input value="ssw_idi0001.idi"/>
    <!-- Dependant values take * wildcard -->
    <!--Dependant value="*.dep"/ -->
  </TranslationTask>
</TranslationTasks>
```

- The following are examples of command line entries:

  ```bash
  runbatch test test
  runbatch test test ..\testxml\TranslationPerf.xml
  ```
Sends SMTP (Simple Mail Transfer Protocol) e-mail. Use this platform-independent utility when sending e-mail on both UNIX and Windows platforms.

**SYNTAX**

```plaintext
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the `user-ID` value to be the password.

  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

  For more information about managing password files, see **Manage password files**.

  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.

- **-to**
  Specifies the e-mail address of the recipient. If there are multiple recipients, use a `-to` argument for each recipient.

  Either this argument or the `-to_list_file` argument is required.
-to_list_file
Specifies the full path and file name of the file containing the list of e-mail addresses. Each line of the file must contain a full e-mail address.

Either this argument or the -to argument is required.

-cc
Specifies the e-mail address of the carbon-copied recipient. If there are multiple recipients, use a -cc argument for each recipient.

-bcc
Specifies the e-mail address of the blind carbon-copied recipient. If there are multiple recipients, use a -bcc argument for each recipient.

-subject
Specifies the subject line of the e-mail. Accepts a string up to 100 characters. Enclose the string text in double quotes.

-server
Specifies the name of the mail server. Accepts a string up to 100 characters. Optionally, you can define the mail server port within this argument. For example:

-server=myserver:1234

Alternatively, you can define the mail server port using the -port argument. If you do not use either method to specify the mail server port, the SMTP mail port (25) of the local machine is used.

-port
Specifies the mail server port. If not defined, the SMTP mail port (25) of the local machine is used.

-body
Specifies the full path (limited to 200 characters) to the file containing the text of the e-mail body. Limited to 200 characters. You can also specify an alternate file name, in a different format. Files can be either text files or HTML files. (HTML files extensions can be only .htm or .HTM.) For example:

-body=C:\correspondence\body\filename1.txt
-body=C:\correspondence\body\filename2.htm

You can use this argument to specify a total of one text file, or one HTML file, or one text file and one HTML file. You cannot specify, two or more text files, or two or more HTML files.

If you specify one text file and one HTML file, the e-mail always contains the text message first, and then the HTML message, regardless of the order in which you sent the argument values.

If you specify multiple values for the same body type, the last value entered in the command line for this argument is read by the system. For example, if you specify:

-body=C:\correspondence\body\filename1.txt
-body=C:\correspondence\body\filename2.txt
-body=C:\correspondence\body\filename3.txt

Only the contents of filename3.txt are added to the body of the message.
- **attachments**
  Specifies the full path and file name of one or more attachment lists and the format of each attachment (B=binary text, T=text). The full path and file name cannot exceed 200 characters.

  For example, you can specify the full path of the location of the bin_file file and indicate the file is a binary file:

  C:\correspondence\attachments\attachment1\bin_file=B

  To include graphics within the HTML body of an e-mail, specify the image source within the HTML (img src=\texttt{cid:myimage.jpg}), and then specify the same image source within the attachment file. For example:

  C:\correspondence\attachments\attachment1\myimage.jpg=B

  To include several graphic attachments with the same name, differentiate the files with IDs. In the HTML body of an e-mail, specify the various image sources within the HTML (\texttt{img src=\texttt{cid:fred_image.jpg}}) and (\texttt{img src=\texttt{cid:bob_image.jpg}}). Then specify the corresponding image sources within the attachment file. For example:

  C:\correspondence\attachments\attachment1\myimage.jpg=B,html,id=fred_image.jpg
  C:\correspondence\attachments\attachment2\myimage.jpg=B,html,id=bob_image.jpg

- **user**
  Specifies the name of the user from whom the e-mail is sent. If not defined, the login name of the local machine is used.

- **validation**
  Determines the behavior of e-mail delivery if an invalid e-mail address is entered.

  0
  E-mail delivery continues, even if incorrect e-mail addresses are encountered. No error is returned. This is the default setting.

  1
  E-mail delivery continues, even if incorrect e-mail addresses are encountered. An error is returned.

  2
  E-mail delivery is sent first to recipients on the To list, then the CC list, and then the BCC list. Delivery stops at the first invalid address. An error is returned.

- **testmode**
  Allows you to print a test of the e-mail output. Specify either stderr, stdout, or the full path and file name to the stderr file.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

None.

**EXAMPLES**

- When defining the formatting of the attachment list, each line in the list must consist of an attachment file name and its file format.
Assume that the attachment list file is called attachment_list.txt, and the list’s content is:

```
C:\temp\BAR_RED.JPG=B
C:\temp\test.txt=T
```

This results in two files being included as attachments, one binary file named BAR_RED.JPG and one text file named test.txt. Both files are located in the C:\temp \ directory.

```
tc_mail_smtp -subject="my test"
 -to=person1@company1.com -to=person2@company2.com
 -cc=person3@company3.com
 -bcc=person4@company4.com
 -server=mail_server_1
 -body=C:\temp\test.txt -attachments=C:\temp\attachment_list.txt
 -user=person5
```
uih_to_xml

Converts existing UIH files to XML files that serve text and error messages.

**SYNTAX**

`uih_to_xml-u=userid {-p=password | -pf=password-file} [-g=group]`

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  
  If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

  `file1 .uih file2 .uih...`
  Lists UIH files to be converted to XML. If no file is specified, the current directories and subdirectories are searched for UIH files, which are then translated to XML.

- **-d= my directory**
  Parses XML files in a given directory and related subdirectories.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in `Manually configuring your environment for Teamcenter utilities`.

**FILES**

As specified in `Log files produced by Teamcenter`.
RESTRICTIONS

None.

EXAMPLES

There are two basic examples for this utility.

- The following example traverses the current directory and all subdirectories searching for UIH files and translates them to XML files:

  uih_to_xml

- The following example translates only the specified UIH files into their corresponding XML files:

  uih_to_xml  ss_errors.uih  ae_errors.uih

Document management
Chapter 13  Maintenance utilities

pdfgenerator

Translates Microsoft Office (Word, Excel, PowerPoint, and Project) documents, Postscript, Encapsulated Postscript (.eps), Adobe Photoshop (.psd), WordPerfect, rich text, bitmap, GIF, JPEG, TIFF and multipage TIF to Adobe PDF file format.

You need the source authoring applications such as the MS Office documents (Word, Excel, PowerPoint or/and Project), Adobe Acrobat, and Adobe Live Cycle PDF Generator ES to run this program.

SYNTAX

-\textbf{u}=-user-id \textbf{\{ -p=nonce | -\textbf{pf}=password-file \}} \textbf{\{ -g=\text{\textit{group}} \}}
\text{\textbf{DispatcherRootDirectory/Module/translators/docmgmt_translators/}}
\textbf{pdfgenerator.bat -inputDir=source directory path -inputFile=full path of the source file to be translated-outputDir=output directory -outputType=output format}

ARGUMENTS

-\textbf{u}
Specifies the user ID.

This is generally \textbf{infodba} or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

\textbf{Note} If Security Services single sign-on (SSO) is enabled for your server, the \textbf{-u} and \textbf{-p} arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-\textbf{p}
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the \textit{user-ID} value to be the password.

-\textbf{pf}
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the \textit{user-ID} value to be the password.

For more information about managing password files, see \textit{Manage password files}.

This argument is mutually exclusive with the \textbf{-p} argument.

-\textbf{g}
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-\textbf{inputDir}
Specifies the complete path of the input directory.
-**inputFile**
Specifies the path of the input file and the input file name. This is the source file to be translated.

-**outputDir**
Specifies the path of the output file.

-**outputType**
Specifies the output format. The default is **PDF**.

**ENVIRONMENT**
None.

**FILES**
None.

**RESTRICTIONS**
Requires Dispatcher, Adobe PDF Generator ES, and source authoring applications like the MS Office.

**EXAMPLES**
- To translate a MS Word file named **testfile.doc** file to a PDF file named **testfile.pdf**, enter the following command on a single line:

  ```bash
  Pdfgenerator.bat -inputDir c:\temp\ -inputFile c:\temp\testfile.doc -outputDir c:\temp\ -outputType PDF
  ```
Chapter

14 Teamcenter Integration for NX utilities
### export_attr_mappings

Exports attribute mappings from the Teamcenter database to a text file.

**SYNTAX**

```
export_attr_mappings -file=text-file [-test]
[-u=user-id [-p=password | -pf=password-file] -g=group]
[-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-file**
  Specifies the name of the file to be written to.

- **-test**
  Exports the test mappings rather than the actual mappings.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

This utility must be run in the Teamcenter shell environment.
FILES

As specified in Log files produced by Teamcenter.

RESTRICTIONS

None.
import_attr_mappings

Imports attribute mappings into the Teamcenter database. Siemens PLM Software recommends that you initially import the mappings using the -test argument and verify the accuracy of the mappings before making them generally available.

**SYNTAX**

```
import_attr_mappings -file= text-file [-test] [-dryrun]
[-u=user-id] [-p=password] [-pf=password-file] [-g=group] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the user-ID value to be the password.

  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see Manage password files.

  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.

- **-file= text-file**
  Specifies the name of the input file.

- **-test**
  Imports the file without overwriting the existing mapping file.

- **-dryrun**
  Parses the file but does not save the mappings.
-h
Displays help for this utility.

ENVIRONMENT
This utility should be run from a shell where the Teamcenter environment is set.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.
refile_info

Generates a list of identifiers of every item revision in the database. The identifiers include keys. This utility is used in conjunction with the NX ug_refile utility to refile all UGMASTER and/or UGPART datasets in the database. Refer to NX online help for additional information.

SYNTAX

refile_info [-u=user-id [-p=password | -pf=password-file] -g=group] -o=file-name

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-o
Specifies the name of the file to which the list of item revision identifiers is written.
If no output file name is specified, the default file name item_revision_list is used.

ENVIRONMENT

As specified in Manually configuring your environment for Teamcenter utilities.

FILES

As specified in Log files produced by Teamcenter.
RESTRICTIONS
None.

EXAMPLES
To generate a list of identifiers of all item revisions in the database and write it to a file called item_revision_list, enter the following command on a single line:

$TC_ROOT/bin/refile_info -u=infodba -p=password -g=dba -o=item_revision_list
**tess_server**

Starts the tessellation server which translates **UGMASTER/UGALTREP** datasets to JT datasets.

**SYNTAX**

```
tess_server {-s | -c} [-h] [-u=user-id [-p=password | -pf= password-file] -g=group] [-s | -c] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-s**
  Starts the tessellation server.

- **-c**
  Stops the tessellation server.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.
FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
- Enter the following command to start the tessellation server:
  `tess_server -s`
- Enter the following command to stop the tessellation server:
  `tess_server -c`
- Enter the following command to display help for the `tess_server` utility:
  `tess_server -h`
nxmgr_upgrade_bvrsyncform

Upgrades assemblies created in a Teamcenter Engineering version earlier than 8.0 to use the BVRSyncInfo Form. The form is created only if the last synchronization date exists in the PDI reprev cache.

SYNTAX

```
```

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

-Note
If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-input_list
Specifies the name of the file containing a list of specifications (either as handles or in @DB/itemtree format), of items to upgrade. This argument is optional, but you must specify one of the following arguments: -item, -input_list, or -folder.
-folder
Specifies the name of the folder listing items to upgrade. This argument is optional, but you must specify one of the following arguments: -item, -input_list, or -folder.

-item
Specifies the ID of the item to upgrade (upgrades all the revisions). This argument is optional, but you must specify one of the following arguments: -item, -input_list, or -folder.

-rev
Specifies the revision ID of the item to upgrade. Use with the -item argument.

-output_file
Specifies the name of the file to write failure information to.

-log_file
Specifies the name of the file to write log information to.

-bypass
Specifies whether to use bypass privilege if necessary. Valid values are yes and no.

-resume_from
Specifies the line number of the input list to resume processing from.
The -resume_from argument is applicable only if the -item argument is used.

-update_mod_props
Specifies whether to update the last modifying user and date on objects. Valid values are yes and no.

-upgrade_released
Specifies whether to upgrade item revisions with release status. Valid values are yes and no.

-h
Displays help for the utility.

ENVIRONMENT
Requires the standard Teamcenter environment for running Integration Toolkit programs.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
This utility is supported for Hewlett-Packard HP-UX, Sun Solaris, and Microsoft Windows systems only.

EXAMPLES
- The following example displays the usage message:
  nxmgr_upgrade_bvrsyncform -h

- The following example upgrades the UGMASTER dataset attached under the parent A item with the new BVRSYNCINFO named reference:
  nxmgr_upgrade_bvrsyncform -item=parent -rev=A
• The following example upgrades all parts in the **ForUpgrade** folder as **infodba**. The last modified dates are not updated during this upgrade:

```
nxmgr_upgrade_bvrsyncform -u=infodba -p=password -g=dba
   -folder=ForUpgrade -bypass=yes -update_mod_props=no
```

• The following example upgrades all revisions of the **top** item:

```
nxmgr_upgrade_bvrsyncform -item=top -bypass=yes
```

• The following example upgrades the items contained in the **list.txt** file (either as handles or in **@DBitem/rev** format).

```
nxmgr_upgrade_bvrsyncform -i=list.txt
```
nxmlgr_upgrade_transforms

Upgrades transforms.

SYNTAX


ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-i
Specifies the name of the file containing the input list of specifications (either as handles or in @DB/item/rev format), of items to upgrade. This argument is optional, but you must specify one of the following arguments: -item, -input_list, or -folder.
-f
Specifies the name of the folder listing items to upgrade. This argument is optional, but you must specify one of the following arguments: -item, -input_list, or -folder.

-item
Specifies the ID of the item to upgrade (upgrades all the revisions). This argument is optional, but you must specify one of the following arguments: -item, -input_list, or -folder.

-rev
Specifies the revision ID of the item to upgrade. Use with the -item argument.

-out
Specifies the name of the output file to which failure information is written.

-log
Specifies the name of the log file to which log information is written.

-bypass
Specifies whether to use bypass privilege if necessary. Valid values are yes and no.

-resume
Specifies the line number of the input list from which to resume upgrade processing. This argument is applicable only if the -item argument is used.

-update_mod
Specifies whether to update the last modifying user and date on objects. Valid values are yes and no.

-upgrade_release
Specifies whether to upgrade item revisions with release status. Valid values are yes and no.

-force_units
Specifies measurement unit of revisions being upgraded. Valid values are inches and millimeters.

Note Any BOMView Revision containing a legacy_transform_factors setting must be set to either 0.0254 (representing inches) or 0.001 (representing millimeters). These are the only valid values for this setting.

Caution Be extremely cautious when specifying the -force_units option. Use this option only if you are absolutely certain of the units of the assembly part being upgraded.

-h
Displays help for the utility.

ENVIRONMENT
Requires the standard Teamcenter environment for running Integration Toolkit programs.

FILES
As specified in Log files produced by Teamcenter.
RESTRICTIONS

This utility is supported for Hewlett-Packard HP-UX, Sun Solaris, and Microsoft Windows systems only.

EXAMPLES

- The following example displays the usage message:
  
  ```
  nxmgr_upgrade_transforms -h
  ```

- The following example upgrades the transforms for the parent A part. This part must be created by NX 18 or later and have a UGPART-ATTRIBUTES named reference form attached to the UGMASTER dataset.
  
  ```
  nxmgr_upgrade_transforms -item=parent -rev=A
  ```

- The following example upgrades all parts in the ForUpgrade folder as infodba. The last modified dates are not updated during this upgrade:
  
  ```
  nxmgr_upgrade_transforms -u=infodba -p=password -g=dba -folder=ForUpgrade -bypass=yes -update_mod_props=no
  ```

- The following example upgrades all revisions of the top item asserting that this part was modelled in inches:
  
  ```
  nxmgr_upgrade_transforms -item=top -bypass=yes -force_units=inches
  ```

- The following example upgrades all revisions having a release status:
  
  ```
  nxmgr_upgrade_transforms -u=infodba -p=password -g=dba
  input_list=file-name
  output_file=file-name log_file=file-name
  -upgrade_released=yes -bypass=yes
  ```
Chapter

15 Integration utilities

Teamcenter/Community Collaboration
Chapter 15  Integration utilities

**tcc_context_upload**

Uploads fully or partially configured assemblies to Teamcenter Community after downloading them from Teamcenter. This utility does the following:

1. Sets up the staging directory to store the temporary files.
2. Executes a search in RDV setup and downloads the resulting data into a flat file (AJT or PLM XML) by calling the **rdv_context_download** utility.
3. Calls the **asciitojt** utility to convert the AJT file downloaded in Step 2 into the JT format.
4. Uploads the JT assembly files into Teamcenter Community.
5. Deletes the staging directory.

**SYNTAX**

```
  tcc_context_upload [-u=user-id [-p=password | -pf=password-file] -g=group]
```

[-item_id=item-ID] [-rev_id=revision-ID]
[-variant_rule_name=variant-rule-name] [-revision_rule_name=revision-rule-name]
[-engg_change_id=engineering-change-ID]
[-sco_name=structure-context-object name]
[-folder_name=folder-name] [-process_name=process_name]
[-zone_name=zone-name] [-zone_type=BOX | PLANE] [-title=JT-file-base-name]
[-stage=staging-area] [-d] [-verbose] [-tccuser=TeamcenterCommunity-user-name]
[-tccpass=TeamcenterCommunity-password] [-tccanon]
[-tcccreds=TeamcenterCommunity-credential-file]
[-tccdestination=url] [-keep] [-h]

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.
  This argument is mutually exclusive with the **-pf** argument.
-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

-sco_name
Specifies the name of the structure context object.

-item_id
Specifies the item ID.

-rev_id
Specifies the revision ID.

-key
Specifies the key of the item. Use the following format:

[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[keyAttrN=keyValN]

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-engg_change_id
Specifies the engineering change item ID. The utility configures an RDV context based on change attachments and the latest engineering change revision.

-process_name
Specifies the name of the Teamcenter workflow processes that have not yet completed.

-zone_name
Specifies the name of the zone. When both the -zone_name and -zone_type arguments are specified, the utility performs an appearance or QPL search according to the preference settings.

-zone_type
Specifies the type of the zone, which must be either BOX or PLANE. The -zone_name argument must be used in conjunction with the -zone_type argument.

-folder_name
Configures a context based on attachments of the folder/envelope/engineering-change-revision-name.

The attachments include the following:

- One product item revision
- One or more component item IDs
Chapter 15  Integration utilities

- Optional revision rule, overwrites the -r argument
- Optional variant rule, overwrites the -v argument

Note  Search results are affected by the following Teamcenter preferences:

- **TC_config_rule_name**
- **WebDesignContextDefaultSearchDistance**
- **PortalDesignContextMaxMatchingObjects**
- **PortalDesignContextMaxMatchingBOMLines**

For more information, see the *Preferences and Environment Variables Reference*.

-variant_rule_name
Specifies the name of the variant rule.

-revision_rule_name
Specifies the revision rule, which defaults according to the **TC_config_rule_name** preference.

title
Specifies the base name of the JT file. If not specified, it defaults to -I.

-stage
Specifies the staging area (for example, /tmp). If not specified, it defaults to $TC_TMP_DIR.

d
Turns on debugging for the Create bookmark (**rdv_context_download**) utility.

-verbose
Turns on debugging for this utility.

tccuser
Specifies the Teamcenter Community user name if it is different than the user name in the -u argument.

tccpass
Specifies the Teamcenter Community password if it is different than the password in the -p argument.

tccanon
Sets the 'Teamcenter Community login to anonymous, assuming the destination permits anonymous access.

tcccreds
Specifies the Teamcenter Community externally created credential file for logging in.

tccdestination
Specifies the URL for Teamcenter Community.
-keep
Do not delete the staging area after uploading the JT assembly files.

-h
Displays help for this utility.

**ENVIRONMENT**

- The **TcUploaderS.jar** file must be present in **CLASSPATH**.
- The Teamcenter environment must be set to run this utility.
- As mentioned in the **Dependencies** section below, the user must have a Teamcenter Community login and a Teamcenter Community environment set up.
- If the **IMAN_QPL_PROX_FILTER_INCL_COMPS** environment variable is set, proximity searches not only return nearby parts for an instance, but also for all of its children and grandchildren.
- If the **IMAN_RDV_VALID_OVERLAYS_ONLY** environment variable is set, background searches (the -c or -n argument) return only background component instances overlaying valid combinations of variants. This may cause long processing times.
- If the environment variable **RDVContextDownloadDebug=1** is set, the Teamcenter **syslog** file contains information about the **rdv_context_download** utility.
- If the environment variable **RDV_debug=Init+QPL+SearchCriteria+Variants** is set, the Teamcenter **syslog** file contains additional RDV debugging information.

**DEPENDENCIES**

- This utility depends on the **TcUploaderS.jar** file. Before using this utility, you must get this file from the Teamcenter Community kit and place it in the **CLASSPATH** on each client host.
- You must have access to the Teamcenter Community environment to run this utility.

**RESTRICTIONS**

- Zone searches (-z) require an NX-based QPL search index with zones or zone filters explicitly created in a product structure for appearance caches.
- Context searches (-c and -n) require a QPL search index.

The attachments include the following:

- One product item revision
- One or more component item IDs
- Optional revision rule, overwrites the -r argument
- Optional variant rule, overwrites the -v argument
Search results are affected by the following Teamcenter preferences:

- **TC_config_rule_name**
- **WebDesignContextDefaultSearchDistance**
- **PortalDesignContextMaxMatchingObjects**
- **PortalDesignContextMaxMatchingBOLMLines**

For more information, see the *Preferences and Environment Variables Reference*.

**EXAMPLES**

- The following example uploads the antenna assembly to Teamcenter Community, overlaying all applicable variants (the RDV search index is not used or needed). It uses the **TC_config_rule_name** user preference to determine the revision rule.

```bash
$TC_ROOT/bin/tcc_context_upload -item_id TL109375 -rev_id 004
-title Antenna -stage /tmp -tccuser subrata
-tccdestination http://usamseveh001/mydocs
```

- The following example uploads the antenna assembly to Teamcenter Community, overlaying all applicable variants (the RDV search index is not used or needed). It enforces a revision configuration using the **Beta or less w/pdi** revision rule.

```bash
$TC_ROOT/bin/tcc_context_upload -item_id TL109375 -rev_id 004
-title Antenna -revision_rule_name "Beta or less w/pdi" -stage /tmp
-tccuser subrata -tccdestination http://usamseveh001/mydocs
```

- The following example uploads a subset of the RDV00190 product assembly that contains all components in the ENGINE zone to Teamcenter Community. It also:
  - Requires an NX ENGINE box zone in the top-level NX part file
  - Requires an NX-based QPL search index
  - Overlays all applicable variants
  - May require a higher value for the **PortalDesignContextMaxMatchingBOLMLines** preference if the ENGINE zone has many components.

```bash
$TC_ROOT/bin/tcc_context_upload -item_id RDV00190 -rev_id 008
-title EngineCompartment - revision_rule_name "Beta or less w/pdi"
-zone_name ENGINE -stage /tmp -tccuser subrata
-tccdestination http://usamseveh001/mydocs
```

- The following example uploads a subset of the product assembly referenced in the latest revision of the 000042RDV Engineering Change Item, including affected components and their nearby parts within the distance specified in the **WebDesignContextDefaultSearchDistance** preference. Please note:
  - 000042RDV is expected to reference the following:
    - The affected parts or part revisions (for example, 15759576/003-RADIATOR ASM-(W/ A/C CNDSR)
15006864/015-REINF-RAD UPPER INR SUPT LH
15068174/002-SUPPORT_ASM_RADIATOR).

- The product item revision (for example, RDV00190/008).
- The revision rule (for example, Beta or less w/pdi)

- The subset contains all components inside the ENGINE zone.
- It requires a QPL search index.
- It overlays all applicable variants.

$TC_ROOT/bin/tcc_context_upload -engg_change_id 000042RDV
-title RadiatorSupport -stage /tmp -tccuser subrata
-tccdestination http://usamseeveh001/mydocs

Teamcenter/System Engineering and Requirements Management
Chapter 15  Integration utilities

proxy_sync

Synchronizes Teamcenter objects that are linked to remote Teamcenter systems engineering and requirements management applications, using information stored in the ExportedProxyLink class to determine which objects must be synchronized. The utility can query and select a subset of records based on a specified foreign application, date, and status. You can also determine whether to synchronize objects that were modified, objects that were deleted, or objects for which the links (proxies) have been deleted. This utility also provides records of links from the local application.

In addition, you can use the -diagnostic parameter to test the setup environment for linking with any type of Teamcenter application.

SYNTAX

proxy_sync [-u=user-id [-p=password | -pf=password-file] -g=group]
-obj_uid=obj_uid -app_guide=app_guide -force -sync -report -delete -proxy_report
-diagnostic -remote_app_guide -remote_app_type tcprj | tcreq | tceng -h

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.
-obj_uid= obj_uid
Selects records of the Teamcenter objects specified by the object UID.

**Note**  The -app_guid and -obj_uid arguments form a condition based on the selected records. However, there is also an implicit condition which specifies that only objects that have been modified after the last synchronization are selected.

-app_guid= app_guid
Selects records that were exported to the foreign application identified by the specified application GUID.

-force
Selects and synchronizes objects regardless of the last modification date.

-sync
**Note** Either the -sync, -delete, or -report operation must be specified when running this utility.

Performs the synchronization.

-report
Displays the queried objects.

-delete
Deletes the queried objects.

-proxy_report
Lists all proxies in the local database. No other parameter is taken into consideration when this argument is specified.

-diagnostic
Performs diagnostics that check the values of various preferences and records, communication with the application registry and communication with a remote application, as indicated by the -remote_app_guid parameter.

-remote_app_guid
Specifies the application that the utility attempts to contact. This argument is mandatory when the -diagnostic argument is used.

-remote_app_type
Specifies one of the following application types:
- tcprj
- tcreq
- tceng

This argument is mandatory when the -diagnostic argument is used.

-debug
Prints information to the standard output.

-h
Displays help for this utility.
Chapter 15  Integration utilities

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

EXAMPLES
None.
Chapter

16 Teamcenter Automotive Edition-GM Overlay utilities
find_released_datasets

Locates the item revisions and item IDs for the UGMASTER and UGALTREP datasets released after a certain date and that do not have a DirectModel dataset. The output is written to a file, which is a user argument for the utility. If this argument is not provided, output is written to query_output.txt in the current location. If no release date is provided, the system date is used.

**SYNTAX**

```
find_released_datasets [-u=user-id [ -p=password | -pf=password-file] -g=group]
-released_date=date [-bypass= TRUE | FALSE]
[-out_file=output-file-name] [include_remote] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-released_date**
  Date on which the UGMASTER/UGALTREP datasets are released to which we are going to create the tessellated datasets. The format is DD-MMM-YYYY. This argument is optional. If not specified, system date is used as the released date.

- **-bypass**
  Indicates a bypass switch for having bypass privileges. The default value is FALSE.
-out_file
Specifies the file to which output is written. This argument is optional. If this is not specified, the file is written to the current location.

-include_remote
If the value given is not null, remote objects are included.

-h
Displays help for this utility.

EXAMPLES
find_released_datasets -u=infodba -p=infodba -g=dba
   -released_date=22-Mar-2005
   -out_file=c:\temp\find_released_datasets_test.txt
get_bvr_structure

Retrieves the assembly structure of a BVR of the specified item revision, and retrieves the child item IDs associated with the assembly structure, then writes these results to the output file along with the IR.

**SYNTAX**

```
get_bvr_structure [-u=user-id | -p=password | -pf=password-file] [-g=group] [-f=input-file-name | -itemRevisionKeyFile=file-name] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  
  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-f**
  Specifies the input file name containing a list of the specified item revisions.
-itemRevisionKeyFile
Specifies the input file name containing the keys of the specified item revisions. The file format is:

- key = [keyAttr1=keyVal1][keyAttr2=keyVal2]...
- key = [keyAttr1=keyVal1][keyAttr2=keyVal2]...
- key = [keyAttr1=keyVal1][keyAttr2='keyVal2']...

To find the key of an object, use the get_key_string utility.
For more information, see the Business Modeler IDE Guide.

-h
Displays help for this utility.

Note This utility creates a log file in the /tmp directory and writes the error messages to this file. This utility also creates the output file in the current working directory and writes the NX component names with the item revision.

EXAMPLES
get_bvr_structure -u=infodba -p=infodba -g=dba -f=input_file
**list Ir_with_bvr**

Lists the item revisions with BVRs in the database to the `list_ir_with_bvr_xx.xxxx` output file.

**SYNTAX**

```
list_ir_with_bvr [-u=user-id [-p=password | -pf=password-file] -g=group]
-type=CORP_Part Revision -query=defined-query-name
-create_before=date-time -create_after=date [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-type**
  Specifies only the item revision type listed in the
  `list_ir_with_bvr_timeStamp.output` file.

- **-query**
  Specifies that the specified query is executed. This query must be defined in the database.
-create_before
Specifies the date to retrieve the list of item revisions created before this date. The format is dd-mo-yyyy hh:mm.

-create_after
Specifies the date to retrieve the list of item revisions created after this date. The format is dd-mo-yyyy hh:mm.

-h
Displays help for this utility.
migrate_gmo_to_gcn_events

Migrates all subscription events created in the GM Overlay using CNonIR project to create the GCN events. Migration is done by modifying attributes such as event_type, attribute_names, attribute_values, logic_operators, and math_operators on the ImanSubscription class.

SYNTAX


ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-list
Outputs all UIDs of instances of the ImanSubscription class in the database.

-split
Limits the number of subscriptions output to each file.
-input_file
Specifies the file containing the UIDs of the subscriptions. Only the valid GM Overlay subscription events specified in the input file are migrated to GCN events.

-report
Writes all messages and errors to the file specified by this argument.

-h
Displays help for this utility.

RESTRICTIONS
None.

EXAMPLES
- To list the UIDs of all the subscriptions in the database in an output file, enter the following command on a single line:
  
migrate_gmo_to_gcn_events -user=test-user -p=test-password -g=dba -list

- To output all UIDs of the subscriptions in the database to output files containing a maximum of 100 subscriptions per file, enter the following command on a single line:
  
migrate_gmo_to_gcn_events -user=test-user -p=test-password -g=dba
  -list -split=100

- To migrate all subscriptions in a given input file and write all messages and errors to a file specified by the report option, enter the following command on a single line:
  
migrate_gmo_to_gcn_events -user=test-user -p=test-password -g=dba
  -input_file=/tmp/migrate_input.txt -report=/tmp/migrate_report.txt

  If the report option is not specified, the utility writes to the
  migrate_gmo_to_gcn_events.txt default file.

- To migrate all subscriptions in the database and report all messages and errors to the default report file using the default user login, enter the following command on a single line:
  
migrate_gmo_to_gcn_events
Converts special GM logic in the object description field to the project level security feature, as follows:

1. Queries all projects in the database.
2. For each project, searches the description field of all item revisions in the database for the following string:
   
   |project-id |

   If a match is found, the utility associates the corresponding item with the project.

The utility assumes the following:

- The pipe symbol is the delimiter used in the object description field.
- An item may be assigned to two different projects.
- Valid projects exist in the database.

**SYNTAX**

```
gmo_assoc_items_to_project [-u=user-id] [-p=password] [-pf=password-file] [-g=group] [-h]
```

**ARGUMENTS**

- **-u**
  
  Specifies the user ID.
  
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  
  Specifies the password.
  
  If used without a value, the system assumes a null value.
  
  If this argument is not used, the system assumes the `user-ID` value to be the password.
  
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  
  For more information about managing password files, see *Manage password files*.
  
  This argument is mutually exclusive with the `-p` argument.
-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
None.

RESTRICTIONS
None.

EXAMPLES
• To obtain help for this utility, enter the following command on a single line:
  gmo_assoc_items_to_project -h

• To associate all items in the database to appropriate projects based on the object description field, enter the following command on a single line:
  gmo_assoc_items_to_project -u=infodba -p=infodba -g=dba
**gmo_change_itemid_naming_rule**

Modifies the item ID naming rule property from a given value to the customer specified value.

**SYNTAX**

```
gmo_change_itemid_naming_rule [-u=user-id | -p=password | -pf=password-file] [-g=group] -option=option -prefix=prefix -nr_name=naming-rule [-init_value=initial-value | -max_value=maximum-value] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.

  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see **Manage password files**.

  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-option**
  Specifies the option for this utility, that is, **change_naming_rule**.

- **-prefix**
  Specifies the prefix of the GM ItemNumeric naming rule.

- **-nr_name**
  Specifies the naming rule to change the prefix. You can specify more than one naming rule separated by commas.
-init_value
Specifies the starting value of the counter.

-max_value
Specifies the maximum value of the counter.

-h
Displays help for this utility.

RESTRICTIONS
None.

EXAMPLES
- The following example uses the **GM ItemRule** naming rule to change the prefix:

  ```
  gmo_change_itemid_naming_rule -u=user -p=password -g=group
  -option=change_naming_rule -nr_name="GM ItemRule 
  -prefix=GMO -init_value=00000 -max_value=99999
  ```

- The following example uses the **GM ItemRule** and **CORP_Tool Rule** naming rules to change the prefix:

  ```
  gmo_change_itemid_naming_rule -u=user -p=password -g=group
  -option=change_naming_rule -nr_name="GM ItemRule,CORP_Tool Rule"
  -prefix=GMO -init_value=00000 -max_value=99999
  ```
**gmo_change_owner**

Sets user and group ownership of objects contained in a folder, item, or item revision. All processing procedures are logged to the log file, if specified.

**SYNTAX**

```
gmo_change_owner [-u=user-id [-p=password | -pf=password-file] -g=group] 
-folder=folder-name -item=item-id -rev=revision-id  
[-key=[keyAttr1=keyVal1], [keyAttr2=keyVal2], ..., [keyAttrN=keyValN]]  
[-r] -owner=new-user-id -own_grp=new-group  
-log=log-file-name -bypass [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  - **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-folder**
  Specifies the folder name. Either `folder` or `item` and/or `rev` should be supplied.

- **-item**
  Specifies the item ID.

- **-rev**
  Specifies the revision ID.
-key
Specifies the key of the item to be checked. The -key argument can be specified instead of the -item argument. Use the following format:

[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-r
If specified, the ownership of the contents is changed.

-owner
Specifies the user ID to which the ownership is changed. Both owner and own_grp should be supplied.

-own_grp
Specifies the new group to which the ownership is changed.

-log
Specifies verbose messages are logged to this file.

-bypass
Bypass access checks. This argument is available only to the system administrator.

-h
Displays help for this utility.

EXAMPLES
None.
gmo_check_comp_names

Truncates the component names greater than 25 characters in length. This program locates the components of an assembly with component names greater that 25 characters long. The component name is the occurrence note of type name UG NAME.

SYNTAX

gmo_check_comp_names [-u=user-id [-p=password | -pf=password-file] -g=group]
-all | -f=folder-name | -i=item-id
| [-key=[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[keyAttrN=keyValN]]
[r=itemrev-id] [-report | update] [-out=output-file-name]
[-v] [-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-all
Runs on all the items in database.

-f
Specifies the name of the folder containing list of items to be checked for component names.
-i
Specifies the item ID to be checked.

-key
Specifies the key of the item to be checked. Use the following format:

[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-r
Specifies the revision ID to be checked.

-report
Generates the report of items with component names greater than 25 characters.

-update
Truncates all the component names greater than 25 characters.

-out
Specifies the name of the file to which output is written. This argument is optional. Default file name is gmpdm_comp_name_report.txt.

-v
Specifies verbose mode.

-h
Displays help for this utility.

RESTRICTIONS
This utility must be run by a user in the dba group with the -update option.

EXAMPLES

gmo_check_comp_names -u=infodba -p=infodba -g=dba
 -all -report -v
Chapter 16  Teamcenter Automotive Edition-GM Overlay utilities

---

### gmo_clone

Serves as a wrapper over the Teamcenter Integration for NX `ug_clone` utility to provide Teamcenter Automotive Edition–GM Overlay-specific clone import/export functionality from a command shell.

Use this utility to import and export NX data in the GM Overlay environment to ensure the clone conforms with GM Overlay naming conventions.

**SYNTAX**

```
```

**ARGUMENTS**

- `-plm`
  Set `-plm` to **Yes** to initialize Teamcenter Integration for NX only, instead of native NX.

- `-u`
  Specifies the user ID.

  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- `-p`
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the *user-ID* value to be the password.

  This argument is mutually exclusive with the `-pf` argument.

- `-pf`
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.
For more information about managing password files, see *Manage password files*. This argument is mutually exclusive with the -p argument.

-\texttt{g}
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-\texttt{corba\_ior\_file}
Specifies the Teamcenter password server IOR file.

-\texttt{http\_url}
Specifies the HTTP URL for four-tier configuration.

-\texttt{h}
Displays help for this utility.

**RESTRICTIONS**
None.
**gmo_create_material_form_templates**

Creates new material form templates by reading the input from an ASCII text file. Input must be supplied in a defined format, as specified below. Material form templates are of the form type Material and are stored in folders or subfolders of the folder type Material Template. These folders and forms are stored in the GM Preferred Materials Catalog that is displayed in the infodba user’s Home folder.

**INPUT FILE FORMAT**

This section describes the input file format using the sample folder structure shown in the following figure.

**Sample directory structure**

To achieve the structure shown in the sample directory structure, the input file must be in the following format:

```
<Folder1>:<Folder2>:<Folder3>:<Folder4>:...$<Form Name>$value of p_mat
# value of p_pcoat# value of p_perf# value of p_pcperf# value of p_appear#
\value of p_fin# value of p_svc# value of p_addreq# value of p_mateng
# value of p_appeng# value of p_pnteng
```

Folders are delimited by a colon (:), folders and forms are delimited by a dollar sign ($), and the form and form values are delimited by the (#) symbol.

**Note** The delimiting symbols described in the previous paragraph assume that these symbols are not used as values in any of the materials form fields.

The following is an example of the input file format.

```
Metals:Hard:Corossive$ALUMINUM_001#p_mat#p_pcoat#p_perf#p_pcperf
#p_appear#p_fin#p_svc#p_addreq#p_mateng#p_appeng#p_pnteng
Metals:Hard:Corossive$COPPER_001#p_mat#p_pcoat#p_perf#p_pcperf#p_appear
#p_fin#p_svc#p_addreq#p_mateng#p_appeng#p_pnteng
```
SYNTAX

gmo_create_material_form_templates [-u=user-id [-p=password] | -pf=password-file] [-g=group] [-infile=full-path-to-input-file] [-h]

ARGUMENTS

-u
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  [Note] If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the -pf argument.

-pf
  Specifies the password file. If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.

-g
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

-infile
  Specifies the full path to the input file.

-h
  Displays help for this utility.
Chapter 16  Teamcenter Automotive Edition-GM Overlay utilities

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities.*

FILES
As specified in *Log files produced by Teamcenter.* In addition, the *gmo_create_material_form_templates.log* file is created in the directory from which the utility is run.

RESTRICTIONS
None.

EXAMPLES
• To obtain help for this utility, enter the following command on a single line:

  `gmo_create_material_form_templates -h`

• To read the supplied input file and create folders and forms that are inserted in the **GM Preferred Materials Catalog** folder, enter the following command on a single line:

  `$/GMPDM_ROOT/bin/gmo_create_material_form_templates -u=infodba -p=infodba -g=dba -infile=/tmp/MATERIAL.txt`
**gmo_find_changed_install_assem**

Locates the installation assemblies that have changed since the specified date and that are configured with the specified revision rules.

**SYNTAX**

```
gmo_find_changed_install_assem [-u=user-id | -p=password | -pf=password-file]
-g=group]-time=date-time -revision_rule=rule1
[-revision_rule=rule2 ...-revision_rule=rulen] -rev_rule_file=file-name
[-obj_type=object-name] [-out_file=output-file-name] [-h]
```

**ARGUMENTS**

- **-u**  
  Specifies the user ID.  
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**  
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**  
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**  
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-time**  
  Specifies the date and time from which the **Released CORP_Install** item revisions are to be searched. This should be provided in the Teamcenter-specified format. An operating system file name can also be given whose last modification time will be taken as the time.
-revision_rule
Specifies revision rules for which the search is to be done. You can specify this argument multiple times. If this is given, the rev_rule_file argument cannot be used.

-rev_rule_file
Specifies a text file listing all the revision rules on separate lines. If this argument is given, revision_rule option cannot be used.

-obj_type
Specifies the type of object which is to be searched for the change in release status since the specified date. This argument is optional and defaults to objects of type CORP_Install Revision.

-out_file
Specifies file to which output is written. This argument is optional. If it is not specified, the output is sent to stdout.

-h
Displays help for this utility.

EXAMPLES
None.
gmo_get_partspec

Retrieves the part specification of the specified dataset.

**SYNTAX**

```
gmo_get_partspec [-u=user-id [-p=password | -pf=password-file] -g=group]
-dataset_tag=dataset [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-dataset_tag**
  Specifies the dataset tag in a string.

- **-h**
  Displays help for this utility.

**EXAMPLES**

None.
gmog_get_pds_info

Retrieves the **pds** attributes for the given part numbers. The output files are generated at the location specified by `%TC_TMP_DIR` with the names `sitename_timestamp_parts_notfnd.txt` and `sitename_timestamp_parts_fnd.txt`.

### SYNTAX

```
gmog_get_pds_info [-u=user-id [-p=password | -pf=password-file] -g=group] [-input_file=input-file-name | -itemKeyFile=file-name] [-h]
```

### ARGUMENTS

- **-u**
  Specifies the user ID. This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

- **-p**
  Specifies the password. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password. This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password. For more information about managing password files, see *Manage password files*. This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user. If used without a value, the user's default group is assumed.

- **-input_file**
  Specifies the input file with part numbers and revision IDs separated by the ~ (tilde) character.

- **-itemKeyFile**
  Specifies the input file name containing the keys of the desired part numbers. The file format is:

  - **-key** = [keyAttr1=keyVal1][keyAttr2=keyVal2]...
  - **-key** = [keyAttr1=keyVal1][keyAttr2=keyVal2]...

**Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.
-key = [keyAttr1=keyVal1][keyAttr2=’keyVal2’]...

-h
Displays help for this utility.
**gmo_install_usage_queries**

Installs usage queries.

**SYNTAX**

```
gmo_install_usage_queries [-u=user-id {-p=password | -pf=password-file} -g=group] [-recreate] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally *infodba* or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the *user-ID* value to be the password.
  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-recreate**
  Optional parameter. If specified, currently installed usage queries are deleted prior to installation of corresponding GMO-specific usage queries. As default, usage queries are normally installed. Siemens PLM Software recommends you use this parameter to avoid installation error messages when attempting to install over existing queries. This utility can be executed repeatedly using this option.

- **-h**
  Displays help for this utility.
As specified in *Manually configuring your environment for Teamcenter utilities.*

As specified in *Log files produced by Teamcenter.*

None.
This is a book page discussing the `gmo_ipvbom_import` utility. It imports build intent data from a PLM XML file and creates a change object of type GM Build Intent.

**SYNTAX**

```
gmo_ipvbom_import [-u=user-id [-p=password | -pf=password-file] -g=group] -xml_file=full-path-to-PLM XML-file [-h]
```

**ARGUMENTS**

- `u` Specifies the user ID. This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

- `p` Specifies the password. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password. This argument is mutually exclusive with the `pf` argument.

- `pf` Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password. For more information about managing password files, see `Manage password files`. This argument is mutually exclusive with the `p` argument.

- `g` Specifies the group associated with the user. If used without a value, the user's default group is assumed.

- `xml_file` Specifies the path to the PLM XML input file containing the build intents.

- `h` Displays help for this utility.

**ENVIRONMENT**

As specified in `Manually configuring your environment for Teamcenter utilities`.

**FILES**

As specified in `Log files produced by Teamcenter`.
RESTRICTIONS

This utility must be used only to import build intent data. It is not intended to import other data contained in PLM XML files.

EXAMPLES

- To obtain help for this utility, enter the following command on a single line:
  
gmo_ipvbom_import -h

- To import build intent data contained in the /tmp/IMPORT.xml file, enter the following command on a single line:
  
gmo_ipvbom_import -u=infodba -p=infodba -g=dba -xml_file=/tmp/IMPORT.xml
Exports specific build intent information, all build intent information, specific build intents along with partial build intents, full BOM or incremental BOM data.

**SYNTAX**

```
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  
  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-build_id**
  Specifies the ID number of the build intent to be exported.

- **-fullbom**
  Specifies whether or not to export the full BOM. Valid values are `yes` or `no`. If `yes`, the utility exports the full BOM; otherwise, the delta BOM is exported.
  The default value is `yes`. 
-inputfile
Full path to file.

-xml_path
Specifies the path to the output directory containing the XML file. If not specified, the path defined in the preference file is used.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities. In addition, the IPVBOM_build_intent_status preference, which specifies the release status used to obsolete older revisions of the build intent changes, must be set.

FILES
As specified in Log files produced by Teamcenter. In addition, the values of the IPVBOM_compare_mode_var_level_RevisionCompare_ItemTypes and IPVBOM_compare_mode_var_level_Occurrence_Notes preferences affect the behavior of the gmiman_export utility. For more information about these preferences, see the Preferences and Environment Variables Reference.

RESTRICTIONS
This utility must be used only to export build intent data. It is not intended to export other data to PLM XML files.

EXAMPLES

- To obtain help for this utility, enter the following command on a single line:
  
gmo_ipvbom_export -h

- To export build BOMs listed in the /tmp/EXPORTS.txt file from the Teamcenter database to a PLM XML file, enter the following command on a single line:
  
gmo_ipvbom_export -u=infodba -p=infodba -g=dba -fullbom=yes
  
  -xml_path=/tmp -inputfile=/tmp/EXPORT.txt
gmo_ipvbom_pulldate

Updates the pull date information for each build intent that is defined in a PLM XML file.

**SYNTAX**

```
gmo_ipvbom_pulldate [-u=user-id | -p=password | -pf=password-file] -g=group
[-xml_file=absolute-path-of-xml-file] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-xml_file**
  Specifies the full path of the PLM XML file.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.
RESTRICTIONS
None.

EXAMPLES
- To obtain help for this utility, enter the following command on a single line:
  
gmo_ipvbom_pulldate -h

- To update pulldate information for each build intent contained in the
  /tmp/PULLDATE.xml file, enter the following command on a single line:
  
gmo_ipvbom_pulldate -u=infodb -g=dba -xml_file=c:/tmp/PULLDATE.xml
gmo_migrate_ulink_to_rdvauto

Migrates ULink occurrences in a VAS to GRDVA occurrences.

**SYNTAX**

```bash
gmo_migrate_ulink_to_rdvauto [-u=user-id [-p=password | -pf=password-file]
-\[product=product-item-id | -key=[keyAttr1=keyVal1[,keyAttr2=keyVal2]...]
[\[keyAttrN=keyValN]]
-rev=product-revision-id -ia_list=IA-item-id-file
-process_path=y | -process_all=y | -process_rules=y
-logfile=logfile-name [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see `Manage password files`.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-product**
  Specifies VAS item ID.

- **-key**
  Specifies the key of the VAS item. Use the following format:

  ```
  [keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN]
  ```
To find the key of an object, use the \texttt{get_key_string} utility.

For more information, see the \textit{Business Modeler IDE Guide}.

\textbf{-rev}

Specifies VAS revision ID.

\textbf{-logfile}

Specifies the name of the logging file.

\textbf{-h}

Displays help for this utility.

\textbf{ENVIRONMENT}

As specified in \textit{Manually configuring your environment for Teamcenter utilities}.

\textbf{FILES}

As specified in \textit{Log files produced by Teamcenter}.

\textbf{RESTRICTIONS}

None.
**gmo_migrate_usage_nves**

Migrates existing architecture breakdowns to the newer, simplified format of named variant expression (NVE) comprising usage, year, and production usage. You should only run this utility if you created NVEs in Teamcenter 2007.1 MP6 or earlier by running the `rdv_import_usage` utility. If you created NVEs in later releases, it is not necessary to run this utility. Otherwise, you should run this migration utility only once on each architecture breakdown.

The utility outputs the usage NVEs in the architecture breakdown and the assembly structure in the new format of NVEs. It also generates a list of the older format NVEs that are replaced and you can use this list to identify unused NVEs for deletion.

For example, it takes an older format NVE coded as `D9_2009-09_AA5M_1PD69_PS` and generate the following NVE code strings:

```
D9_AA5M_1PD69_000
Year_2009-09
ProductionUsage
```

**SYNTAX**

```
gmo_migrate_usage_nves [-u=user-id [-p=password | -pf=password-file] -g=group] -revision_rule=rev-rule-string -mode=migration-mode -top_level_AB_id=vehicle-architecture-id | -louholder_item_id=item-id -archId_list_file=file-name -h
```

**ARGUMENTS**

- `-u`  
  Specifies the user ID.  
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  
  If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- `-p`  
  Specifies the password.  
  If used without a value, the system assumes a null value.  
  If this argument is not used, the system assumes the `user-ID` value to be the password.  
  This argument is mutually exclusive with the `-pf` argument.

- `-pf`  
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

  For more information about managing password files, see `Manage password files.`  
  This argument is mutually exclusive with the `-p` argument.
-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-revision_rule
Specifies a valid revision rule string to configure the structure window.

-mode
Specifies the running mode of the utility, either report to generate a report of NVEs to migrate or migrate to initiate migration of affected NVEs.

-top_level_AB_id
Specifies the item ID of a top level architecture. All LOUs under LOU holders in the specified architecture are processed. If you specify this argument, do not specify a -louholder_item_id argument.

-louholder_item_id
Specifies the item ID of a LOU holder. If you specify this argument, do not specify a -top_level_AB_id argument.

-archId_list_file
Specifies a flat file containing architecture IDs. The utility uses these architecture IDs to retrieve the NVEs of affected LOUs.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

RESTRICTIONS
None.

FILES
As specified in Log files produced by Teamcenter.

EXAMPLES
To migrate all the NVEs for the Model_2009_AB architecture breakdown, enter the following command on a single line:

```bash
gmo_migrate_usage_nves
-u=user-name -p=password -g=group -revision_rule=production -mode=migrate
-top_level_AB_id=Model_2009_AB -archId_list_file=AB.txt
```
**gmo_set_rel_status**

Sets the release status for the item revisions and related datasets, revision masters, and BOMview revisions with the specified statuses. It searches for the specified folder in home folder of the user **infodba** and finds all the items and item revisions in that folder. The utility then sets the specified *product-release-status* for all the non-PDE item revisions, datasets, BOMview revisions, revision master forms and the specified *pdi-release-status* for all the PDI item revisions, datasets, BOMview revisions, and revision master forms. It sets the given release status only if no release status is set before for item revision, dataset, bomview revision, and revision master form.

**SYNTAX**

```
gmo_set_rel_status [-u=user-id | -p=password | -pf=password-file] -g=group
folder_name prod_rel_status pdi_rel_status
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the *user-ID* value to be the password.

  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.

  For more information about managing password files, see *Manage password files*.

  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.

- **-h**
  Displays help for this utility.
RESTRICTIONS

The `folder_name` must be present in the home folder of the `infodba` user.

EXAMPLES

None.
**gmo_split_usage**

Divides GM Corporate Dictionary (Architecture Breakdown Structure) and Line Of Usage Data (GPDS XML files) into predefined blocks of data (GPDS XML files). For each block of data, this utility creates script/batch file that is run to upload the Corporate Dictionary/Usage Data.

**SYNTAX**

```
gmo_split_usage [-u=user-id | -p=password | -pf=password-file] -g=group
               -input=input-file (-log=name-of-logfile | -max=maximum-usage | [-enable_lock_grabbing] -arch=y
               [-archtop_item_id=arch-top-item-id | -archtop_item_name=arch-item-name]]
               -import_usage_log=logfile-name -generate_delta_xml [-enable_lock_grabbing] [h]
```

**ARGUMENTS**

- **-u**  
  Specifies the user ID.  
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.  
  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**  
  Specifies the password.  
  If used without a value, the system assumes a null value.  
  If this argument is not used, the system assumes the *user-ID* value to be the password.

- **-pf**  
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.  
  For more information about managing password files, see [Manage password files](#).  
  This argument is mutually exclusive with the -p argument.

- **-g**  
  Specifies the group associated with the user.  
  If used without a value, the user's default group is assumed.

- **-input**  
  Specifies the name of the input file.

- **-log**  
  Specifies the name of the log file.
-**max**
  Specifies the maximum usage.

-**arch**
  Boolean flag to upload Corporate Dictionary.

-**archtop_item_id**
  Specifies item ID of the Architecture Breakdown.

-**archtop_item_name**
  Specifies the name of the architecture top item.

-**import_usage_log**
  Specifies for each block of data, a separate logfile is generated with increments indicating each data block.

-**generate_delta_xml**
  Specifies the utility is to generate the Delta XML file.

-**h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

None.
Connects to the GPDS system and updates the VAS registration.

**SYNTAX**

```sh
```

**ARGUMENTS**

- `-u`
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  
  **Note:** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- `-p`
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- `-pf`
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

For more information about managing password files, see `Manage password files`.

This argument is mutually exclusive with the `-p` argument.

- `-g`
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- `-datasource`
  Specifies the name of the external datasource.

- `-hostname`
  Specifies the hostname of the external datasource.

- `-user`
  Specifies the user of the external datasource.

- `-passwd`
  Specifies the password of the external datasource.
-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.
gmo_upgrade_dlist_objects

Migrates the distribution list objects created as a dataset using the TcAEV8.1/V9.1 functionality. It also searches for all distribution list objects existing in the database and transforms them into EPMAssignmentList objects.

DESCRIPTION

SYNTAX

```
gmo_upgrade_dlist_objects [-u=user-id [-p=password | -pf=password-file] -g=group] [-delete_old] [-h]
```

ARGUMENTS

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  [Note] If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-delete_old**
  Indicates that the utility is to delete the old assignment list objects after they are upgraded.

- **-h**
  Displays help for this utility.

ENVIRONMENT

As specified in Manually configuring your environment for Teamcenter utilities.
FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.
gmo_validate_xml

Validates the GPDS generated XML file. It ensures that all of the model option statements and model designators contain the correct VDS records and the corporate dictionary is correctly defined.

**SYNTAX**

```
gmo_validate_xml [-u=user-id [-p=password | -pf=password-file] -g=group]
-\input=input-xml-file-name [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  
  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-input**
  Specifies the name of the XML file.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in **Manually configuring your environment for Teamcenter utilities**.

**FILES**

As specified in **Log files produced by Teamcenter**.
RESTRICTIONS

None.
gmo_vds_util

Synchronizes the variant data stored with the item revision between the base and multiple target item revisions.

**SYNTAX**

```
gmo_vds_util [-u=user-id] [-p=password | -pf=password-file] [-g=group]
[-i=item-id]
[-key=[keyAttr1=keyVal1], keyAttr2=keyVal2]...[,keyAttrN=keyValN]
[-b=base-item-rev] [-t=target-item-rev1 ...] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  Note: If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-i**
  Specifies the item ID.

- **-key**
  Specifies the key of the item. Use the following format:

  `[keyAttr1=keyVal1], [keyAttr2=keyVal2]...[,keyAttrN=keyValN]`

  To find the key of an object, use the get_key_string utility.
  For more information, see the Business Modeler IDE Guide.
-b
Specifies the base item revision.

-t
Specifies the first target item revision. You can specify this argument multiple times.

-h
Displays help for this utility.
Imports usages from an XML file to Teamcenter usage representations. The utility applies all model NVEs available during the pre-usage stage to the top-level architecture node. The model NVEs are not applied to the children of the top-level architecture node (the architecture breakdown elements). However, the stored model NVEs on the top-level architecture element are available for manual application to any children in the architecture breakdown. When working in the Replace Design in Product wizard in DesignContext or Structure Manager, the user can select the model NVEs from the top-level architecture breakdown, rather than from the preselected architecture breakdown element (ABE).

Unlike in earlier versions of Teamcenter, model NVEs are not associated with the ABEs under the top-level architecture breakdown. Rather, model NVEs are stored as absolute occurrence data on the top-level architecture node. The utility creates the necessary absolute occurrence data at the top-level during the pre-usage import step.

Platform Designer allows the user to view model and manual NVEs associated with the top-level. You can use the Add command to add associated manual NVEs from the variant expression block at the top level to the absolute occurrence data.

Optionally, you can configure the utility to retry if it fails to complete a usage load for any reason on the first attempt. Failure to complete the load impacts downstream processes, as users cannot align their CAD solutions to the most recent PLM system changes. The utility retries obtaining a lock on the objects needing modification, typically, the product revision or top-level architecture node. Once a lock is obtained, the utility completes usage load operations. The optional ability for the utility to obtain the necessary locks is set with the RDV_enable_product_lock preference.

Data loss may occur if the utility removes the lock while a user is actively editing data associated with the top-level product.

In the event of a failure while importing LOUs, it reports error codes and descriptions in the system log. These reports can be interpreted by users or scripts to take the necessary corrective action.

The format of the NVEs created by this utility changed with effect from Teamcenter 2007.1 MP6. Newer versions of the utility automatically include options and values so that you can use those options for the manual creation of NVEs and saved variant rules (SVRs) in Platform Designer. While running the utility, Teamcenter checks to see if the item ID of the product item is present in the PSM_global_option_item_ids preference. If so, it automatically creates the variability on the top level architecture breakdown. The import utility then applies variability for every option-value on the architecture breakdown (VAB). During execution of the rdv_import_usage utility, Teamcenter does not enforce hierarchical variability on the architecture breakdown (VAB).

If you used an earlier version of this utility to create NVEs, you should run the gmo_migrate_usage_nves utility to migrate them to the new format. If you created NVEs in Teamcenter 2007.1 MP6 or later, it is not necessary to migrate them. Examples of the old and new formats follow:
A sequence number is appended to the authorized NVE so that true availability changes in model codes across years may be recorded in the NVE content. In the previous examples, the sequence number is 000.

SYNTAX

rdv_import_usage [-u=user-id [-p=password | -pf=password-file] -g=group] -input_file=name-of-xml-file -h

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note
If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-input_file
Specifies the XML input file from which the utility imports usages.

-h
Displays help for this utility.
Chapter 16  Teamcenter Automotive Edition-GM Overlay utilities

ENVIRONMENT

- As specified in Manually configuring your environment for Teamcenter utilities.

- The TC_retry_time preference determines the time interval at which the utility tries to obtain a lock on objects to import, if it is not initially successful. You can set this preference as an environment variable so that the default value can be overridden by scripts during usage loading.

- The TC_max_number_of_retries preference determines how many attempts the utility makes to obtain a lock on objects to import, if it is not initially successful. You can set this preference as an environment variable so that the default value can be overridden by scripts during usage loading.

RESTRICITONS

None.

FILES

As specified in Log files produced by Teamcenter.

EXAMPLES

To import usages, enter the following command on a single line:

```
rdv_import_usage -u=user-name -p=password -g=group -input_file=pdis101.x
```

The utility uses the RDV_IMPORT_USAGE_TM transfer mode to convert the XML file to PLM XML format, via a style sheet.
Chapter 17  Aerospace and Defense utilities
default_adsfoundation_queries

Installs the saved queries in the ADS Foundation template with names and descriptions either in the locale specified for the system or in all supported locales. The following queries are installed by this utility:

- **Find ADSTechDocument**
- **Find ADSDrawing**
- **Find ADSPart**
- **Find ADSDesign**

**Note** This utility runs automatically when the Aerospace and Defense solution is installed or upgraded.

**SYNTAX**

default_adsfoundation_queries [-u=**user-id**] [ -p=**password** ] | -pf=**password-file**] [-g=**group**] -locales=**locale-code** | -locales=ALL | ALL [-h]

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the -pf argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.
-locales
Specifies the locale, using locale codes or ALL, for which translated query names and descriptions are installed. You can specify a single locale, or you can specify multiple locales in a comma-separated list, for example, en_US,de_DE,fr_FR. Using the ALL value installs all locales supported by your Teamcenter system.

For a list of locale codes, see the Localization Guide.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
- To install the ADS Foundation saved queries with names and descriptions in all locales supported for the system, enter the following command on a single line:

  default_adsfoundation_queries -u=infodba -p=password -g=dba -locales=ALL

- To install the ADS Foundation saved queries with names and descriptions in English, German, and Czech, enter the following command on a single line:

  default_adsfoundation_queries -u=infodba -p=password -g=dba -locales=en_US,de_DE/cs_CZ
Installs the ADS Change Management saved queries with names and descriptions in either the locale specified for the system or in all supported locales. The following queries are installed by this utility:

- **Find All Change Notice Revisions**

  *Note* This utility runs automatically when the Aerospace and Defense Change Management solution is installed or upgraded.

**SYNTAX**

```
default_adschangemanagement_queries [-u=user-id [-p=password | -pf=password-file] -g=group] -locales=locale-code | ALL [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  *Note* If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-locales**
  Specifies the locale, using locale codes or **ALL**, for which translated query names and descriptions are installed. You can specify a single locale or you can specify multiple
locales in a comma-separated list, for example en_US,de_DE,fr_FR. Using the ALL value installs all locales supported by your Teamcenter system.

For a list of locale codes, see the Localization Guide.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
- To install the ADS Change Management saved queries with names and descriptions in all locales supported for the system, enter the following command on a single line:

  default_adschangemanagement_queries -u=infodba -p=password -g=dba -locales=ALL

- To install the ADS Change Management saved queries with names and descriptions in English, German, and Czech, enter the following command on a single line:

  default_adschangemanagement_queries -u=infodba -p=password -g=dba -locales=en_US,de_DE,cs_CZ
**update_locationcode_from_owningorg**

Updates the **Original Location Code** of items and **Current Location Code** of item revisions based on the **Organization ID** of the organization associated with the item or item revision.

This utility also creates a relation between groups and company locations based on the defined organization structure.

**SYNTAX**

```
update_locationcode_from_owningorg [-u=user-id { -p=password | -pf=password-file }] [-g=group] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in **Manually configuring your environment for Teamcenter utilities**.
FILES

As specified in *Log files produced by Teamcenter*.

RESTRICTIONS

None.

EXAMPLES

- To update the **Original Location Code** of all items and **Current Location Code** of all item revisions based on the **Organization ID** attribute, and create relations between groups and company locations:

  `update_locationcode_from_owningorg -u=infodbapassword -g=dba`
Chapter

18 Materials Management and Substance Compliance
material_export

Exports the material and associated substances information in MatML format.

SYNTAX

```
material_export
[-u=user-id
[-p=password | -pf=password-file]
[-g=group]
[-f=output-xml-file]
[-item=item-id]
[-rev=item-revision-id]
[-optionset=name]
[-transfermode=name]
[-h]
```

ARGUMENTS

- **u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **u** and **p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the **pf** argument.

- **pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the **p** argument.

- **g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **f**
  Specifies the MatML file that contains the information about the material objects that are exported.
-item
Specifies the item ID. This argument is mutually exclusive with the -item_key argument.

-item_key
Specifies the a string identifier containing attributes that identify the item object to export. This argument is mutually exclusive with the -item argument.

-rev
Specifies the item revision ID of the item that must be exported.

-optionset
Specifies the option set name of the transfer option set that must be used for this export.

-transfermode
Specifies the transfer mode name that is to be used during export.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
material_export -file=steel.xml -item=000016 -rev=A -xsl=tcxml_to_matml.xls
optionset=TIEConfiguredExportDefault
material_import

Imports MatML file containing the materials and substances information into Teamcenter.

**SYNTAX**

```
material_import
[-u=user-id]
[-p=password | -pf=password-file]
[-g=group]
[-file=input-xml-file]
[-dir=input-dir-path]
[-optionset=name]
[-transfermode=name]
[-errorcontinue=yes/no]
[-xls=xls-file]
[-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the `user-ID` value to be the password.

  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

  For more information about managing password files, see *Manage password files*.

  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user’s default group is assumed.
-file
Specifies the MatML file that contains the information about the material objects that must be imported.

-dir
Specifies the directory path of the MatML file.

-optionset
Specifies the name of the transfer option set that must be used for this import.

-transfermode
Specifies the transfer mode name that is to be used during import.

-errorcontinue
Specifies the option to control continuation of import when an error is encountered. The default value is no.

-xls
Specifies the XLS file that needs to be applied on input material file before the import is performed. If not provided, the default XLS file is located at TC_DATA is used.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
```
material_import -dir=d:\matML -xls=mattotcxml.xls material_import
-file=mat1.xml -optionset=MaterialImportDefaultoptionSet
-optionset=MaterialImportDefaultoptionSet

material_import -file=mat1.xml -dir=d:\matML -site=100001
-optionset=MaterialImportDefaultOptionSet
```
Imports the default user templates to work with Microsoft Office components that are required in Substance Compliance.

**SYNTAX**

```plaintext
material_import
[-u=user-id]
[-p=password | -pf=password-file]
[-g=group]
[-f=path of the folder]
[-i=path of the template file]
[-t=type of template being imported]
[-h]
```

**ARGUMENTS**

**-u**

Specifies the user ID.

This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

**-p**

Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the **user-ID** value to be the password.

This argument is mutually exclusive with the **-pf** argument.

**-pf**

Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.

For more information about managing password files, see **Manage password files**.

This argument is mutually exclusive with the **-p** argument.

**-g**

Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

**-f**

Specifies the path of the folder from which templates are imported.

**-i**

Specifies the path of the template file to be imported.
-t
Specifies the type of the template being imported using -I or -f option, for example, ExcelTemplate.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.
subscmpl_msd_import

Imports the material substance declaration data available in the IPC 1752 XML files into Teamcenter.

SYNTAX

subscmpl_msd_import
-\texttt{u=}\texttt{user-ID}
\{-p=\texttt{password} \mid \texttt{-pf=\texttt{password-file}}\}
\{-g=\texttt{group}\}
\{-\texttt{file=}\texttt{input-xml-file} \mid \texttt{-dir=}\texttt{directory_path}\}
\{-\texttt{optionset=}\texttt{TransferOptionSet_name}\}
\{-\texttt{transfermode=}\texttt{TransferMode_name}\}
\{-\texttt{xsl=}\texttt{XML_style_sheet_xsl_file}\}
\{-h\}

ARGUMENTS

\textbf{-u}
Specifies the user ID. The user must have administrative privileges.

If this argument is used without a value, the operating system user name is used.

\[\textbf{Note}\] If your Teamcenter server uses Security Services single sign-on, see \textit{Before you begin} for additional information.

\textbf{-p}
Specifies the user’s password.

If used without a value, the system assumes a null value. If this argument is not used, the system assumes the \textit{user-ID} value to be the password.

This argument is mutually exclusive with the \texttt{-pf} argument.

\textbf{-pf}
Specifications the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the \textit{user-ID} value to be the password.

For more information about managing password files, see \textit{Manage password files}.

This argument is mutually exclusive with the \texttt{-p} argument.

\textbf{-g}
Specifies the group associated with the user.

\textbf{-file}
Specifies the material substance declaration data in XML file to be related to the vendor part.

\[\textbf{Note}\] This argument is mutually exclusive with the \texttt{-dir} argument.

\textbf{-dir}
Specifies the directory containing material substance declaration data in the XML file to be related to the vendor parts. The system searches for the matching XML file name as specified by the \texttt{SUBSCMPL\_msd\_file\_naming\_prefix} preference.
The `unique_file_name.xml` file is the input XML file containing material substance declaration data. The `unique_file_name.zip` file contains supporting documents for the same vendor part.

**Note** This argument is mutually exclusive with the `-file` argument.

**-optionset**
Specifies the name of the transfer option set to be used for the Teamcenter XML import.

**Note** This argument is optional.

By default, `TIEImportOptionSetDefault` is used as the transfer option set.

**-transfermode**
Specifies the name of the transfer mode to be used for the Teamcenter XML import.

**Note** This argument is optional.

By default, `TIEImportDefault` is used as the transfer mode.

**-xsl**
XML style sheet file to be applied to the input material substance declaration XML file before the Teamcenter XML import.

**Note** This argument is optional.

By default, the XML style sheet `msd_to_tcxml.xsl` file from the `TC_DATA` directory is used to convert the input XML file to the Teamcenter XML file format. For import, this file must specify the correct master site ID.

**-h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
To import material substance declaration data, enter one of the following commands on a single line:

```
subscmpl_msd_import
    -u=user
    -p=password
    -g=group
    -file=D:\IPC_Data\IPC_1.xml
subscmpl_msd_import
    -u=user
    -p=password
    -g=group
    -dir=/data/IPC_Data
subscmpl_msd_import
```
-u=user
-p=password
-g=group
-dir=/data/IPC_Data
-xsl=/data/Stylesheet/IPC_new.xsl

subcmp1_msd_import
-u=user
-p=password
-g=group
-dir=/data/IPC_Data
-xsl=/data/Stylesheet/IPC_new.xsl
-optionset=TIEImportOptionSetDefault

subcmp1_msd_import
-u=user
-p=password
-g=group
-dir=/data/IPC_Data
-xsl=/data/Stylesheet/IPC_new.xsl
-optionset=TIEImportOptionSetDefault
-transfermode=TIEImportDefault
subscmpl_validate_compliance_results

Validates the compliance results in Teamcenter based on the expiry dates.

SYNTAX

material_import
[-u=user-id]
[-p=password | -pf=password-file]
[-g=group]
[-locales=language codes]
[-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-locales
Specifies the language codes separated by a comma.

-h
Displays help for this utility.

ENVIRONMENT

As specified in Manually configuring your environment for Teamcenter utilities.
As specified in Log files produced by Teamcenter.

None.

Translations for query name and descriptions will be added for the specified languages. User can specify single or multiple language codes separated with comma (,). Specifying ALL will add translations in all supported languages.

[-locales=language codes/ALL]
Chapter

19 Consumer Packaged Goods utilities
add_specmgr_templates

Installs Specification Manager templates in Teamcenter. These templates are used to view information about a specification and its section in the Specification Manager application in the rich client.

The following templates are installed by this utility:

- **SPECMGR_default_spec_template**
- **SPECMGR_default_object_template**
- **SPECMGR_default_CPSpecSection_object_template**
- **SPECMGR_defaultCPFreeText_object_template**
- **SPECMGR_default_CPRedText_object_template**
- **SPECMGR_default_CPPropertyList_object_template**
- **SPECMGR_default_CPComponentList_object_template**
- **SPECMGR_default_CPBOM_object_template**
- **SPECMGR_default_CPRefSpec_object_template**
- **SPECMGR_default_CPProcLine_object_template**
- **SPECMGR_default_CPRefObject_object_template**
- **SPECMGR_default_CPProcStage_object_template**

**Note** This utility runs automatically when you install or upgrade Specification Manager.

**SYNTAX**

```
add_specmgr_templates [-u=user-id | -p=password | -pf=password-file | -g=group] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

-pf

Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g

Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-h

Displays help for this utility.

ENVIRONMENT

As specified in Manually configuring your environment for Teamcenter utilities.

FILES

As specified in Log files produced by Teamcenter.

RESTRICTIONS

None.

EXAMPLES

• To install Specification Manager templates:

    add_specmgr_templates -u=infodba -p=password -g=dba
Chapter 20  Computer-aided engineering (CAE) utilities
Migrates legacy tool configuration settings to a new configuration managed by the Teamcenter vaulted dataset.

**SYNTAX**

```plaintext
cae_migrate_atl_preferences
[-u=user-id]
[-p=password]
[-pf=password-file]
[-g=group]
[-file=file-name (including file path)]
[-overwrite]
[-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the `user-ID` value to be the password.

  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

  For more information about managing password files, see `Manage password files`.

  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.

- **-file**
  Specifies the path and file name of the tool preferences file containing tool preferences data to be migrated/appended to dataset-managed preferences.
If you do not specify this option, the utility looks for authoring tool launch preferences (used in Teamcenter 2007.1.x) in the database and simulation tool configuration (used in Teamcenter 8.0.x) in the espf_configuration.xml file in the TC_DATA folder and migrates them (if they are available) to a new configuration managed by the Teamcenter vaulted dataset.

-overwrite
Overwrites the existing tool preferences with legacy tool preferences.

If you do not specify this option, the utility appends legacy tool preferences to the existing tool preferences.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
• Migrate the Teamcenter 2007.1.x preferences to the Teamcenter 8.1 configuration file in a dataset.

  This example assumes there is no espf_configuration.xml file in the active TC_DATA folder and no CAESolution dataset with the name indicated by CAE_simulation_tool_config_dsname exists in the database.

  cae_migrate_atl_preferences
  -u=infodba
  -p=*******
  -g=dba

  The system reads the configuration definitions from the CAE_pre_processor_*, CAE_solver_*, and CAE_post_processor_* preferences and creates an appropriate espf_configuration.xml file. The system creates a new CAESolution dataset named according to the value in CAE_simulation_tool_config_dsname, and imports the file as an XML-File reference.

  • Migrate the Teamcenter 8.0.x espf_configuration.xml file to the Teamcenter 8.1 configuration file in a dataset.

  This example assumes a simadmin user is assigned to a Simulation-Administrator role in the Simulation-Administration group. This example assumes that there is an espf_configuration.xml file in the active TC_DATA folder, but no CAESolution dataset with the name indicated by CAE_simulation_tool_config_dsname exists in the database.

  cae_migrate_atl_preferences
  -u=simadmin
Chapter 20  Computer-aided engineering (CAE) utilities

```
-p=*******
-g=Simulation-Administration
```

The system locates the `espf_configuration.xml` file in the active TC_DATA folder. The system creates a new CAESolution dataset named according to the value in `CAE_simulation_tool_config_dsname` and imports the file as an XML-File reference.

• Migrate the specified Teamcenter 8.0.x `espf_configuration.xml` file to the Teamcenter 8.1 configuration file in a dataset.

![Note](image)

This example assumes that there exists a `simadmin` user assigned to a Simulation-Administrator role in the Simulation-Administration group.

```
cae_migrate_atl_preferences
-u=simadmin
-p=*******
-g=Simulation-Administration
-file=D:\MyFiles\espf_configuration.xml
-overwrite
```

The system locates the `espf_configuration.xml` file using the provided path. The system attempts to locate a CAESolution dataset named according to the value in `CAE_simulation_tool_config_dsname`. If an appropriate dataset is found, the system imports the file as an XML file reference, overwriting any existing reference. If an appropriate dataset is not found, the system creates a new CAESolution dataset named according to the value in `CAE_simulation_tool_config_dsname` and imports the provided file as an XML-File reference.
clave_save_result_data

Saves the output of an analysis run (results) to Teamcenter when called by an analysis application.

SYNTAX

case_save_result_data
[-u=user-id
[-p=password
-pf=password-file]
-g=group]
-name=result-name
[-type=type-name]
[-desc=result-description]
[-item=item-id] | [-key=[keyAttr1=keyVal1][,keyAttr2=keyVal2]…[,keyAttrN=keyValN]]
-rev=revision-id
-xml_file=xml-file-name
-result_dir=result-directory
[external=true |false]
[overwrite=true |false]
-h

ARGUMENTS

-u
Specifies the user ID.
This is generally InfoDBA or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-name
Specifies the name of the result object to be created in Teamcenter. This argument is required, and the name must be no longer than 32 characters in length. In addition, there must be no other result inside the results dataset that resides in the specified item revision with the same name.

-type
Specifies the value used for the type attribute of the new result in Teamcenter. This argument is optional, and if supplied it must be no longer than 32 characters long.

-desc
Specifies the value to be used for the description attribute of the new result in Teamcenter. This argument is optional, and if supplied it must be no longer than 240 characters long.

-item
Specifies the item ID of the item which contains the item revision containing the results dataset in which the result is created. This argument is mutually exclusive with the -key argument; one of these two arguments must be specified.

-key
Specifies the key of the item which contains the item revision containing the results dataset in which the result is created. This argument is mutually exclusive with the -item argument; one of these two arguments must be specified. Use the following format:

```
[keyAttr1=keyVal1][,keyAttr2=keyVal2][,keyAttrN=keyValN]
```

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-rev
Specifies the ID of the item revision containing the results dataset in which the result will be created. If a results dataset does not already exist in this item revision one is created to hold the new result. This argument is required.

-xml_file
Specifies the full path to the PLM XML metadata file used to generate the result. This argument is optional.

-result_dir
Specifies a path to a directory that is assumed to contain the data files for the result. All files found in this directory are associated with the result. This argument is optional.

-external
Indicates whether the files associated with the result are stored externally to the Teamcenter volume. Valid values for this argument are true and false and are not case sensitive. This argument is optional; if not provided the default value is false.

-overwrite
Indicates whether a pre-existing result with the same name should be overwritten. Valid values for this argument are true and false and are not case sensitive. This argument is optional. If no value is given, the default value is false. If the value of
this argument is **false** and a result with the input name already exists, the system returns an error.

- **h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

- This utility must be called only from an integrated CAE analysis application.
- The type of the specified item must be the type defined as the CAE default analysis item type.

**EXAMPLES**

- To save a new result named **Result1** into a results dataset under **item 000001**, **revision A**, enter the following command on a single line:

  ```
  cae_save_result_data
  -name=Result1
  -type=Analysis
  -desc=Test first run
  -item=000001
  -rev=A
  -xml_file=c:\temp\test.xml
  -result_dir=c:\temp\result1
  ```

- To overwrite the existing result from the previous example with a new result of the same name, this time with externally stored files, enter the following command on a single line:

  ```
  cae_save_result_data
  -name=Result1
  -type=Analysis
  -desc=Overwrite first run
  -item=000001
  -rev=A
  -xml_file=c:\temp\test2.xml
  -result_dir=c:\temp\result2
  -external=true
  -overwrite=true
  ```
**epm_import_batch_meshing_results**

Imports batch meshing results into the Teamcenter database.

**SYNTAX**

```plaintext
epm_import_batch_meshing_results
 [-u=user-id
 [-p=password
 -pf=password-file}
 -g=group]
 -workdir=working-directory
 [[-itemid=item-id] | [-key=keyAttr1=keyVal1][,keyAttr2=keyVal2]...[,keyAttrN=keyValN]]
 -revid=revision-id
 -dsname=dataset-name
 -nrname=named-reference-name
 -size=mesh-size
 -ext=extension
 [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.
-workdir
Specifies the full operating system path of the working directory into which all batch meshing results for a single job will be written.

After meshing completes, the batch meshing interface examines this directory to determine which mesh results files are imported in to the Teamcenter database. This argument is mandatory.

-itemid
Identifies the item under which the file will be imported.

The utility imports the file indicated by the -file argument value in to the CAEMesh dataset at the location specified by the -itemid, -revid, and -dsname arguments. This argument is mutually exclusive with the -key argument; one of the two arguments must be specified.

-key
Uses the key to identify the item under which the file will be imported.

The utility imports the file indicated by the -file argument value in to the CAEMesh dataset at the location specified by the -key, -revid, and -dsname arguments. This argument is mutually exclusive with the -itemid argument; one of the two arguments must be specified. Use the following format:

[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[keyAttrN=keyValN]

To find the key of an object, use the get_key_string utility.

For more information, see the Business Modeler IDE Guide.

-revid
Identifies the item revision under which the file will be imported.

The utility imports the file indicated by the -file argument value in to the CAEMesh dataset at the location specified by the -itemid, -revid, and -dsname arguments. This argument and value are mandatory.

-dsname
Specifies the name to be applied to the resulting CAEMesh dataset.

The utility imports the file indicated by the -file argument value in to the CAEMesh dataset at the location specified by the -itemid, -revid, and -dsname arguments. This argument and value are mandatory.

-nrname
Specifies the base name used when generating the resulting named reference in the CAEMesh dataset.

This name is used as input to the USER_get_batch_meshing_nr_name() user exit to determine the actual named reference file name to be imported. This argument and value are mandatory.

-size
Specifies the mesh size used when generating the mesh.

The mesh size is used as input to the USER_get_batch_meshing_nr_name() user exit to determine the actual named reference file name. The mesh size is encoded in the named reference file name to distinguish those of different mesh sized in the same dataset. This argument and value are mandatory.
-ext
Specifies the file name extension to apply to the named reference in the **CAEMesh** dataset.

The batch meshing interface uses this file name extension to find the batch meshing results files to import in to the resulting **CAEMesh** dataset in the Teamcenter database. This argument and value are mandatory.

-h
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
This utility is intended to be called only from the batch meshing interface from within Teamcenter.

**EXAMPLES**
To import the **some_mesh.bdf** file in to a **CAEMesh** dataset with the name **Some_part**, under item **000001**, revision **A**, enter the following command on a single line:

```
epm_import_batch_meshing_results
-workdir=c:\temp\batch_meshing_dir
-itemid=000001
-revid=A
-dsname=Some_part
-nrname=some_mesh
-size=10
-ext=dbf
```
epm_notify_batch_meshing_results

Notifies the user of the results of a batch meshing job.

**SYNTAX**

```plaintext
epm_notify_batch_meshing_results
  [-u=user-id]
  [-p=password]
  [-pf=password-file]
  [-g=group]
  [-workdir=working-directory]
  [-logfile=log-file-name]
  [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  
  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the *user-ID* value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-workdir**
  Specifies the full operating system path to the working directory in which all batch meshing results for a single job reside.
  User notification includes a reference to this directory in the event that the user must examine the contents of the directory. This argument and value are mandatory.
Chapter 20  Computer-aided engineering (CAE) utilities

-logfile
Specifies the full operating system path to the log file containing specific information about the batch meshing job for which this notification is generated.

The utility examines the contents of this log file name as input for generating the user notification message. This argument and value are mandatory.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
This utility is intended to be called only from the batch meshing interface from within Teamcenter.

EXAMPLES
To send the results of a batch meshing job to the current user's Teamcenter mailbox (using autologon), enter the following command on a single line:

    epm_notify_batch_meshing_results
    -workdir=c:\temp\batch_meshing_dir
    -logfile=c:\temp\batch_meshing_dir\batch_meshing_log
cae_execute_datamap

Applies data mapping rules to an input structure by providing the root item revision of the input structure and the configuration information of the structure along with the domain for the data mapping rules.

When a snapshot is produced, the **Snapshot** folder, rather than the root item of the resulting structure, is pasted on the invoking user’s **Newstuff** folder.

**SYNTAX**

```plaintext
cae_execute_datamap
[-u=cae_analyst
[-p=password
[-pf=password-file]
-g=CAE_designer]
-inputItemKey=key-to-the-root-item-of-the-input-structure
-revID=revision-ID-of-the-input-item-revision
-snapshotOutput=snapshot-folder
[-h]
```

**ARGUMENTS**

- **-u**
  
  Specifies the user ID.

  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the **user-ID** value to be the password.

  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.

  For more information about managing password files, see **Manage password files**.

  This argument is mutually exclusive with the **-p** argument.

- **-g**
  
  Specifies the group associated with the user.

  If used without a value, the user’s default group is assumed.
-inputItemKey
Specifies the key to the root item of the input structure; for example, 000001.

-revID
Specifies the revision ID of the input item revision.

-snapshot
Specifies the snapshot folder name.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
To execute a data map on a input structure, enter the following command on a single line:

Example 1:

```
cae_execute_datamap
-u=cae_analyst
-p=password
-g=CAE_designer
-inputItemKey=000001 (key-to-the-root-item-of-the-input-structure)
-revID=A (revision-ID-of-the-input-item-revision)
-snapshotOutput=snapshot-folder
```

Example 2:

```
cae_execute_datamap
-u=cae_analyst
-g=CAE_designer
-inputItemKey=000001 (key-to-the-root-item-of-the-input-structure)
-revID=A (revision-ID-of-the-input-item-revision)
```
cae_execute_structuremap

Applies structure map rules to an input structure by providing the root item revision of the input structure and the structure map item revision containing the rule along with the configuration information of the structure.

When a snapshot is produced, the **Snapshot** folder, rather than the root item of the resulting structure, is pasted on the invoking user’s **Newstuff** folder.

### SYNTAX

```
cae_execute_structuremap
[-u=user-id
 -p=password
 -pf=password-file]
 -g=group
 -inputItemkey= key-of-the-root-item
 -revID= revision-ID-of-the-input-item-revision
 -SMItemKey= structure-map-item-key
 -SMRev= structure-map-item-revision-ID
 -snapshotOutput= snapshot-folder
 [-h]
```

### ARGUMENTS

- **-u**
  Specifies the user ID.
  
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  
  If used without a value, the system assumes a null value.
  
  If this argument is not used, the system assumes the **user-ID** value to be the password.
  
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  
  For more information about managing password files, see **Manage password files**.
  
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-**inputItemkey**  
Specifies the key of the root item of the input structure; for example, **000001**.

-**revID**  
Specifies the revision ID of the input item revision.

-**SMItemKey**  
Specifies the structure map item key; for example, **000002**.

-**SMRev**  
Specifies the structure map item revision ID.

-**snapshotOutput**  
Specifies the output snapshot name of the output model item revision.

-**h**  
Displays help for this utility.

---

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
To execute structure map rules on a input structure, enter the following command on a single line:

**Example 1:**

```bash
cae_execute_structuremap  
-u=cae_analyst  
-g=CAE_designer  
-inputItemKey=000001 (key-to-the-root-item-of-the-input-structure)  
-revID=A (revision-ID-of-the-input-item-revision)  
-SMItemKey=000002 (structure-map-item-key)  
-SMRev=B (structure-map-item-revision-ID)  
snapshotOutput=snapshot-folder
```

**Example 2:**

```bash
cae_execute_structuremap  
-u=cae_analyst  
-g=CAE_designer  
-inputItemKey=000001 (key-to-the-root-item-of-the-input-structure)  
-revID=A (revision-ID-of-the-input-item-revision)  
-SMItemKey=000002 (structure-map-item-key)  
-SMRev=B (structure-map-item-revision-ID)
```
Migrates the data mapping definition files from the TC_DATA directory in the existing installation to a dataset attached to an item revision in the database. The data map definition files consist of the data mapping XML file—named according to the CAE_dataMapping_file preference—and an optional NodeXMLConfig.xml configuration file.

This utility checks the value of the CAE_datamap_files_location preference.

- If the preference is set, the utility imports the files located in the TC_DATA directory to a CAEStructureMap dataset attached to the item revision indicated by the preference and creates a dataset, if needed. The files are not removed from the TC_DATA directory.

- If the preference is set, and the indicated item revision already has an attached CAEStructureMap dataset with a valid XML reference, the utility does not do anything, that is, it does not overwrite any existing data map definition files in the database.

- If the preference is not set, the utility creates an ItemRevision type and assigns ownership according to the -ou and -og arguments supplied to the utility, and sets the preference value to the created item revision.

SYNTAX

cae_migrate_datamap_definition

- **u**=user-id
- **p**=password
- **pf**=password-file
- **g**=group
- **ou**=owning-user-id
- **og**=owning-group-name

ARGUMENTS

- **u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the **u** and **p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **p**
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the *user-ID* value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-ou
(Optional) Specifies the owning user ID.
This user owns all created objects.

-og
(Optional) Specifies the group associated with the owning user.

Note If you specify the -ou argument and do not specify the -og argument, the user's default group is used.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
To migrate the data mapping definition files from the operating system to a dataset, enter the following command in a single line:

    cae_migrate_datamap_definition
    -u=infodb
    -p=infodb
    -g=dba
    -ou=cae_admin
    -og=simulation-administrator
cae_validate_structuremap

Validates the StructureMap item revision to ensure that the configured structure map rules are properly validated before they are executed.

**SYNTAX**

`cae_validate_structuremap
[-u=infodba
[-p=infodba]
-pf=password-file]
-g=dba]
-ou=cae_admin
-og=simulation_administrator
-or=simulation_administrator
-SMItemKeyList=item-id=0001;item-id=0002;item-id=0003
-SMRevList=A;A;C
[-h]

**ARGUMENTS**

-**u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  ![Note](image)
  If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-**p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

-**pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the `-p` argument.

-**g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

-**ou**
  (Optional) Specifies the owning user ID.
This user owns all created objects.

-\texttt{-og}
(Optional) Specifies the group associated with the owning user.

\textbf{Note} \hspace{1em} If you specify the \texttt{-ou} argument and do not specify the \texttt{-og} argument, the user's default group is used.

-\texttt{-or}
(Optional) Specifies the role associated with the owning user.

-\texttt{-SMItemKeyList}
Specifies the list of structure map items key. At least one \texttt{SMItemKey} is required, for example, \texttt{-SMItemKey=item-id=value}.

When using multiple item keys, use a semicolon separated string, for example, \texttt{SMItemKeyList=item1key;item2key;item3key}.

-\texttt{-SMRevList}
Specifies the list of structure map item revision IDs for corresponding item keys.

\textbf{Note} \hspace{1em} This list must have the same number of entries as the \texttt{SMItemKeyList} list.

When using multiple item keys, use a semicolon separated string, for example, \texttt{SMRevList=item1-revision-id;item2-revision2-id;item3-revision-id}.

-\texttt{-h}
Displays help for this utility.

\textbf{ENVIRONMENT}
As specified in \textit{Manually configuring your environment for Teamcenter utilities}.

\textbf{FILES}
As specified in \textit{Log files produced by Teamcenter}.

\textbf{RESTRICTIONS}
None.

\textbf{EXAMPLES}
To validate the structure map, enter the following command in a single line:

```bash
cae_validate_structuremap
-u=CAE_analyst
-p=*****
-g=CAE_designer
-ou=cae_admin
-og=simulation_administrator
-or=simulation_administrator
SMItemKeyList=item-id=0001;item-id=0002;item-id=0003
-SMRevList=A;A;C
```
**cae_execute_cae_accountability_check**

Compares the attributes of a product and model structure using the accountability check framework along with data mapping rules. The attributes are compared by applying data mapping rules. The attributes marked as mapped in the NodeXMLConfig.xml file used by data mapping is considered for comparison. Data mapping rules are applied on the input product structure and the data mapped values are compared with the model attribute value. The product and model item keys, and the revision IDs are required along with the data mapping domain as input. You can optionally specify the configuration information for the product and the model. The result of the comparison is created as a named reference containing a dataset (Microsoft Excel file) with the name you specify in the **-comparison_dataset_name** argument. The result is attached to the root of the model structure.

**SYNTAX**

```
cae_execute_cae_accountability_check
[-u=infodba]             # Specifies the user ID.
[{-p=infodba}]           # If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.
{-pf=password-file}      # Specifies the password.
{-g=dba}                # If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.
{-ou=cae_admin}         # Specifies the user ID.
{-og=simulation_administrator}  # If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.
{-or=simulation_administrator}     # Specifies the user ID.
{-product_item_key=key-to-the-root-item-of-the-product-structure}  # Specifies the product item key.
{-product_rev_id=revision-ID-of-the-product-item-revision}      # Specifies the product revision ID.
{-product_rev_rule=revision-rule-of-the-product-structure}     # Specifies the product revision rule.
{-product_snapshot=snapshot-folder-name-for-product-structure}  # Specifies the product snapshot.
{-product_variant_rule=variant-rule-for-the-product-structure} # Specifies the product variant rule.
{-model_item_key=key-to-the-root-item-of-the-model-structure}   # Specifies the model item key.
{-model_rev_id=revision-ID-of-the-model-item-revision}          # Specifies the model revision ID.
{-model_rev_rule=revision-rule-of-the-model-structure}          # Specifies the model revision rule.
{-model_snapshot=snapshot-folder-name-for-the-model-structure} # Specifies the model snapshot.
{-model_variant_rule=variant-rule-of-the-model-structure}      # Specifies the model variant rule.
{-domain=data-mapping-domain-you-want-to-use}                  # Specifies the domain.
{-comparison_dataset_name=dataset-name-to-save-the-comparison-log-if-the-mode-is-compare}  # Specifies the comparison dataset name.
{-param_file=parameter-file-in-text-format-containing-parameters-for-the-utility} # Specifies the parameter file.
[-h]                   # Specifies the help option.
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-ou
(Optional) Specifies the owning user ID.

This user owns all created objects.

-og
(Optional) Specifies the group associated with the owning user.

Note If you specify the -ou argument and do not specify the -og argument, the user's default group is used.

-or
(Optional) Specifies the role associated with the owning user.

-product_item_key
Specifies the key to the root item of the product structure.

-product_rev_id
Specifies the revision ID of the product item revision.

-product_rev_rule
(Optional) Specifies the revision rule of the product structure.

This argument is not considered if you specify the -product_snapshot argument.

-product_snapshot
(Optional) Specifies the snapshot folder name for product structure.

-product_variant_rule
(Optional) Specifies the variant rule for the product structure.

-model_item_key
Specifies the key to the root item of the model structure.

-model_rev_id
Specifies the revision ID of the model item revision.
-model_rev_rule
(Optional) Specifies the revision rule of the model structure.
This argument is not considered if you specify the -model_snapshot argument.

-model_snapshot
(Optional) Specifies the snapshot folder name for the model structure.

-model_variant_rule
(Optional) Specifies the variant rule of the model structure.

-domain
Specifies the data mapping domain you want to use.

-comparison_dataset_name
Specifies the dataset name to save the comparison log if the mode is compare.
If the dataset name already exists in the model revision, the dataset content is replaced.

-param_file
A parameter file in text format containing parameters for the utility.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLE 1
Using item key and rev ID, enter the following command in a single line:

```
cae_execute_cae_accountability_check
-u=adminjones
-p=adminjones
-g=admin
-product_item_key=item_id=0001
-product_rev_id=A
-product_rev_rule=myRevRule
-product_variant_rule=myVariantRule
-model_item_key=item_id=0002
-model_rev_id=A
-model_rev_rule=myRevRule
-model_variant_rule=myVariantRule
-domain=CAE
```

EXAMPLE 2
Using product and model snapshot, enter the following command in a single line:

```
cae_execute_cae_accountability_check
-u=adminjones
-p=adminjones
-g=admin
-product_snapshot=prodSnapshot
-product_variant_rule=myVariantRule
-model_snapshot=ModelSnapshot
-model_variant_rule=myVariantRule
-domain=CAE
```
EXAMPLE 3

Using a parameter file, enter the following command in a single line:

```bash
cae_execute_cae_accountability_check
-u=adminjones
-p=adminjones
-g=admin
-param_file=C:\temp\myparamfile.txt
```

Parameter file contents:

```plaintext
product_item_key=item_id=0001
-product_rev_id=A
-product_rev_rule=myRevRule
-product_variant_rule=myVariantRule
-model_item_key=item_id=0002
-model_rev_id=A
-model_rev_rule=myRevRule
-model_variant_rule=myVariantRule
-domain=CAE
-comparison_dataset_name=ComparisonReport
```
Chapter

21 Teamcenter mechatronics process management utilities
install_algebraicformulas

Provides capabilities to create algebraic formula definitions (identical, linear, quadratic, and rational) in Teamcenter.

If algebraic formulas provided in Teamcenter are deleted, you can run this utility to reinstall them.

**SYNTAX**

```
install_algebraicformulas [-u=user-id [-p=password | -pf=password-file] -g=group] [-h]
```

**ARGUMENTS**

- **-u**  
  Specifies the user ID.  
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  
  If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**  
  Specifies the password.  
  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the *user-ID* value to be the password.

  This argument is mutually exclusive with the **-pf** argument.

- **-pf**  
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.

  For more information about managing password files, see *Manage password files*.

  This argument is mutually exclusive with the **-p** argument.

- **-g**  
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.

- **-h**  
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*. 

---

**Variables**

- *user-ID*  
  The user ID.

- *password*  
  The password.

- *password-file*  
  The password file.

- *group*  
  The group associated with the user.
RESTRICTIONS

None.

EXAMPLES

- To *create out of the box algebraic formula definitions in Teamcenter*, enter the following command on a single line:

  `install_algebraicformulas -u=infodba -p=password -g=dba`
install_kbl

Extends the schema to provide Teamcenter support of wire harnesses meeting the KBL standard.

**Note**  This utility installs all KBL types. If any of these types already exist in the system, it is skipped and a warning is displayed in the console. The message also gets printed in the system log file.

**SYNTAX**

```
install_kbl [-u=infodba -p=infodba | -pf=password-file] -g=dba] -h
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in **Manually configuring your environment for Teamcenter utilities**.

**FILES**

As specified in **Log files produced by Teamcenter**.

**RESTRICTIONS**

None.
update_gde_types

Allows site administrators to update the parent types of existing GDE types based on information provided in an input file.

SYNTAX

update_gde_types [-u=user-id [-p=password | -pf=password-file] -g=group] [-s=parent-type -t=type1,type2] [-f=input-file -h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-f
Specifies the input file containing one or more lines with parent type and child type GDE information in the following format:

parent_type child_type_name1,child_type_name2,child_type_name3,...

If the input file is specified, it takes precedence over information provided by the -s and -t arguments.

-s
Specifies the parent type to be set for the GDE types.
-t
Specifies the GDE types, separated by commas, of the parent type to be updated.
-h
Displays help for this utility.

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.

EXAMPLES
- Enter the following command on a single line to update specific children of a GDE type:
  
  ```
  update_gde_types -u=user-name -p=password -g=dba -s=InterfaceDefinition -t=port1,port2
  ```

- Enter the following command on a single line to update GDE types based on an input file:
  
  ```
  update_gde_types -u=user-name -p=password -g=dba -f=test.txt
  ```

  The following is an example of format of the input file:

  ```
  #Parent child1,child2
  InterfaceDefinition port1,port2,
  ProcessVariable pv1,pv2,
  ```
migrate_eda_data

Allows you to bulk migrate pre-Teamcenter 8.1 EDA data to the current data model.

Run this utility to manually perform a bulk EDA migration. This utility runs automatically when you upgrade from a pre-Teamcenter 8.1 database to a more recent data model and select Teamcenter EDA Server Support as part of the upgrade.

**Note** The migration process assumes the data does not contain variants.

**SYNTAX**

```
migrate_eda_data [-u=user-id {-p=password | -pf=password-file} -g=group] [-dryrun] [-ccaSelectFile=path-name] [-migrationList=path-name] [-logFile=path-name] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-dryrun**
  Performs a dry run of the migration, making no changes to the database. Use this argument to identify problematic data prior to migration.
-**ccaSelectFile**

Specifies the input file containing the list of items to select when a schematic is identified as being related to multiple CCA item objects. The utility uses this information to migrate EDA schematic data to one of x number of CCA item objects related to it.

The file format is:

```
Schematic-Item-ID, CCA-Item-ID
Schematic-Item-ID2, CCA-Item-ID2
...
```

**Note**  Inconsistencies in the file are logged as errors. Erroneous entries are skipped during migration.

-**migrationList**

Specifies the input file containing the list of items to migrate. If this argument is not provided, all **EDA Schem** item objects are migrated.

The file format is:

```
Schematic-Item-ID
Schematic-Item-ID2
Schematic-Item-ID3
...
```

**Note**  Inconsistencies in the file are logged as errors. Possible errors include, but are not limited to: item IDs of non-**EDA Schem** item objects, duplicate entries, and invalid item IDs. Erroneous entries are skipped during migration.

-**logFile**

Specifies the location of the migration log file. If this argument is not specified, the default location is `TEMP\program-name_date-time.log`.

-**h**

Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

The log file is generated in the user's `TEMP` directory. The file name format is `migrate_eda_data-date-time.log`.

**RESTRICTIONS**

None.

**EXAMPLES**

To manually perform a bulk migrate of EDA data from a pre-Teamcenter 8.1 database to a more recent data model:

```
migrate_eda_data -u=infodba -p=infodba -g=dba
```

To perform a dry run of the EDA data bulk migration:

```
migrate_eda_data -u=infodba -p=infodba -g=dba -dryrun
```

To perform a dry run of the EDA data bulk migration using the **selectionFile.txt** CCA selection file:
migrate_eda_data -dryrun -u=infodba -p=infodba -g=dba
-ccaSelectFile=D:\migration\selectionFile.txt

To perform a dry run of the EDA data bulk migration using the selectionFile.txt CCA selection file and the edaSchemList.txt migration list:

migrate_eda_data -u=infodba -p=infodba -g=dba -dryrun
-ccaSelectFile=D:\migration\selectionFile.txt
-migrationList=D:\migration\edaSchemList.txt

To bulk migrate the EDA data specified in the selectionFile.txt migration list:

migrate_eda_data -u=infodba -p=infodba -g=dba
-ccaSelectFile=D:\migration\selectionFile.txt
-migrationList=D:\migration\edaSchemList.txt

To bulk migrate the EDA data specified in the selectionFile.txt CCA selection file:

migrate_eda_data -u=infodba -p=infodba -g=dba
-ccaSelectFile=D:\migration\selectionFile.txt

To bulk migrate the EDA data specified in the selectionFile.txt CCA selection file, with the migration information sent to the migration_output.log log file:

migrate_eda_data -u=infodba -p=infodba -g=dba
-ccaSelectFile=D:\migration\selectionFile.txt
-logFile=D:\migration\migration_output.log
Chapter 22 Volume and database management utilities
collect_garbage

Collects unreferenced workspace objects and places them in a WASTE BASKET folder in the Home folder of the infodba user. Datasets, envelopes, folders, items, and forms objects can be collected. Released objects are not collected. A special case operation is the orphan option that collects item revisions that do not have valid parent items. These items revisions may be referenced in other folders, in which case you are warned while collection is taking place. Orphan operations should not be combined with other operations.

The collect_garbage utility should be run in two phases. The first phase is run without the -delete option, which allows objects to be collected in the WASTE BASKET folder. This allows you to examine the contents of the waste basket. Once you are satisfied with the contents, the collect_garbage can be rerun with the -delete option to empty the WASTE BASKET folder.

When working with large databases, use the -query argument to create a report of all unreferenced objects. You can restrict the report to specific object types with various arguments. When working with a large report, you can split the report into separate files that can be executed in batches. Use the -rf and -if arguments to define the file to which you want to write the report. The batch jobs can then be executed simultaneously on multiple workstations. Use the -delete argument to delete the unreferenced objects from the specified folder.

SYNTAX

collect_garbage [-u=user-id {-p=password | -pf=password-file} -g=group]
-rf=report-file-name -if=input-file-name
[-dataset] [-item] [-occurrence] [-absoccdatqualifier]
[-form] [-folder] [-envelope] [-all]
[-dataset] [-child_references] [-ignore_relation]
[-gsidentity] [-plmappuid=ReportOnly | ReportAndDelete]
[-start=number] [-end=number] [-h]

Caution You must run Teamcenter Workspace with system administration privileges to access the WASTE BASKET folder.

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

-dataset
Specifies that datasets be collected or deleted.

-item
Specifies that items be collected or deleted.

Note This argument also collects all item revisions associated with the item.

-occurrence
Specifies that occurrences (appearance path nodes, absolute occurrences, and occurrence threads) are collected.

-absoccdatalocator
Collects or deletes locally owned unreferenced, and locally owned referenced, absolute occurrence data qualifier (AbsOccDataQualifier) objects associated with replica BOM view revisions (BVRs).

-form
Specifies that forms be collected or deleted.

-folder
Specifies that object folders be collected or deleted.

-envelope
Specifies that envelopes be collected or deleted.

-all
Collects or deletes datasets, items, forms, object folders, and envelopes. This argument does not include orphans.
Siemens PLM Software does not recommend using this argument when processing a large database.

-orphan
Collects or deletes all item revisions that do not have a valid parent item. These item revisions may be referenced in other folders, in which case you are warned while collection is taking place. Use the -orphan argument alone to collect orphan item revisions in the WASTE BASKET folder. Use the -delete argument in conjunction
with the **-orphan** argument to delete orphans from the **WASTE BASKET** folder. Orphan operations should not be combined with other operations. See restriction #2.

**Note** Because orphan operations collect or delete item revisions that do not have valid parent items, it is normal for the **collect_garbage** application log file to include some errors. In most cases, you can disregard them.

**-delete**
Deletes all objects of a specified type. One or more of the **-dataset**, **-item**, **-form**, **-folder**, or **-envelope** arguments or the **-all** or **-orphan** arguments must be supplied. You can also include the **-gsidentity** option with the **-delete** argument.

**-query**
Queries the database for the instances of the specified object type when used in combination with a defined object type.

**Note** This argument works only in combination with an object type argument (**-item, -dataset, -form, -envelope, -folder, -all**) and the **-rf** argument.

**-report**
Creates a report of the objects moved to the **WASTE BASKET** folder of the **infodba** user.

**Note** The **-report** argument generates output in a different format than the **-orphan** operations because orphan objects are not valid workspace objects.

**-gsidentity**
Locates and removes all invalid **GSIIdentity** records for objects that do not exist.

**-plmappuid**
Deletes unreferenced entries from the **plmappuid** table.

When objects are imported into Teamcenter using PLM XML, an **Application Ref** tag can be used to define individual IDs for the imported objects. The IDs are stored in the **plmappuid** table. If these objects are later deleted in Teamcenter, the entries are not deleted from the table. Over time the table size increases, decreasing performance.

Use the **ReportOnly** value to generate a count of all the unreferenced entries in the **plmappuid** table. Use the **ReportAndDelete** value to generate a count of all the unreferenced entries in the table and delete them.

**-rf= report-file-name**
Creates a report file listing instances of a specified type. This argument may be used in combination with object type arguments (**-item, -dataset, -form, -envelope, -folder, -orphan**) and the **-query** argument.

When used in combination with object type arguments, the **-rf** argument retrieves a list of all instances of a specified class and writes the list to a specified file.

**Note** This argument works only in combination with an object type argument (**-item, -dataset, -form, -envelope, -folder, -all**) and the **-if** argument.

A file name is required when using this argument. If a file name is not provided, the list is written to a default file named **argument-name_report.txt**, where argument
name is equal to **item, dataset, form, folder, envelope**, or **orphan**. If the default file already exists in the directory where this utility is executed, instances are overwritten to the default file.

When the report is large, Siemens PLM Software recommends that it be split into multiple reports. The suggested naming convention is `argument-name_report_aa.txt`, `argument-name_report_ab.txt`, and so on.

**-if= input-file-name**

Uses the report file name as input to identify the unreferenced objects of a given object type. Unreferenced objects are placed in a specified subfolder within the **Waste Basket** folder.

**Note** This argument works only in combination with an object type argument (**-item, -dataset, -form, -envelope, -folder, -all**) and the **-if** argument. If no value is specified for this argument, the utility exits with a message.

**-start**

Specifies the starting number of objects to process. The default value is 1. Use this option in conjunction with the **-end** option.

The **-start** and **-end** arguments are recommended when the utility runs out of memory when loading too many objects of the given class for processing.

**-end**

Specifies the ending number of objects to process. Use this option in conjunction with the **-start** option.

**-dataset**

Specifies that datasets qualify as garbage for collection.

**-child_references**

Specifies that datasets qualify as garbage if they are unreferenced in the system but have secondary objects. Use with the **-dataset** option.

**-ignore_relation**

Specifies that datasets are excluded from garbage collection if they have at least one secondary object attached with any of the relations in the list. The valid value for this argument is a comma-separated list containing internal relation names. Use with the **-dataset** option.

**-h**

Displays help for this utility.

---

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

1. The **collect garbage** utility must be run from the **infodba** user account. This automatically enables the bypass feature and collects and deletes all garbage objects regardless of owning user and group.

2. Do not use the **-orphan** argument with an object type argument **-dataset**, **-item, -form, -folder, -envelope** or **-all**.
The following examples illustrate how to use the -query argument with this utility:

- The following example displays a message and exits the program because no file name was provided for the -rf argument:
  ```
  collect_garbage -u=infodba -p=infodba -g=dba -item -rf -query
  ```
- The following example collects a list of unreferenced objects of the type item and writes the report to the list_items.txt file:
  ```
  collect_garbage -u=infodba -p=infodba -g=dba -item -rf=list_items.txt -query
  ```
- The following example collects a list of unreferenced objects of type item and writes the report to the item_report.txt file:
  ```
  collect_garbage -u=infodba -p=infodba -g=dba -item -query
  ```
- To collect unreferenced folders, enter the following command on a single line:
  ```
  collect_garbage -folder
  ```
- To collect unreferenced folders and items, enter the following command on a single line:
  ```
  collect_garbage -folder -item
  ```
- To collect unreferenced folders and items and get a report to stdout, enter the following command on a single line:
  ```
  collect_garbage -folder -item -report
  ```
- To collect all unreferenced objects except orphans, enter the following command on a single line:
  ```
  collect_garbage -all
  ```
- To delete folders collected in the WASTE BASKET folder, enter the following command on a single line:
  ```
  collect_garbage -folder -delete
  ```
- To delete all objects collected in the WASTE BASKET folder except orphans, enter the following command on a single line:
  ```
  collect_garbage -all -delete
  ```
- To collect all item revisions with no parent item, enter the following command on a single line:
  ```
  collect_garbage -orphan
  ```
- To delete orphan item revisions in the WASTE BASKET, enter the following command on a single line:
  ```
  collect_garbage -orphan -delete
  ```
- To collect unreferenced items into the item_rep file, enter the following command on a single line:
  ```
  collect_garbage -item -query -rf=item_rep
  ```
• To process these items and insert into folder, enter the following command on a single line:
  ```
  collect_garbage -item -report -if=item_rep
  ```

• To delete items in the SUB WASTE BASKET folder, enter the following command on a single line:
  ```
  collect_garbage -item -delete -sub_folder=WBITEM_item_rep
  ```

• To collect unreferenced forms when there are too many forms in the database to load in memory, enter the following command on a single line:
  ```
  collect_garbage -form -end=1000
  collect_garbage -form -delete
  collect_garbage -form -end=1000
  collect_garbage -form -delete
  ```

Or
  ```
  collect_garbage -form -start=1 -end=1000
  collect_garbage -form -start=1001 -end=2000
  collect_garbage -form -delete
  ```

• To delete unreferenced occurrence threads, appearance path nodes, and absolute occurrences, enter the following command on a single line:
  ```
  collect_garbage -occurrence -delete
  ```

• To collect all locally owned referenced, and locally owned unreferenced AabsOccDataQualifier objects and place them in the respective BadAbsOccFolder and BadAbsOccFolder_unrefdirectory folders:
  ```
  collect_garbage -absoccdataqualifier -query -sub_folder=BadAbsOccFolder
  ```

• To delete all locally owned unreferenced AbsOccDataQualifier objects:
  ```
  collect_garbage -absoccdataqualifier -delete
  ```

• To delete all locally owned referenced AbsOccDataQualifier objects:
  ```
  collect_garbage -absoccdataqualifier -delete -sub_folder=BadAbsOccFolder
  ```

When working with a large database, or with a large number of instances in a report file, Siemens PLM Software recommends that you split the query report into multiple files. The following examples illustrate how to split a report into specified files:

• The following example splits 50,000 instances reported from a query into files of 5,000 lines each:
  ```
  split -l 5000 item_rep.txt ITEM_rep_
  ```

• The following example processes each instance from the report and identifies unreferenced objects. These objects are placed in a subfolder of the WASTE BASKET folder:
  ```
  collect_garbage -u=infodba -p=infodba -g=dba -item -if=list_items.txt
  ```

• The following example processes each instance from the report and identifies unreferenced objects. These objects are placed in a subfolder of the WASTE BASKET folder. It also displays the object information, such as object name, ID, object type and owner's name.


The following example retrieves all unreferenced objects of type item and places them in the WASTE BASKET folder:

```
collect_garbage -u=infodba -p=infodba -g=dba -item
```

The following example retrieves all unreferenced objects of type item and places them in the WASTE BASKET folder. It also displays object information, such as object name, ID, object type, and owner's name.

```
collect_garbage -u=infodba -p=infodba -g=dba -item -report
```

The following examples illustrate how to use the -delete argument to delete unreferenced objects:

- The following example deletes all objects in the WBITEM_item_rep.txt subfolder within the WASTE BASKET folder.
  
  ```
collect_garbage -item -delete -sub_folder=WBITEM_item_rep.txt
  ```

- The following example deletes all unreferenced instances of type item in the WASTE BASKET folder, as well as all instances from any subfolders with names beginning with WBITEM_:

  ```
collect_garbage -u=infodba -p=infodba -g=dba -item -delete
  ```

- The following example displays a message and exits the program because no subfolder value is specified:

  ```
collect_garbage -u=infodba -p=infodba -g=dba -item -sub_folder=
  ```

- The following example deletes all objects of type folder, but does not delete the contents of the folder object. (The same concept is true for other object types, such as item, dataset, form, and envelope.)

  ```
collect_garbage -u=infodba -p=infodba -g=dba -folder -delete
  ```

- The following example deletes all GSIdentity records from the database:

  ```
collect_garbage -u=infodba -p=infodba -g=dba -gsidentity
  -delete -rf=report-file-name
  ```

The following examples illustrate how to use the -rf argument:

- The following example displays a message and exits the program because no file name is provided for the -rf argument:

  ```
collect_garbage -u=infodba -p=infodba -g=dba -item -rf -query
  ```

- The following example collects a list of unreleased objects of type item and writes them to the list_items.txt file:

  ```
collect_garbage -u=infodba -p=infodba -g=dba -item -rf=list_items.txt
  -query
  ```

- The following example collects a list of unreleased objects of type item and writes them to the item_report.txt file:

  ```
collect_garbage -u=infodba -p=infodba -g=dba -item -query
  ```
- The following example generates a list of objects for the following types: item, dataset, form, envelope, and folder. The list is placed in the following files, respectively: item_report.txt, dataset_report.txt, form_report.txt, envelope_report.txt, and folder_report.txt.

```
collect_garbage -all -query
```

The following examples illustrate how to use the -if argument:

- The following example displays a message and exits the program because no value was provided for the -if argument:

```
collect_garbage -item -if=
```

- The following example checks each entry in the item_report_aa file. A folder named WBITEM_item_report_aa is created within the WASTE BASKET folder and all unreferenced objects are placed within this folder.

```
collect_garbage -item -if=item_report_aa
```

- The following example checks each entry in the given list and identifies unreferenced objects. A subfolder is created within the WASTE BASKET folder and all unreferenced objects are placed within this subfolder. It also displays object information, such as object name, ID, object type and owner’s name.

```
collect_garbage -u=infodba -p=infodba -g=dba -item -if=list_items.txt -report
```

The following examples illustrate how to use the -sub_folder argument:

- The following example deletes the objects of type dataset within the WBDSET_dataset_report1 folder within the WASTE BASKET folder.

```
collect_garbage -dataset -sub_folder=WBDSET_dataset_report1 -delete
```

- The following example deletes all instances of type dataset within the WASTE BASKET folder and all instances in the subfolder named WBDSET_file-name:

```
collect_garbage -dataset -delete
```

This section illustrates how to use the -query argument. The following example compiles a list of objects of type item that are not released and writes the list to the list_items.txt file:

```
collect_garbage -u=infodba -p=infodba -g=dba -item -rf=list_items.txt -query
```

The following example shows how to use the -dataset, -child_references, and -ignore_relation arguments. In the example, all unreferenced datasets that have secondary objects are collected as garbage, except those that have any of the secondary object attached with the IMAN_Rendering or IMAN_specification relationship.

```
collect_garbage -u=infodba -p=<password> -g=dba -dataset -query -rf=report.txt -child_references -ignore_relation=IMAN_Rendering,IMAN_specification
```

**IMPORTANT NOTES**

- The -report option for orphan operations outputs in a different format than for other object types, because orphans are not valid workspace objects.

- The -item option collects the associated item revisions along with the item.
• Errors are reported in the **logfile** when running in orphan collection mode. The error reported indicates that an error attempting to load an indirected object. These errors can be disregarded.
dataset_cleanup

Repairs corrupted datasets and removes orphaned revision anchors.

**Caution** Siemens PLM Software recommends that you run this utility only when there is no other activity on the database.

**PROBLEM IDENTIFIERS**

A dataset is identified as corrupted if any of the following problems are found:

- Dataset has no reference to an **ImanFile** object.
- Dataset has reference to an **ImanFile** object, but the corresponding operating system file does not exist and the dataset is not archived.
- Dataset is an orphan (that is, the dataset refers to the anchor but the anchor does not go to dataset).
- Anchor refers to datasets that do not exist.
- Anchor size = 0.

**OBJECT CLEANUP RULES**

A dataset object is reattached to revision anchor if it is an orphan but is referenced by some other objects, or deleted if it meets the following criteria:

- Dataset is an orphan and is not referenced.
- Dataset is not archived and the associated operating system file does not exist.

**ANCHOR CLEANUP RULES**

The **dataset_cleanup** utility repairs dataset revision anchors as follows:

- If the anchor refers to nonexistent datasets, the references are removed from the anchor.
- If the anchor size = 0, the anchor is deleted.

**SYNTAX**

```
```

**ARGUMENTS**

- `-u` Specifies the user ID.

This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-rf
Creates a report file listing the corrupted datasets.

-if
Uses the report file as input to purge corrupted datasets or repair revision anchors.

-of
Cleans up and logs the results to a log file. This argument must be supplied if the -if argument is used but is optional with the -rf argument.

-a
Specifies that corrupt anchors (those that are orphaned and are not referenced by a dataset) be deleted and a message be provided.

-b
Specifies the first revision anchor of a contiguous series to be repaired. The default value is 1.

-e
Specifies the last revision anchor of a contiguous series to be repaired. The default value is last.

A revision anchor is an object that keeps track of a set of revisions of some object. One such class of objects is datasets.
-**start_date**
Specifies the starting date to search for datasets that have been modified from this date. Use this argument with the -**end_date** argument.

The format of the date is “DD-MMM-YYYY HH:MM:SS” and must be inside the double quotes because of the space between the year and the hour. This argument is used only with the -**rf** argument.

-**end_date**
Specifies the ending date to search for datasets that have been modified until this date. This argument is optional and is used only with the -**start_date** argument. If this argument is not specified, the end date is the current date.

The format of the date is “DD-MMM-YYYY HH:MM:SS” and must be inside the double quotes because of the space between the year and the hour. This argument is used only with the -**rf** argument.

-**h**
Displays help for this utility.

**Environment**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**Files**
As specified in *Log files produced by Teamcenter*.

**Restrictions**
None.

**Examples**
- To generate a report file called *myreportfile* listing corrupted dataset objects, enter the following command on a single line:

```
$TC_ROOT/bin/dataset_cleanup -u=infodba -p=password -g=dba -rf=myreportfile
```

- To run the *dataset_cleanup* utility using the *myreportfile* file as input, enter the following command on a single line:

```
$TC_ROOT/bin/dataset_cleanup -u=infodba -p=password -g=dba -if=myreportfile -of=mylogfile
```

- On a database with 1000 dataset revision anchors, you could run the *dataset_cleanup* utility as follows:

```
$TC_BIN/dataset_cleanup -u=infodba -p=infodba -g=dba -b=1 -e=500 -rf=dataset_cleanup_500.report
$TC_BIN/dataset_cleanup -u=infodba -p=infodba -g=dba -b=501 -e=1000 -rf=dataset_cleanup_1000.report
```

- To purge all datasets with modification dates between Oct-01-2007 and Oct-10-2007:

```
dataset_cleanup -u=infodba -p=password -g=dba -start_date="01-OCT-2007 00:00:00" -end_date="10-Oct-2007 00:00:00" -rf=ttt.txt
```

- To purge all datasets with modification dates from Oct-01-2007 to the current date:

```
dataset_cleanup -u=infodba -p=password -g=dba -start_date="01-OCT-2007 00:00:00" -rf=ttt.txt
```
Perform the following steps to clean up corrupted datasets:

1. Use the `dataset_clean Up` utility to generate a report file called `myreportfile` listing the corrupted dataset objects in the database by entering the following command on a single line:

   
   ```
   $TC_ROOT/bin/dataset_clean Up -u=infodba -p=password -g=dba 
   -rf=myreportfile
   ```

   The report file contains a list of corrupted datasets sorted by `Object_UID`. The report also contains the problem identifier, dataset name, and ownership.

   If the `-a` argument is specified on the command line, the utility deletes the corrupt anchors and displays a message to the user. If the `-a` argument is not supplied, a message is displayed indicating that the anchor was skipped and the `-a` option should be used.

   You must review the report file and decide which datasets, if any, should not be purged from the database.

2. Use a text editor to remove any references to dataset objects that should not be purged from the database from the report file.

3. Run the `dataset_clean Up` utility using the `myreportfile` file as input to purge corrupted dataset objects from the database or fix anchors and log the results to the `mylogfile` file by entering the following command on a single line:

   
   ```
   $TC_ROOT/bin/dataset_clean Up -u=infodba -p=password -g=dba 
   -if=myreportfile -of=mylogfile
   ```

   The utility attempts to fix the revision anchor, attach the dataset to another revision anchor, or purge the datasets from the database.

   A final output report is generated showing the results for each dataset. The report displays the following message if the operation is successful:

   ```
   problem deleted
   ```

   If the operation is unsuccessful, the following message is displayed:

   ```
   could not delete error stack number
   ```

4. Display information about the dataset cleanup process by entering the following command:

   ```
   ps -ef | grep data
   ```

5. Kill the dataset cleanup process by entering the following command:

   ```
   kill -9 PID
   ```

   **PID** is the operating system process ID returned in step 4.
dele te_item_data

Delete s unused item revisions from the database. The item revisions to be removed are contained in an input file created by the user.

SYNTAX


ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user’s default group is assumed.

-inputFile
Specifies the absolute path of the input file. The input file has the following format (the forward slash, /, is the delimiter):


item id/Item Revision1
item id/Item Revision2
item id/Item Revision3

-inputKeyFile
Specifies the absolute path of the input file. The input file has the following format:

[keyAttr1=keyVal1] [,keyAttr2=keyVal2]...[,keyAttrN=keyValN],
**-configFile**
Specifies the absolute path of the configuration file. The configuration file has the following field names and format:

- **EXCLUDE** = Relationship@C=Class; Relationship@T=Type; ...;
- **INCLUDE** = Relationship@T=Type; Relationship@C=Class; ...;

The **EXCLUDE** and **INCLUDE** expressions contain three values as shown in the following examples:

```
Relationship@C=Class
Relationship@T=Type
```

- The first value of the expression contains the relation value followed by the @ separator.
- The second value of the expression contains the type name (T) or the class name (C) followed by the = separator.
- The third value of the expression contains the value of the type or class followed by the ; delimiter.

**Note**

- If there is only one relation specified in the expression, it must be terminated with the ; delimiter. For example:
  ```
  IMAN_reference;
  ```
  If there is more than one expression, the expressions must be separated by the ; separator. For example:
  ```
  IMAN_specification@T=MSWord;IMAN_reference@C=PSBOMViewRevision;
  ```

- To exclude the based-on item revisions to be deleted, add the **IMAN_based_on@C=ItemRevision;** expression to the **EXCLUDE** section.

  For example, assume item revision B was revised from A. When item revision B is deleted, revision A will also be deleted unless the **IMAN_based_on@C=ItemRevision;** expression is in the **EXCLUDE** section.

This argument is required.

**-outputDir**
Specifies the path where report and log files are to be written.

The default value is the current directory.

**-mode**
Specifies one of the following the modes:

- **report**
  Generates a summary report containing the following information:
  - Target item revision ID
Reference status
Usage status
Site ownership
Exported replica status
Deletion status

**delete**

Deletes the item revision and its associated objects except those specifically excluded by entries in the configuration file. If the item revision is the only revision of an item, the item is also deleted. If the object is a dataset, all versions of the target dataset are deleted as well as all forms and named references associated with the dataset.

This argument is required.

**-delimiter**

Specifies the delimiter character separator between the item ID and the item revision ID. The default is the forward slash (/).

**-h**

Displays help for this utility.

**RESTRICTIONS**

None.

**EXAMPLES**

- The following is an example of an input file:

```
ABC000075/A
ABC000074/A
ABC000092/A
ABN000002/A
ABN000011/A
ABN000058/A
```
• The following is an example of a configuration file:

```
EXCLUDE = IMAN_specification@T=UGMASTER;
INCLUDE = IMAN_specification@T=MSWord;IMAN_reference@C=PSBOMViewRevision;
```

If there are no configuration entries in the configuration file, the **EXCLUDE** and **INCLUDE** values must be assigned with the ; delimiter as shown below:

```
EXCLUDE=;
INCLUDE=;
```

Any statements not conforming to the format above are not processed for evaluation. This example indicates that the attached objects are not processed for evaluation and but they are only dereferenced from their parent item revision.

• The following is an example of the **delete_item_data** command line entry:

```
delete_item_data -u=infodba -p=infoda -g=dba
   -inputFile=c:\temp\input.txt
   -configFile=c:\temp\config.txt -mode=report
```

• The following is an example of using the **delimiter=@** argument:

```
000001A
000002B
```
**hsm_capacity_alert**

Evaluates if the Teamcenter volume tiers filled capacity exceeds the specified alert capacity levels. When the filled capacity exceeds the alert capacity level, an e-mail is sent to the system administrator. The capacity levels are measured in percentage of total capacity.

Sites can schedule this utility to execute overnight using a UNIX cron job or the Microsoft Windows at command. This utility can require considerable time to evaluate the capacity levels on different tiers.

**SYNTAX**

```
hsm_capacity_alert [-u=user-id [-p=password | -pf=password-file] -g=group] -alertcapacity=percentage -tier=tier-level [-v] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  
  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-alertcapacity**
  Specifies alert capacity as a percentage of total capacity. You can include the percent symbol (%) in this argument.

- **-tier**
  Specifies volume tier. Valid values are 1, primary, and 2 secondary.
Chapter 22  Volume and database management utilities

-\texttt{v}
Verbose mode. Provides information about results and progress.

-\texttt{h}
Displays help for this utility.

\textbf{ENVIRONMENT}

- The generic command window set with all Teamcenter-related environments.
- As specified in \textit{Manually configuring your environment for Teamcenter utilities}.

\textbf{FILES}

As specified in \textit{Log files produced by Teamcenter}.

\textbf{RESTRICTIONS}

This utility requires that the \texttt{HSM\_primary\_tier\_hosts} and \texttt{HSM\_secondary\_tier\_capacity} preferences contain estimated total capacity values. These preferences are set using \texttt{preferences\_manager} utility.

\textbf{RETURN VALUES}

\begin{tabular}{l|l}
Return value & 0 \\
\hline
upon success & \\
\hline
Return value & 1 \\
\hline
upon failure & \\
\end{tabular}

\textbf{EXAMPLES}

To determine if the primary tier capacity exceeds 80\% of total capacity, enter the following command:

```
  hsm_capacity_alert -u=infodba -p=infodba -g=dba -tier=1 -alertcapacity=80%
```

When the filled capacity exceeds 80 percent of total capacity level, an e-mail is sent to the system administrator.
**hsm_report**

Evaluates any or all hierarchical storage management (HSM) policies to generate a report. Because of performance considerations using the rich client application interface, Siemens PLM Software recommends the system administrator execute this utility to create pending migration file sets.

Sites can schedule this utility to execute overnight through a UNIX **cron** job or Microsoft Windows at command. This utility can take considerable time to evaluate all migration policies.

**SYNTAX**

```
shsm_report [-u=user-id [-p=password | -pf=password-file] -g=group]
-tier={1 | 2 | 3} -migrationreport={[ALL | migration-policy] [-before=before-date]}
[-after=after-date] -filepath=filepath
[-listpolicies=ALL | policy-name] [-v] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
  
  [Note] If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.

  For more information about managing password files, see **Manage password files**.

  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-tier**
  Specifies migration tier. Valid values are:

  1 Primary to secondary.
Chapter 22  Volume and database management utilities

2  Secondary to tertiary.
3  Primary to tertiary.

-migrationreport
Specifies migration policy for which the report need to be reported. To generate a report for all active migration policies, specify -migrationreport=ALL.

-before
Specifies the beginning date for reporting migration, for example, 23_Mar_2004.

-after
Specifies the ending date for reporting migration, for example, 23_May_2006.

/filepath
Specifies the operating system file path to which the report is saved.

-listpolicies
Indicates that the utility is to list all active policies.

-v
Verbose mode provides information about results and progress.

-h
Displays help for this utility.

ENVIRONMENT

- The generic command window set with all Teamcenter-related environments.
- As specified in Manually configuring your environment for Teamcenter utilities.

FILES

As specified in Log files produced by Teamcenter.

RESTRICTIONS

None

EXAMPLES

- Execute the following command to generate report on all policies in the database:
  
  hsm_report -u=infodba -p=infodba -g=dba
  -migrationreport=ALL -tier=1 -filepath=c:\temp\report.txt

- Execute the following command to generate report about a specific policy in the database:
  
  hsm_report -u=infodba -p=infodba -g=dba
  -migrationreport=policy-name -filepath=c:\temp\report.txt

- Execute the following command to list of all active policies names defined for a database:
  
  hsm_report -u=infodba -p=infodba -g=dba -listpolicies
index_verifier

Detects missing indexes in a Teamcenter database. There are five types of indexes that can be detected using this utility:

- **Indexes on the primary key of each Teamcenter class.**
  The PUID (internal attribute of each table mapped to a Teamcenter class) must have a unique index.

- **Indexes on variable length arrays (VLA).**
  Each VLA must have two indexes, as follows:
  - An index on the PUID+PSEQ. This index must be unique.
  - An index on the PVAL attribute (pvalu_0 for POM_TYPED/UN_TYPED_REFERENCE and pval_0 for the other data type).

- **Indexes created by Teamcenter.**
  These indexes are created using Teamcenter POM ITK and information about these indexes resides in the POM data dictionary pom_indexes table.

- **Functional indexes**
  This utility detects the necessary functional indexes required by the version of Teamcenter in use. These functional indexes may include, but are not limited to the following:
  - A functional index on WorkspaceObject.object type
  - A functional index on WorkspaceObject.object_desc
  - A functional index on WorkspaceObject.object_name
  - A functional index on Item.Item_id
  - A functional index on ItemRevision.Item_revision_id

- **Indexes on system tables such as pom_backpointer, pom_m_lock, and the pm_process_list tables.**

**SYNTAX**

```
index_verifier [-u=user-id [-p=password | -pf=password-file] -g=group] [-o= [DRYRUN|DO_IT]] [-h]
```

**ARGUMENTS**

- `-u`
  Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.
If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument. One of the two mutually exclusive password elements is required.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-o
Specifies the action to take with the output of the index_verifier utility.
index_verifier outputs SQL statements that can create database indexes. The -o argument has the following parameters.

-o DRYRUN
Specifies to output the SQL statements without applying them to the database.
This is the same behavior as not using the -o argument.

-o DO_IT
Specifies to immediately apply the SQL statements to the database to create indexes.

For Oracle, if the SA user who runs index_verifier wants missing indexes to be created in a specific tablespace, the SA user must set the TC_INDEX_STORAGE environment variable:

TC_INDEX_STORAGE=PARALLEL 8 NOLOGGING TABLESPACE tablespace-name

This setting uses up to 8 parallel processes to create indexes and push these indexes into tablespace-name.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.
Volume and database management utilities

RESTRICTIONS

This utility can be run while users are logged on to Teamcenter.

EXAMPLES

None.
mark_for_migrate

Evaluates any or all active policies to determine if there are any Teamcenter volume files pending for migration, and if found, mark it for migration. Because of performance considerations using the rich client application interface, Siemens PLM Software recommends the system administrator execute this utility to create pending migration file sets.

Sites can schedule this utility to execute overnight through a UNIX cron job or Microsoft Windows at command. This utility can take considerable time to evaluate all migration policies.

SYNTAX

mark_for_migrate [-u=user-id [-p=password | -pf=password-file] -g=group] [migrationpolicy=ALL | policy-name] [-listpolicies] [-v] [-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-migrationpolicy
Evaluates a given migration policy and marks pending files for migration. To evaluate all active migration policies and mark them for migration, specify -migrationpolicy=ALL.
-listpolicies
List all active policies in chronological order.

-v
Verbose mode. Provides information about results and progress.

-h
Displays help for this utility.

ENVIRONMENT
• The generic command window set with all Teamcenter-related environments.
• As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
None.

RETURN VALUES
Return value 0 upon success
Return value 1 upon failure

EXAMPLES
• Execute the following command to evaluate all policies in the database:
  mark_for_migrate -u=infodba -p=infodba -g=dba -migrationpolicy=ALL

• Execute the following command to evaluate a specific policy in the database:
  mark_for_migrate -u=infodba -p=infodba -g=dba -migrationpolicy=policy_name

• Execute the following command to receive a list of all active policies names defined for a database:
  mark_for_migrate -u=infodba -p=infodba -g=dba -listpolicies
Chapter 22  Volume and database management utilities

move_volume_files

Moves files from one Teamcenter volume to another using FMS to move the files over your WAN/LAN. You can specify selected files to move based on file date, file age, or by volume allocation rules.

For more information about using volume allocation rules to reallocate volume files, see the System Administration Guide.

You can run this utility as a cron job or as a scheduled task using process_move_file_volumes as a .sh or .bat script, respectively. Use this script if your scheduling tools are not running in the Teamcenter environment with the appropriate TC_ROOT and TC_DATA variables set. The script sets these variables and calls tc_providevars directly before running the move_volume_files utility. The script accepts the same arguments as the utility. The arguments specified in the script are run by the utility.

SYNTAX

move_volume_files -u=user-id [-p=password | -pf=password-file] -g=group
-f={list | move} [-output_file=file-name] [-srcvol=source-volume]
[-destvol=destination-volume]
[-listvolumes] [-before=access-time-ending-range] [-after=access-time-beginning-range]
[-maxage=days] [-fszlessthan=bytes] [-fszgreaterthan=bytes]
[-outrulesfile=file-name] [-rulesfile=file-name] [-excludedvollist=file-name]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.
-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-f
Specifies whether the utility lists or moves files.

  -list
  Lists the files to be moved in the specified source volume that are candidates
to be moved.
  This argument must be used with the -srcvol argument.

  -move
  Moves the Teamcenter files to the specified destination volume.
  This argument must be used with both the -srcvol and -destvol arguments.

-output_file
Specifies the file to which list output is written when using the -f=list or -listsf
arguments. If not specified, the move_tcfiles_list.txt file is created.

-srcvol
Specifies the name of the Teamcenter source volume.

-destvol
Specifies the name of the Teamcenter destination volume.

-listvolumes
Displays a list of all Teamcenter volumes configured in the database.

-before
Specifies the ending access time in the form of dd-mmm-yyyy, for example,
06-Jan-2008. All files with this last access date or earlier are selected. If the -after
argument is specified, then the files selected are within that range, inclusive.

-after
Specifies the beginning access time in the form of dd-mmm-yyyy, for example,
23-Mar-2007. All files with this last access date or later are selected. If the -before
argument is specified, then the files selected are within that range, inclusive.

-maxage
Specifies the maximum age (in days) a file can reach and still be eligible for transfer.
For example, if set to 24, any file 24-days old or younger can be transferred.
If used outside of a rules environment, the current date minus the age specified by
this argument is used as the -after value.

-fszlessthan
Specifies the maximum file size (in bytes) a file can reach and still be eligible for transfer. For example, if set to 64000, all files that are 64,000 bytes or smaller can be transferred.
If the -fszgreaterthan argument is specified, the files selected are within that range, inclusive.
If the -fszlessthan argument is specified, the files selected are within that range, inclusive.

-outrulesfile
Outputs the volume allocation rules XML template to the current directory. The XML template is given the filename specified by this argument. For example, if set to VolRules.xml, an XML template of the allocation rules named VolRules.xml is created and stored in the current directory.

-rulesfile
Specifies the path and name of the volume allocation rules XML file to evaluate. The file is validated against the DTD, and then its rules are evaluated. Volume files are moved or listed, based on the setting of the -f argument.

This argument must be used with the -f argument. It does not work with the -listvolumes, -srcvol, -destvol, or -presorted_file arguments.

-excludedvollist
Specifies the path and name of the file containing a list of volumes to be excluded from both listing and transfer actions. This argument is typically used to list default local volumes (store and forward volumes) to ensure the files stored in these temporary volume location are not transferred.

Use either the full path to the file, or use the partial path/file name, in which case the utility searches for the file name in the current directory.

Any number of volumes can be specified in this file. Each entry must be a valid volume name, listed on its own row in the file.

-presorted_file
Specifies the path and name of the file containing a list of files to be moved. This argument must be used with the -f and -move arguments.

Use either the full path to the file, or use the partial path/file name, in which case the utility searches for the file name in the current directory.

Any number of files can be specified in this file. The file format is the same format as the file output by the -f=list argument. Typically, you generate a file using this -f=list argument, edit the file as necessary, and then set the -presorted_file argument with the name of the edited file.

-listaf
Lists files evaluated for a store and forward operation.

-transferaf
Transfers all files evaluated for a store and forward operation from all of the user's local volumes to their corresponding default volumes. It also creates and schedules a dispatcher request to clean up files in local volumes.
Volume and database management utilities

Note: The **-listaf** and **-transferaf** arguments require installation of dispatcher scheduler, module, client, and the **store_and_forward** translator. They also require setting the **TC_Store_and_Forward** and **FMS_SAF_Batch_Transfer_Enabled** preferences to true.

For more information, see the *System Administration Guide*

**-v**
Executes the utility in verbose mode.

**-h**
Displays help for this utility.

**RESTRICTIONS**
If the volume path definition is defined in multiple locations, the definition must be exactly the same in each location. For example, if you define a volume in the Organization application using a drive/path definition format, you must use the same drive/path definition in the FMS master configuration file (you cannot use the UNC format).

Conversely, the volume can be defined in both Organization and in the master configuration file in UNC format.

**EXAMPLES**
- Enter the following command on a single line to generate the list of all files in Teamcenter volume **vol003**:
  
  ```
  move_volume_files -u=infodba -p=infodba -g=dba -f=list
  -srcVol=vol0103 -destvol=vol11001 -v
  ```

- Enter the following command on a single line to generate the list of all files in Teamcenter volume **vol003** that were last accessed in the given date range:

  ```
  move_volume_files -u=infodba -p=infodba -g=dba -f=list -srcvol=vol003
  -destVol=vol1001 -after=03-Feb-2008 -before=03-Mar-2008 -v
  ```

  The list of evaluated files is stored in the **move_tcfiles_list.txt** file, in the current directory.

- Enter the following command on a single line to move all the files listed in the **move_tcfiles_list.txt** file to volume **vol003**:

  ```
  move_volume_files -u=infodba -p=infodba -g=dba -f=move
  -preSorted_file=move_tcfiles_list.txt -destvol=vol11003 -v
  ```

- Enter the following command on a single line to relocate all Teamcenter files from volume **vol003** to the destination volume **newvol002**:

  ```
  move_volume_files -u=infodba -p=infodba -g=dba -f=move
  -srcVol=vol1003 -destvol=newvol002 -v
  ```

- Enter the following command on a single line to relocate Teamcenter files that were last accessed on November 29, 2006, or later, from Teamcenter **vol002** to the destination volume **newvol003**:

  ```
  move_volume_files -u=infodba -p=infodba -g=dba -f=move
  -srcVol=vol0102 -destvol=newvol003 -after=29-Nov-2006 -v
  ```

- Enter the following command on a single line to generate the volume allocation rules XML template named **VolSelectionRules.xml** and stored in the current directory:

  ```
  move_volume_files -u=infodba -p=infodba -g=dba -outrulesfile=VolSelectionRules.xml
  ```
• Enter the following command on a single line to evaluate the volume allocation rules in the `VolSelectionRules.xml` file and store the results in the `move_tcfiles_list.txt` file in the current directory:

```
move_volume_files -u=inodba -p=inodba -g=dba -rulesfile=VolSelectionRules.xml -f=list -v
```

• Enter the following command on a single line to evaluate the volume allocation rules in the `VolSelectionRules.xml` file and move the evaluated files:

```
move_volume_files -u=inodba -p=inodba -g=dba -rulesfile=VolSelectionRules.xml -f=move -v
```

• Enter the following command on a single line to generate the list of all files evaluated for a store and forward operation:

```
move_volume_files -u=inodba -p=inodba -g=dba -listsaf -v
```

• Enter the following command on a single line to transfer files evaluated for a store and forward operation from all of the users’ local volumes to their corresponding default volumes and to schedule a dispatcher request to clean up files in local volumes:

```
move_volume_files -u=inodba -p=inodba -g=dba -transfersaf -v
```
purge_datasets

Removes (purges) old versions of datasets from the database and outputs a list of each dataset purged, along with the owning user and group.

**Note** Normally, Teamcenter stores a fixed number of dataset versions in the database. The maximum number of datasets retained is set using the `AE_dataset_default_keep_limit` preference.

For more information, see the *Preferences and Environment Variables Reference*.

Certain conditions prevent automatic purging of old datasets. For example, when a user does not have permission to purge a dataset owned by another user, or when a group is given read/write permission but not delete permission.

Additionally, datasets are not purged when the named references in `version0` do not match the named references in the latest dataset version. Use the `-skipInconsistencyCheck` argument to bypass this named references check. Use this argument only in situations in which you know why the named references differ and are confident that purging the older dataset versions will not result in loss of needed data. Possible situations include CAD integrations in which custom code is implemented, wrong coding exists from custom ITK programs, and PLM XML import.

Before using the `-skipInconsistencyCheck` argument, run this utility without the argument and review the output for any failed purges. Investigate all datasets that did not purge, correcting problems if necessary.

**Example** `version0` of a dataset contains three named references: `a.txt`, `b.txt`, and `c.txt`. The latest version of the same dataset contains two named references: `a.txt` and `b.txt`. Using this utility to purge this dataset fails because of the inconsistency between the named references. The utility logs an inconsistent data message.

In this situation, you should compare the named references between the versions and resolve the inconsistency if necessary.

- Compare the named references of the two versions in the rich client by choosing View→Named References.

- Correct the inconsistency by copying the `c.txt` named reference from `version0` to the clipboard, then pasting it into the latest version. The named references must be in the same order for both versions. Rerunning the utility would purge this dataset.

  Alternatively, checking the dataset out, making changes, and checking it back in synchronizes the named references between the versions.

If it is not possible to synchronize the named references, for example, the datasets are already released (and thus read-only), use this argument to purge the datasets.
**Chapter 22**  
*Volume and database management utilities*

**SYNTAX**

```plaintext
purge_datasets [-u=userid [-p=password | -pf=password-file] -g=group] 
-b=beginning_anchor -e=ending_anchor [-k=keep-limit] 
-start_date=DD-MM-YYY HH:MM:SS -end_date=DD-MM-YYY HH:MM:SS 
[-set] [-report] [-replica_only -site=site-name] 
[-itemidsfile=item-id-file-name] [-mgrtypesfile=relation-types-file-name] 
[-includeFolderContents] [-skipInconsistencyCheck] [-h]
```

**ARGUMENTS**

- `-u`
  Specifies the user ID.
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  
  If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- `-p`
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- `-pf`
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.

  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the `-p` argument.

- `-g`
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- `-b`
  Specifies the first version anchor (*beginning_anchor*) of a contiguous series to be purged. The default value is 1. Version anchors are objects that keep track of a set of versions of an object. Datasets are one such class of objects.

- `-e`
  Specifies the last version anchor (*ending_anchor*) of a contiguous series to be purged. The default value is *last*. Version anchors are objects that keep track of a set of versions of an object. Datasets are one such class of objects.

- `-set`
  Determines if the current keep limit is to be reset to the version limit. If this argument is not used, the current keep limit is not assigned to the version limit. If this argument is used, the current keep limit is set to the version limit, as follows:
• If the -k argument is used, always assign the keep limit to the version limit no matter whether the dataset is to be purged or not.

• If the -k argument is not used, the current version limit is used to purge; therefore, it need not be reset to the version limit.

-k
Determines the keep limit to be used. If the -k argument is set to a particular keep limit, for example -k=4, a dataset is purged down to that keep limit. If the -k argument is not used, the current version limit of the dataset is used as the purge keep limit.

-start_date
Specifies the start date/time for which datasets are purged. This argument must be used with the -end_date argument.

-end_date
Specifies the end date/time for which datasets are purged. This argument must be used with the -start_date argument.

-h
Displays help for this utility.

-report
Produces a report of the datasets to be purged, but does not purge the datasets from the database.

-replica_only
Specifies that only replica datasets are purged. The -site argument can be used in conjunction with the -replica_only argument to purge only the datasets replicated from a specific site.

-site
Specifies the site from which replica datasets will be purged. Valid only in conjunction with the -replica_only argument.

-itemidsfile
Specifies an input file containing a list of item IDs. Enter one ID per line or you can enter multiple IDs on one line separated by commas.

-grmtypesfile
Specifies an input file containing a list of specified relation types. Enter one relation type per line or you can enter multiple relation types on one line separated by commas. This parameter is optional. If it is not specified, all relation types are used. This parameter is valid only with the -itemidsfile argument.

-includeFolderContents
Specifies a folder containing datasets to be purged. This parameter is optional and is valid only with the -itemidsfile argument.

-skipInconsistencyCheck
Bypasses the consistency check of named references. If not specified, a dataset is not purged if the named references in version0 of the dataset are not the same as the named references in the latest version.

Running the utility with this argument purges previous versions of the dataset.
Chapter 22  Volume and database management utilities

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities.*

FILES
As specified in *Log files produced by Teamcenter.*

RESTRICTIONS
1. The **purge_datasets** utility must be run by the **infodba** user. This automatically enables the bypass feature and purges old datasets regardless of owning user and group.

EXAMPLES
The default options are not set and use the version limit of the current dataset. The complete **purge_datasets** command looks like this:

```bash
$TC_BIN/purge_datasets -u=infodba -p=password -g=dba -b=beginning-anchor -e=ending-anchor -k=keep-limit -set
```
purge_volumes

Removes (purges) operating system files that represent deleted Teamcenter objects. The purge_volumes utility can be run interactively, in forced execution mode, or periodically.

During a Teamcenter session, users delete objects. However, if an object’s associated files remain in the Teamcenter volume, the purge_volumes utility unlocks these files so they can be deleted at the operating system level.

SYNTAX

```
purge_volumes [-u=user-id [-p=password | -pf=password-file] -g=group] [-f] [-s=time] -h
```

ARGUMENTS

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  [Note] If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see Manage password files.
  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-f**
  Specifies forced execution mode. When the -f argument is supplied, files are deleted without prompting for confirmation. When the -f argument is not supplied, the purge_volumes utility runs interactively and prompts the user before deleting each file.
-s
Specifies sleep time in seconds. After each **purge_volumes** session is complete, it is dormant for the specified time before running again. If the -s argument is not supplied, the **purge_volumes** only runs once.

-h
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
1. When running the **purge_volumes** utility periodically with the -s argument, include the -f argument. This disables interactive mode and ensures that the utility runs to completion.

**EXAMPLES**
To run the **purge_volumes** utility interactively, enter the following command on a single line:

```
$TC_ROOT/bin/purge_volumes -u=infodba -p=password -g=dba
```

The **purge_volumes** utility prompts the user before deleting each volume. When complete, the system displays the following message:

```
Purge_Volumes: terminating
Stop returned 0
```

If no files were deleted, the system displays the following:

```
There are no deleted files in your system
```

**Note**
In order to run the **purge_volumes** utility at boot time on UNIX platforms, add the following line to the appropriate startup script on your UNIX system, or add it to the rc script created by the postinstallation routine for the database configuration you want this activity to work against:

```
purge_volumes -u=infodba -p=password -g=dba -f
```

This starts **purge_volumes** at boot time and disables confirmation of each delete action.
**reencode_filenames**

Re-encodes volume file names. You may need to rename volume file names on some system configurations depending on the character set of the system where the volume resides.

This operation is required when upgrading system configurations where the character sets of the database and the volume servers do not match and pre-existing volume files exist. This situation can occur when file names are created using TCFS and the system is upgraded to a Teamcenter version that utilizes FMS file services.

By default, the utility does not change the system state and therefore the file names are not renamed.

To commit the changes, add the **-modify=TRUE** argument to the command line.

Siemens PLM Software recommends that the utility be executed first without the **-modify=TRUE** argument to determine the current state of the volumes on the system.

**Note** Siemens PLM Software recommends sites use this utility with caution and back up all volumes affected by this utility.

**SYNTAX**


**ARGUMENTS**

**-u**

Specifies the user ID.

This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

**-p**

Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the *user-ID* value to be the password.

This argument is mutually exclusive with the **-pf** argument.

**-pf**

 Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the *user-ID* value to be the password.

For more information about managing password files, see **Manage password files**.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.
-l
Specifies the utility is to list all volumes.
-vb
Specifies verbose mode.
-rf
Specifies the report file name. This argument is required.
-vh
Specifies the volume host name. The default value is all hosts.
-v
Specifies the volume. The default value is all volumes.
-f
Specifies the file. The default value is all files. If this argument is specified, you must also specify the -v argument.
-modify
Specifies whether to rename the files. The default value is to not rename the files and only generate a report. If you specify this argument, you must also specify the -vh and/or the -v arguments. The value set by this argument is case sensitive. For example, -modify=TRUE is valid; -modify=true is not valid.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.

EXAMPLES
• To generate a report on all volumes and hosts:
  
  reencode_filenames -u=myuserid -p=mypassword -g=mygroup -rf=reencode_report.txt

• To generate a report and re-encode all file names on a host:
  
  reencode_filenames -u=myuserid -p=mypassword -g=mygroup -vh=myvolumehost -rf=reencode_report.txt -modify=TRUE

• To generate a report and re-encode all file names on a volume:
  
  reencode_filenames -u=myuserid -p=mypassword -g=mygroup -v=myvolumename -rf=reencode_report.txt -modify=TRUE
• To generate a report and re-encode all file names on a volume:

    reencode_filenames -u=myuserid -p=mypassword -g=mygroup
    -v=myvolumename -f=myfilename -rf=reencode_report.txt -modify=TRUE
report_volume

Lists the operating system path of all existing Teamcenter volumes. The path does not include the network node name.

SYNTAX

```
report_volume [-u=user-id [-p=password | -pf=password-file] -g=group] [-f=file-name [-date=ymmdhhmmss] -h]
```

ARGUMENTS

- **-u**
  Specifies the user ID.

  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  [Note] If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.

  If used without a value, the system assumes a null value.

  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see Manage password files.

  This argument is mutually exclusive with the -p argument.

- **-g**
  Specifies the group associated with the user.

  If used without a value, the user's default group is assumed.

- **-f**
  Specifies the name of the output report file. The utility automatically appends this file name with the .volumes extension.

- **-date**
  Specifies the date string. Must be in yymmdhhmmss format where yy is the year, mm is the month, dd is the day, hh is the hour, mm is minutes and ss is seconds.

  This argument is optional. If not supplied, all volumes are reported. Otherwise, only volumes and files created after the input date are reported.

- **-h**
  Displays help for this utility.
ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
Do not include a directory path with the `-f` argument. The output file must be written to the current working directory.

EXAMPLES
To list all existing volumes in a file called `out.volume`, enter the following on a single line:

```
$TC_ROOT/bin/report_volume -u=infodba -p=infodba -g=dba -f=out
```
review_volumes

Allows you to view volume file attributes regarding OS volumes (file size, last modification date, and so on) and to remove unreferenced operating system files from these volumes.

This utility can generate a report file describing volume usage by various groups and users, as well as reporting any unreferenced operating system files, missing operating system files, and unreferenced Teamcenter files.

Unreferenced operating system files can be deleted at the time a report file is generated or at a later time using a previously-generated report file as an input.

The report file format is plain text (ASCII) and can be manually edited in order to not delete certain files. To prevent files from being deleted, remove any file names before using the report file as input.

You can also save any deleted files to a ZIP format compressed file.

**Note** Before creating volumes, you must have an FMS server cache (FSC) installed and running, and you must set the FMS_BootStrap_Urls preference with the FSC host and port information.

**SYNTAX**

```
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-v
Runs the utility against a single, specified volume. This argument is required unless the -lv argument is specified.

-rf
Creates a report file listing unreferenced files in volumes.

[Note] The -of, -if, and -zf arguments do not work in combination with the -rf argument. When the -rf argument is present, only the report file generation is performed.

-if
Specifies the report file to be used as input to delete unreferenced files in volumes.

-of
Deletes and logs the results to a specified file. This argument must be supplied if the -if argument is used.

-zf
Saves deleted files to the specified ZIP file. The .zip extension is automatically appended to the file name if another extension is not specified.

-lv
Lists all volumes defined in the database.

-parallel
Specifies the number of volumes on which to simultaneously run this utility. You can use this argument to generate reports on all volumes defined in your database simultaneously (use the -lv argument to determine the number of volumes defined in your database). However, you must consider available computing resources while setting this value. Even if you have 800 volumes defined in your database, you might only have enough computing power to run five or ten processes in parallel.
This argument must be used with the -rfolder argument.

-rfolder
Specifies the folder in which the multiple reports generated by the -parallel argument are stored.
This argument must be used with the -parallel argument.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.
RESTRICTIONS

In versions prior to 8.3.2, you could supply the -rf argument in combination with the -of argument in order to have the `review_volumes` utility simultaneously generate a report file and delete files from the specified volume.

Beginning with Teamcenter 8.3.2, this requires two separate steps:

1. Run the `review_volumes` utility with the -rf argument.
2. Use the -if and -of arguments to input the previously created report file and delete volume files.

This change in how arguments are processed was required by the need to improve scalability and performance of the `review_volumes` utility, for example, the addition of the new -parallel argument.

EXAMPLES

- To generate a report on a single volume, enter the following command on a single line:
  
  ```
  $TC_ROOT/bin/review_volumes
  -u=user-id -p=password -g=group -v=volume -rf=file-name
  ```

- To generate a report on all volumes and delete files, enter the following command on a single line:
  
  ```
  $TC_ROOT/bin/review_volumes
  -u=user-id -p=password -g=group -of=file-name -v=volume
  ```

- To delete files on all volumes from a previously executed report, enter the following on a single line:
  
  ```
  $TC_ROOT/bin/review_volumes
  -u=user-id -p=password -g=group -if=file-name -of=file-name -v=volume
  ```

- To generate a report on all volumes defined in the database:
  
  ```
  $TC_ROOT/bin/review_volumes
  -u=user-id -p=password -g=group -parallel=number-of-parallel-processes
  -rfolder=folder-name
  ```
## syncCache

Loops through each dataset row for the specified applications in the cache database and performs the following tests and actions:

- If the **Dataset.Folder** field is either null or empty, the utility performs no action.

- If the **Dataset.Folder** field does not exist or is not a directory, the dataset is deleted from the cache.\(^1\)

- If the **Dataset.AppRef** field is not found in Teamcenter, the dataset is deleted from the cache.\(^1\)

- The dataset and its related **ItemRev** and **Item** rows in the cache database are updated from Teamcenter. This process performs most of the Open process except for downloading the design file. Since no files are downloaded, the staging directory is not modified.

### SYNTAX

```
syncCache application-name [-help]
```

### ARGUMENTS

**application-name**

Specifies a list of ECAD application names so that only the cached datasets created by the applications in the list are processed.

**-help**

Displays help for this utility.

### ENVIRONMENT

Requires the same environment as for running EDA.

### FILES AND RESTRICTIONS

None.

### EXAMPLES

- To run **syncCache** on datasets created by Cadence Allegro:
  ```
syncCache cadenceSchematic cadencePcb
  ```

- To run **syncCache** on datasets created by Mentor BoardStation:
  ```
syncCache mentor
  ```

---

1. When a dataset is deleted from the cache, then the dataset’s related ItemRev and Item are also deleted unless they are referenced by other datasets or ItemRev's.
tcmemstat

Monitors the Teamcenter model event manager (TcMEM).

By default, this utility is stored in the TC_ROOT/tces/bin directory.

SYNTAX


ARGUMENTS

none
Displays TcMEM component versions and run time, if running.

-help or -h or -?
Displays help for this utility.

-x
Displays a summary of TcMEM status.

-status
Displays a complete TcMEM status report

-restart
Stops (if running) and restarts TcMEM, effectively reloading the configuration.

-start
Starts TcMEM if it is not already started.

-stop
Shuts down the TcMEM process immediately if no other clients are connected or if all connected clients are idle. Otherwise, a warning message is displayed.

-kill
Immediately and unconditionally shuts down the TcMEM process.

ENVIRONMENT

As specified in Manually configuring your environment for Teamcenter utilities.

FILES

As specified in Log files produced by Teamcenter.

RESTRICTIONS

None.
tspstat

Monitors the Teamcenter server proxy.

By default, this utility is stored in the TC_ROOT/tecs/bin directory.

**SYNTAX**


**ARGUMENTS**

none
Displays TcServerProxy component versions and run time, if running.

-help or -h or -?
Displays help for this utility.

-x
Displays a summary of TcServerProxy status.

-status
Displays a complete TcServerProxy status report.

-config
Displays the name of TcServerProxy configuration file.

-reconfig
Reloads the TcServerProxy configuration. Use this argument to update a running TcServerProxy with any HTTP/HTTPS proxy changes.

-restart
Stops (if running) and restarts TcServerProxy, effectively reloading the configuration.

-start
Starts TcServerProxy if it is not already started.

-stop
Shuts down the TcServerProxy process immediately if no other clients are connected or if all connected clients are idle. Otherwise, a warning message is displayed.

-kill
Immediately and unconditionally shuts down the TcServerProxy process.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

None.
vms_upgrade

Modifies any commercial part, vendor part, and vendor data created before Teamcenter 2007.1 MP4 to conform to the updated vendor management data model.

The utility creates GRM relations between these items where a VendorIdentifier object had previously been used. The CommercialPart object is now directly related to the ManufacturerPart (Vendor Part) object by the new VMRepresents relation, which holds vendor status information. The VendorIdentifier and IdContext objects are no longer associated with the CommercialPart object. The new TC_vendor_part_rel GRM relation is used to associate the ManufacturerPart with the vendor.

SYNTAX

application_root/bin/vms_upgrade [-u=user-id | -p=password | -pf=password-file] [-g=group] -h

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-h
Displays help for this utility.
unmigrate_from_hsm

Reverses migration of the existing Teamcenter volume files objects from the purview of hierarchical storage management (HSM) by removing the hsm_info object associated with file objects from the database. Use this utility for the following situations:

• Encountering errors while migrating files to HSM.
• Maintenance requirement to remove a specific volume from purview of HSM.
• Remove all volumes from the purview of HSM.

After the execution of this utility completes, all physical volume files must be brought back to a primary tier in the event it has already migrated by third-party HSM software to secondary or tertiary tier. Siemens PLM Software recommends sites execute this utility on a specific volume when no other users are accessing Teamcenter, especially during maintenance or upgrades. This utility can take considerable time to reverse migrate all files from the purview of HSM.

SYNTAX


ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

- **listvolumes**
  List all volumes defined for the database.

- **volume**
  Specifies particular volume to unmigrate. The system administrator can specify `volume=ALL` to unmigrate all volumes from the purview of HSM.

- **-v**
  Verbose mode. Provides information about results and progress.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

- The generic command window set with all Teamcenter-related environments.
- As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

This utility is intended only for system-level users.

**RETURN VALUES**

Return value upon success
0

Return value upon failure
1

**EXAMPLES**

- To unmigrate all volumes defined for the database:

  ```
  unmigrate_from_hsm -u=infodba -p=infodba -g=dba -volume=ALL -v
  ```

- To unmigrate a specific volume:

  ```
  unmigrate_from_hsm -u=infodba -p=infodba -g=dba -volume=volume_name
  ```

- To list volumes names defined for a database:

  ```
  unmigrate_from_hsm -u=infodba -p=infodba -g=dba -listvolumes
  ```
upgrade_vendor_part

Populates the new typed reference attribute in the ManufacturerPart from the existing data during upgrade. The associated vendor for the new typed reference attribute is retrieved from the TC_Vendor_part_rel relation.

**SYNTAX**

```
upgrade_vendor_part [-u=infodba -p=$TC_USER_PASSWD] -g=dba -h
```

**ARGUMENTS**

- `-u` Specifies the user ID.
  
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the user and password arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- `-p` Specifies the password.

- `-g` Specifies the group associated with the user, in this case, `dba`.

- `-h` Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

None.
Evaluates any or all volume management policies to generate a report. Because of performance considerations using the rich client application interface, Siemens PLM Software recommends the system administrator execute this utility to create pending migration file sets.

Sites can schedule this utility to execute overnight through a UNIX `cron` job or Microsoft Windows `at` command. This utility can take considerable time to evaluate all migration policies.

**SYNTAX**

```bash
vm_report [-u=user-id [-p=password | -pf=password-file] -g=group]
[-listvolumes] [-listpolicies]
[-migrationreport=migration-policy] [-filepath=filepath]
[-migrationreport=ALL [-srcvol=source-volume-name -destvol=destination-volume-name]
[-before=before-date] [-after=after-date] [-v] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  
  This is generally `infodba` or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  
  If used without a value, the system assumes a null value.
  
  If this argument is not used, the system assumes the `user-ID` value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  
  For more information about managing password files, see *Manage password files*.

  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  
  If used without a value, the user's default group is assumed.

- **-listvolumes**
  Indicates that the utility is to list all volumes in the database.
-listpolicies
Indicates that the utility is to list all active policies.

-migrationreport
Specifies migration policy for which the report need to be reported.
To generate a report on all active migration policies, specify -migrationreport=ALL
If you specify ALL for the migration policy, you must include either the -srcvol or -destvol arguments.

-srcvol
Specifies source volume name.

-destvol
Specifies destination volume name.

-before
Specifies the beginning date for reporting migration. For example, 23_Mar_2004.

-after
Specifies the ending date for reporting migration. For example, 23_May_2006.

/filepath
Specifies the operating system file path to which the report is saved.

-v
Verbose mode. Provides information about results and progress.

-h
Displays help for this utility.

ENVIRONMENT
- The generic command window set with all Teamcenter-related environments.
- As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
Due to performance considerations, Siemens PLM Software recommends a system administrator execute this utility instead of using the rich client application interface.

EXAMPLES
- Execute the following command to generate report on all policies in the database:
  vm_report -u=infodba -p=infodba -g=dba -migrationreport=ALL
  -srcvol=volume-one -destvol=volume-two -filepath=c:\temp\report.txt

- Execute the following command to generate report about a specific policy in the database:
  vm_report -u=infodba -p=infodba -g=dba
  -migrationreport=policy-name -filepath=c:\temp\report.txt

- Execute the following command to list of all active policies names defined for a database:
  vm_report -u=infodba -p=infodba -g=dba -listpolicies
xml_validator

Checks the XML file against the document type definition (DTD) to which it should conform.

**SYNTAX**

```
xml_validator [-u=user-id [-p=password | -pf=password-file] -g=group] [-v=always | never | auto*] file.xml
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

  For more information about managing password files, see *Manage password files*. This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-v**
  Specifies the validation scheme: `always, never, auto*`. If not explicitly stated, defaults to `auto*`.

  `file .xml`
  Specifies the XML file to be validated.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*. 
As specified in *Log files produced by Teamcenter*.

**EXAMPLES**

1. The following example checks only the structure of the XML file:
   
   ```
   xml_validator -v=never file1.xml
   ```

2. This example produces an error if the XML file does not have an associated DTD file. It always checks the validity of the XML file.
   
   ```
   xml_validator -v=always file1.xml
   ```

3. This example checks the structure of the XML file if it does not correspond to a DTD. If the file corresponds to a DTD, it checks the validity of the file’s XML against that of the DTD.
   
   ```
   xml_validator file1.xml
   ```

**File Management System (FMS) utilities**
fscadmin.sh/.bat

Monitors and controls File Management System FSC servers. This can be used to check the status of a server, perform a shutdown, modify logging levels, query performance counters, or to clear or inspect caches.

SYNTAX

```
$FMS_HOME/fscadmin.sh [-u=user-id [-p=password | -pf=password-file] [-g=group] [-h] [-k keyfile] [-s serveraddr] [-f tickets-file] [command]
```

ARGUMENTS

- **u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

- **p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the -pf argument.

- **pf**
  Specifies the password file. If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the -p argument.

- **g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **h**
  Displays help for this utility.

- **k**
  Specifies a file containing the encryption key required by this system. A key file is a text file containing an ASCII-HEX encryption key. This is generally the same key file referenced in the *fmsmaster.xml* file for this system.
  This argument is optional.

**Note** If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.
Example: `fscadmin -k site123keyfile.txt /status`
Default: `<none>`

**-s**
Specifies the protocol server for the FSC and the port you wish to communicate with.

Example: `fscadmin -s http://myserver:4445 /status`
Default: `http://127.0.0.1:4444`

**-f**
Specifies the name of the tickets file.

**command**
Command is a formatted string with the following fields:

**FSCID/FUNCTION[/SUBFUNCTION/…]**

**FSCID**
The FSC with the given ID, as defined in the master configuration, for which this command is intended. A period (.) can be used to indicate the local (current) FSC you are connecting to, as indicated by the **-s** parameter.

**FUNCTION[/SUBFUNCTION/…]**
The functions and subfunctions are enumerated in `Function[/Subfunction/…] Details`, later in this section.

Example: `fscadmin -s http://myserver:4445 /status`
Example: `fscadmin -s http://myserver:4445 /log`
Default: `/status`.

Example: `fscadmin -s http://myserver:4444 fsc123/log`

**ENVIRONMENT**

- The **FSC_HOME** variable must be set to a valid FMS server directory.
- The **JAVA_HOME** variable must be set to a valid Java SDK directory.

**FILES**

- `fscadmin.properties`
  (Optional) A property file used to configure proxy and SSL options if required by the `fscadmin` utility.

- `fscadmin.properties.template`
  A template of the available properties that can be set for the `fscadmin` utility.

**RESTRICTIONS**

- You can route `fscadmin` commands to remote FSCs without having to specify that FSCs address on the command line.
- Input and output through the `fscadmin` utility is not localized. Commands are subject to change without notice.
### FUNCTION[/SUBFUNCTION/...]

#### DETAILS

<table>
<thead>
<tr>
<th>FUNCTION/[SUBFUNCTION]</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>cachesummary</td>
<td>Summary of the read and write caches (number of files, bytes, hits, misses).</td>
</tr>
<tr>
<td>cachesummary/read</td>
<td>Summary of the read cache.</td>
</tr>
<tr>
<td>cachesummary/write</td>
<td>Summary of the write cache.</td>
</tr>
<tr>
<td>cachesummary/whole</td>
<td>Summary of the whole file cache.</td>
</tr>
<tr>
<td>cachedetail</td>
<td>Summary and detail of the read and write caches (GUIDS, filesizes).</td>
</tr>
<tr>
<td>cachedetail/read</td>
<td>Summary and detail of the read cache.</td>
</tr>
<tr>
<td>cachedetail/write</td>
<td>Summary and detail of the write cache.</td>
</tr>
<tr>
<td>cachedetail/whole</td>
<td>Summary and detail of the whole file cache.</td>
</tr>
<tr>
<td>clearcache</td>
<td>Clears (empties) both read and write caches.</td>
</tr>
<tr>
<td>clearcache/read</td>
<td>Clears the read cache.</td>
</tr>
<tr>
<td>clearcache/write</td>
<td>Clears the write cache.</td>
</tr>
<tr>
<td>clearcache/whole</td>
<td>Clears the whole file cache.</td>
</tr>
<tr>
<td>config</td>
<td>Dumps the configuration for this FSC.</td>
</tr>
<tr>
<td>config/hash</td>
<td>Displays the MD5 hash for the current master configuration file.</td>
</tr>
<tr>
<td>config/reload</td>
<td>Reloads the latest configuration from the usual configuration sources, either from disk or via download from another FSC.</td>
</tr>
<tr>
<td>config/reload/all</td>
<td>Performs a coordinated configuration reload first reloading all FSC configuration masters, then reloading all FSC configuration slaves. Returns final configuration hash results in a comma-separated list.</td>
</tr>
<tr>
<td>config/reload/slaves</td>
<td>Performs a coordinated configuration reload of all FSC configuration slaves. Returns final configuration hash results in a comma-separated list.</td>
</tr>
<tr>
<td>config/report</td>
<td>Queries the configuration hashes from all FSCs and returns results in a comma-separated list.</td>
</tr>
<tr>
<td>filestoresummary</td>
<td>Summary of all filestores (volumeid, root path, files, dirs, bytes).</td>
</tr>
<tr>
<td>filestoresummary/xxx</td>
<td>Summary of a filestore specified by xxx.</td>
</tr>
<tr>
<td>filestoredetail</td>
<td>Summary and detail of all filestores (file name, length, last modified, last accessed).</td>
</tr>
<tr>
<td>filestoredetail/xxx</td>
<td>Summary and detail of a filestore specified by xxx.</td>
</tr>
<tr>
<td>FUNCTION[/SUBFUNCTION]</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>loadfsccache/status</td>
<td>Displays the simple Load FSC Cache status. This includes the number of tickets received, valid, invalid, expired, etc. It also includes the number of files that have been downloaded, failed to download, and are waiting to be downloaded.</td>
</tr>
<tr>
<td>loadfsccache/status/reset</td>
<td>Resets the Load FSC Cache statistics.</td>
</tr>
<tr>
<td>loadfsccache/queue</td>
<td>Displays the tickets remaining in the Load FSC Cache queue.</td>
</tr>
<tr>
<td>loadfsccache/queue/clear</td>
<td>Removes all remaining tickets in the Load FSC Cache queue.</td>
</tr>
<tr>
<td>loadfsccache/filelist</td>
<td>Uses -f option to upload a file of tickets that should be populated into the specified FSC.</td>
</tr>
<tr>
<td>loadfsccache/stat</td>
<td>Returns the number of transactions processed by the Load FSC Cache context.</td>
</tr>
<tr>
<td>loadfsccache/stat/valid</td>
<td>Returns the number of valid tickets processed.</td>
</tr>
<tr>
<td>loadfsccache/stat/invalid</td>
<td>Returns the number of invalid tickets processed.</td>
</tr>
<tr>
<td>loadfsccache/stat/expired</td>
<td>Returns the number of expired tickets processed.</td>
</tr>
<tr>
<td>loadfsccache/stat/total</td>
<td>Returns the total number of tickets processed.</td>
</tr>
<tr>
<td>loadfsccache/stat/ok</td>
<td>Returns the number of files successfully populated.</td>
</tr>
<tr>
<td>loadfsccache/stat/failed</td>
<td>Returns the number of files which failed to populate.</td>
</tr>
<tr>
<td>loadfsccache/stat/waiting</td>
<td>Returns the number of tickets remaining to be populated</td>
</tr>
<tr>
<td>loadfsccache/stat/processing</td>
<td>Returns 1 if population is occurring, otherwise 0.</td>
</tr>
<tr>
<td>loadfsccache/stat/localfiles</td>
<td>Returns the number of local files on which population was attempted, but was not required.</td>
</tr>
<tr>
<td>loglevel/show</td>
<td>Shows the current logging level of all loggers.</td>
</tr>
<tr>
<td>loglevel/fatal</td>
<td>error</td>
</tr>
</tbody>
</table>
FUNCTION[/SUBFUNCTION] | Description
--- | ---
loglevel/logger/[fatal|error|warn|info|debug] | Sets error log level on the logger and all children. logger is in the form of the name of the class.package of which you wish to change the log level.

com.teamcenter.fms.servercache is all of the server
com.teamcenter.fms.servercache.

FileHandleCacheManager sets only the loglevel on that class.

log | Dumps the current logfile contents.
purgcach | Purges the caches, reclaiming disk space.
purgcach/read | Purges the read cache.
purgcach/write | Purges the write cache.
purgcach/whole | Purges the whole file cache.
purpeguid/xxx | Removes the GUID (file) specified by xxx from the cache.
perfcounters | Performance counters
perfcounters/reset | Resets the performance counters.
shutdown | Stops the FSC when it becomes idle (when all current file transfers are complete). The FSC will reject all new incoming file requests.
shutdown/maxwait/xxx | Stops the FSC when it becomes idle (when all current file transfers are complete) or when a maximum number of seconds have been exceeded. The FSC will reject all new incoming file requests. If the server does not become idle, xxx is the number of seconds to wait before forcing the shutdown.
shutdown/now | Stops the FSC.
status | Displays simple status about the FSC (FSCID, site, running time) and also prints the number of concurrent admin and file-based connections. This also shows the remaining time before a forced shutdown, if one is pending.
stop | Stops the FSC.
useragents | Prints a tally of all the useragents (clients) that have connected.
version | Prints the versions of the FSC JAR files.

EXAMPLES

- To see general statistics of the server, enter the following command:
Example output:

FSC id: myfsc, site:fms.teamcenter.com
running for 3 days, 17 hours, 3 min, 46 sec
Current number of file connections: 0
Current number of admin connections: 1

• To see general statistics of the caches, enter the following command:

  ./.fscadmin.sh -s http://myserver:4445 ./cachesummary

Example output:

Cache summary: myfsc-FSCReadMap
   Files: 0, Bytes: 0, Hits: 0, Misses: 0
Cache summary: myfsc-FSCWriteMap
   Files: 0, Bytes: 0, Hits: 0, Misses: 0

• To set the FSC loglevel to WARN, enter the following command on a single line:

  ./.fscadmin.sh -s http://myserver:4445 ./loglevel/warn

Example output:

loglevel done.

• To cause an idle shutdown, waiting no more than 1 hour, enter the following command on a single line:

  ./.fscadmin.sh -s http://myserver:4445 ./shutdown/maxwait/3600

Example output:

FSC will shutdown when idle, or in 3600 seconds...

• The following command prepopulates FSC using the loadfscache/filelist command:

  fscadmin -s http://server:port -f ticketsfile ./loadfscache/filelist
FSCWholeFileCacheUtil

Purges files from the whole file cache. Purge the cache based on file age, subdirectory size, and/or available disk space. This utility also purges misplaced files.

By default, this utility is stored in the FSC_HOME/bin directory.

**SYNTAX**

FSCWholeFileCacheUtil [-clear | -purge] [-d=cache-root-directory-path]
[-l=file-name] [-maxf=maximum-files-per-subdirectory]
[-maxage=maximum-file-age] [-pctfree=percent-disk-free]
[-temp=temporary-cache-directory-path] [-h]

**ARGUMENTS**

- **clear**
  Clears all permanent cache files from the cache.

- **purge**
  Performs a single purge cycle on the cache.

- **d**
  Specifies the version subdirectory path of the cache. If not set, the current directory is used.

  Use with either the -clear or -purge arguments.

- **l**
  Specifies the full path name of the log file. If not set, no logging is performed.

  Use with either the -clear or -purge arguments.

- **maxf**
  Specifies the maximum number of files per subdirectory. If the number of files stored in the subdirectory exceeds the configured amount, files are automatically purged to the maximum number of files specified.

  Valid values are **1024** through **10240**. The default setting is **10240**.

  Use only with the -purge argument.

- **maxage**
  Specifies (in days) the maximum file age. All cache files older than the specified age are purged.

  Valid values are **0** through **3650**. The default setting is **3650**. Setting this argument to **0** clears the entire cache.

  Use only with the -purge argument.

- **pctfree**
  Specifies the minimum percentage of disk space to remain free.

  Valid values are **0** through **100**. The default setting is **0**. Setting this argument to **0** purges the cache by only the subdirectory count specified by the -maxf argument and the file age specified by the -maxage argument. Setting this argument to **100** clears the entire cache.

  Use only with the -purge argument.
**-temp**
Specifies the directory location to store temporary cache purge data. The default setting is the directory set by the **-d** argument.

Use only with the **-purge** argument.

**-h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.
Monitors the local FMS cache (FCC).

By default, this utility is stored in the TC_ROOT/tecs/bin directory.


ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note: If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user's default group is assumed.

none
Prints whether FCC is online, displays FCC versions and run time if running.

-help or -h or -?
Displays help for this utility. Help can be localized if the FCC is running.

-x
Prints FCC cache statistics summary, including whole file read, whole file write, and segment cache statistics. In addition, this option displays all offline FSC connections.
Offline FSC connections are those that have been attempted and failed but have not yet been restored to service.

-status
Prints FCC status and statistics summary, including whole file read, whole file write, and segment cache statistics, as well as client request statistics, FSC upload and download statistics, and the currently active assigned FSC. Assigned FSCs are listed as active by default, even if they have never been used. FSC addresses that have been attempted and failed, but have not yet been restored to service, are reported as offline.

-config
Displays the name of the local FCC configuration file used for bootstrapping.

-purge
Purges all files from the FCC cache, including the segment cache extent files.

-clear
Purges the cache completely. This removes all data but retains the segment cache extent files.

-reconfig
Reloads the FCC configuration. Use this option to update a running FCC with changes made to the local FCC XML configuration files.

-restart
Stops (if running) and restarts the FCC, effectively reloading the configuration. Environment variables still override any configuration file settings or changes.

-start
 Starts the FCC if it is not already started.

-stop
Shuts down the FCC process immediately if no other clients are connected or if all connected clients are idle. Otherwise, a warning message is displayed.

-kill
Immediately and unconditionally shuts down the FCC process.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities and the following:

- The FMS_HOME variable must be set to a valid FMS server directory.
- The JAVA_HOME variable must be set to a valid Java SDK directory.
- FCC must be running.
- This command must be run in an FMS operating environment.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
None.
**EXAMPLES**

- To determine whether the FCC is running, run the `fccstat` command. For example:

  C:\Tc2007\portal\fms\bin>fccstat

  Example output:

  fccstat: FCC offline.

- To display help for this utility and a statistic summary, run the `fccstat` command with the `status` argument. For example:

  C:\Tc2007\portal\fms\bin>fccstat -? -x-status fccstat -?:

  Example output:

  FMS Client Cache Status Utility
  fccstat command line options:
  no options     Display FCC component versions and execution time.
  -help          Display this help message.
  -h             Display this help message.
  -?             Display this help message.
  -x             Display FCC status summary.
  -status        Display complete FCC status.
  -config        Display FCC configuration filename.
  -purge         Clear the FCC Cache and remove extents.
  -clear         Clear the FCC Cache and retain extents.
  -remove (UID)  Remove a UID from the FCC Cache.
  -restart       Stop and restart the FCC.
  -stop          Stop the FCC if no clients are connected.
  -kill          Stop the FCC even if clients are connected.
  fccstat -x:
  Cache:
    segment: 1 files, 507904 bytes.
    read:   38 files, 268433410 bytes.
    write:  0 files, 0 bytes.
  Servers:
    0 files downloaded.
    Active assigned FSC is 'http://127.0.0.1:4444/'
  fccstat -status:
  Cache:
    segment: 1 files, 507904 bytes, 0 hits, 0 misses.
    read:   38 files, 268433410 bytes, 0 hits, 0 misses.
    write:  0 files, 0 bytes.
  Clients:
    3 Client connections established.
    6 Client request messages processed.
    5 Client response messages processed.
    0 Client status messages processed.
    0 Client error messages processed.
  Servers:
    0 segments downloaded.
    0 files downloaded.
    0 files uploaded.
    Active assigned FSC is 'http://127.0.0.1:4444/'

- To display the name of the local FCC configuration file and clear the cache, run the `fccstat` command with the `clear` argument. For example:

  C:\Tc2007\portal\fms\bin>fccstat -config -clear

  Example output:

  fccstat -config:
Z:\pkmvobl\fms\build\install\fms/fcc.xml
fccstat -clear:
Cache cleared.

- To purge a UID from the cache, run the `fccstat` command with the **remove** argument. For example:

  C:\Tc2007\portal\fms\bin>fccstat
  -remove abcd1234fedc9876ef005678ba005432

  Example output:

  fccstat -remove:
  UID abcd1234fedc9876ef005678ba005432 has been removed from the FCC Cache.

- To stop the FCC, run the `fccstat` command with the **stop** argument. For example:

  C:\Tc2007\portal\fms\bin>fccstat -stop

  Example output:

  fccstat -stop:
  FCC Stopped.

- To restart the FCC, run the `fccstat` command with the **restart** argument. For example:

  C:\Tc2007\portal\fms\bin>fccstat -restart

  Example output:

  fccstat -restart:
  FCC Started.

- To shut down the FCC process immediately when no clients are connected or all clients are idle, run the `fccstat` command with the **stop** argument. For example:

  C:\Tc2007\portal\fms\bin>fccstat -stop

  Example output:

  fccstat -stop:
  FCC Stopped.

- To kill the FCC, run the `fccstat` command with the **kill** argument. For example:

  C:\Tc2007\portal\fms\bin>fccstat -kill

  Example output:

  fccstat -kill:
  FCC Stopped.

- To print an FCC status and statistics summary, including whole file read, whole file write, and segment cache statistics, as well as client request statistics, FSC
upload and download statistics, and the currently assigned FSC, run the `fccstat` command with the `status` argument. For example:

C:\Tc2007\portal\fms\bin>fccstat -status

Example output:

```
fccstat -status:
Cache:
    segment: 19 files, 52854784 bytes, 590722 hits, 1781 misses.
    read: 19 files, 134216705 bytes, 106253 hits, 38 misses.
    write: 0 files, 0 bytes.
Clients:
    5 Client connections established.
    388741 Client request messages processed.
    392284 Client response messages processed.
    79 Client status messages processed.
    1 Client error messages processed.
Servers:
    839 segments downloaded.
    19 files downloaded.
    0 files uploaded.
    Active assigned FSC is 'http://127.0.0.1:4444/'
```

- Entering `fccstat -reconfig` and the operation is successful returns the following message:

  FCC successfully reconfigured.

- Entering `fccstat -reconfig` and the operation is not successful returns the following message:

  FCC reconfiguration failed:
  Cannot reconfigure FCC pipe name.
install_encryptionkeys

Creates encryption keys for the File Management System (FMS). This utility is initially invoked by the Teamcenter installation procedure to install the predefined encryption keys. After the initial installation, this utility can be used to list, modify, and delete encryption keys.

SYNTAX

install_encryptionkeys [-u=user-id [-p=password | -pf=password-file] -g=group] -f=install | list | modify | delete | install_mediator_key [-h]

ARGUMENTS

-u
Specifies the user ID.
This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.
If used without a value, the system assumes a null value.
If this argument is not used, the system assumes the user-ID value to be the password.
This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
For more information about managing password files, see Manage password files.
This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.
If used without a value, the user’s default group is assumed.

-f
Specifies one of the following functions:
install Installs the default encryption keys in the database.
list Lists the encryption keys currently installed in the database.
modify Modifies one or more encryption keys in the database.
Chapter 22  Volume and database management utilities

- **delete** Deletes the encryption keys from the database.
- **install_mediator_key** Prompts the user to enter the Teamcenter Security Services Mediator Password Value key. The key is installed in the **EncryptionKey** table.
- **-h** Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
None.

**EXAMPLES**
- To install the default encryption keys, enter the following command on a single line:

```
install_encryptionkeys -u=infodba -p=password -g=dba -f=install
```
load_fcccache

Prepopulates the FMS client cache (FCC) using ITK calls, resulting in improved cache performance. You can also use this utility to read the PLM XML file generated by the bomwriter utility, and then parse the UIDs and generate read tickets. The read tickets can be prepopulated on the target FCC process. Additional options include:

- Prepopulate the FCC based on dataset type.
- Manage integrated clash management (ICM) behavior.
- Copy JT files to a local staging area.
- Update the PLM XML file to point to local JT files.

**SYNTAX**

```bash
load_fcccache [-u=user-id [-p=password | -pf=password-file] -g=group] 
-f=list [-plmxml=file-name] [-dataset_type=dataset-type-name] 
-f=load [-plmxml=file-name] [-input_file=file-name] [-dataset_type=dataset-type-name] 
[-latest_version=yes | no] [-output_file=file-name] [-copy_out=directory] 
[-output_plmxml=file-name] [-use_absolute_location=yes | no] 
[-config=configuration-file] [-log_filename=log-file-name] [-log_types=levels] 
[-copy_out_lifetime=value] [-lifetime_check = yes | no] 
[-lifetime_check_interval=value] [-lifetime_process_limit=value] [-purge] [-h]
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the user-ID value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.
  For more information about managing password files, see [Manage password files](#).
This argument is mutually exclusive with the \texttt{-p} argument.

\texttt{-g}

Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

\texttt{-f}

Runs either the \texttt{list} or \texttt{load} function.

The \texttt{list} function lists specified UIDs, which can then be used to prepopulate the FCC using the \texttt{load} function. The \texttt{list} function accepts the following input:

\begin{itemize}
\item \texttt{-plxml=\textit{file-name}}
  Lists the UIDs of all datasets in the PLM XML file generated by the \texttt{bomwriter} utility.
\item \texttt{-dataset_type=\textit{dataset-type-name}}
  Lists the UIDs of all datasets of the specified dataset type.
\end{itemize}

The \texttt{load} function prepopulates the FCC as specified by the following input:

\begin{itemize}
\item \texttt{-plxml=\textit{file-name}}
  Prepopulates the FCC with all the datasets in the PLM XML file generated by the \texttt{bomwriter} utility.
\item \texttt{-input_file=\textit{file-name}}
  Prepopulates the FCC based on the UIDs previously generated by the \texttt{list} function.
\item \texttt{-dataset_type=\textit{dataset-type-name}}
  Prepopulates the FCC with all datasets of the specified dataset type.
\end{itemize}

\texttt{-latest_version}

Use \texttt{yes} to prepopulate the FCC with only the latest dataset version or \texttt{no} to use the version specified by the UID. The default value is \texttt{yes}.

Use this argument with the \texttt{load} function.

\texttt{-output_file}

Direct the output to a specific file by specifying a file name. If this argument is not used, the default output file is \texttt{stdout}.

\texttt{-copy_out}

Copy each downloaded file to a specific directory by specifying the directory name.

Use this argument with the \texttt{load} function.

\texttt{-output_plxml}

If the \texttt{load} function is set to prepopulate the FCC with a PLM XML file, and the \texttt{-copy_out} argument is used to specify a specific directory location to which copies of each downloaded file is loaded, and then use this argument to update the PLM XML with the same directory location as specified by the \texttt{-copy_out} argument.

You must use this argument with the \texttt{load} function and the \texttt{-copy_out} argument.
-use_absolute_location
Use yes to create absolute location references in the output PLM XML file. For more information about configuring default settings, use -h -config.

-config
Specifies the file containing default settings. For more information about configuring default settings, use -h -config.

-log_filename
Specifies the file to which logging messages are printed. If not set, the default location is the stderr file. For more information about configuring logging messages, use -h -log_types.

-log_types
Specifies which types of messages are logged. Valid values are:

- NONE
- ERROR
- WARNING
- INFORMATION
- DEBUG
- PERFORMANCE
- ALL

Combine log types using the plus (+) symbol as a delimiter. For example:

ERROR+WARNING+INFORMATION

For more information about configuring logging messages, use -h -log_types.

-copy_out_lifetime
Specifies the lifetime date of the files stored in the directory specified by the -copy_out directory. The directory is scanned for files that are older than the specified lifetime date. Use this argument to automatically clean up older files that are no longer used. This argument must be used in conjunction with the -copy_out argument.

Use -h -config to display more information about configuring default settings.

-lifetime_check
Use yes to scan the directory specified by the -copy_out directory during startup and perform a lifetime check. The lifetime check is performed in random order. This argument must be used in conjunction with the -copy_out and -copy_out_lifetime arguments.

Use -h -config to display more information about configuring default settings.

-lifetime_check_interval
Specifies how frequently to scan the directory specified by the -copy_out directory and perform a random cleanup based on the interval value. For example, if set to 10, a lifetime check is performed once every ten executions.
This argument must be used in conjunction with the `-copy_out`, `-copy_out_lifetime` and `-lifetime_check` arguments. If the directory specified by the `-copy_out` argument contains many files, and if it is not important to check the lifetime on each execution, setting the `-lifetime_check_interval` argument can improve performance.

Use `-h -config` to display more information about configuring default settings.

**-lifetime_process_limit**

Specifies how long (in seconds) lifetime processing can continue. The lifetime check is performed in random order. If the directory specified by the `-copy_out` directory contains a large number of files, lifetime processing can be lengthy. You can use this argument to randomly process a subset of the files by setting a low value. This argument must be used in conjunction with the `-copy_out`, `-copy_out_lifetime` and `-lifetime_check` arguments.

Use `-h -config` to display more information about configuring default settings.

**-purge**

Purges all files from the directory specified by the `-copy_out` directory.

**-h**

Displays help for this utility. Use `-h -config` to display more information about configuring default settings. Use `-h log_types` for more information about logging output.

**ENVIRONMENT**

As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**

As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**

None.

**EXAMPLES**

To ensure the JT files referenced in the `xyz001.plmxml` file are using the same dataset versions as when it was generated (rather than the latest version), enter the following command on a single line:

```
load_fcccache -u=infodba -p=password -f=load -plmxml=xyz001.plmxml -latest_version=no -copy_out=plmxml_cache -output_plmxml=xyz001_local.plmxml
```
## load_fscache

Reads a PLM XML file, parses it for globally unique identifiers (GUIDs) and generates read tickets for files referenced in the PLM XML file. The read tickets can be stored in the operating system (OS) file. The utility can also be used to load the file server cache (FSC) of a target/distant FSC serving the same database using the read tickets file.

### SYNTAX

```
load_fscache [-u=user-id {-p=password | -pf=password-file} -g=group]
{ [-f=list [-plmxml=file-name | -dataset_type=dataset-type-name]} ]
{ [-f=load -fsctargets=string {[plmxml=file-name] [-input_file=file-name]}}
{ [-dataset_type=dataset-type-name] } [-latest_version= yes | no]
[-output_file=file-name] [[-config=file-name][-log_filename=file-name]
[-log_types=log-level] [-h[-config] [-log_types] ]
```

### ARGUMENTS

- **-u**
  Specifies the user ID.
  This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the `-u` and `-p` arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the `user-ID` value to be the password.
  This argument is mutually exclusive with the `-pf` argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the `user-ID` value to be the password.
  For more information about managing password files, see *Manage password files*.
  This argument is mutually exclusive with the `-p` argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-f**
  Runs either the `list` or `load` function.
Chapter 22  Volume and database management utilities

The list function creates a list of GUIDs for object in the specified PLM XML file, which can then be used to prepopulate the FSC using the load function. The list function requires one of the following input arguments:

- `-plmxml=file-name`
  Lists the GUIDs of all datasets in the specified PLM XML file.

- `-dataset_type=dataset-type-name`
  Lists the GUIDs of all datasets of the specified dataset type.

The load function prepopulates the FSCs specified in the `-fsctargets` argument using the information provided by one of the following input arguments:

- `-plmxml=file-name`
  Prepopsulates the FSC with all the datasets in the specified PLM XML file.

- `-input_file=file-name`
  Prepopsulates the FSC based on the GUIDs previously generated by the list function.

- `-dataset_type=dataset-type-name`
  Prepopsulates the FSC with all datasets of the specified dataset type.

- `-latest_version`
  Specifies the dataset version to use to prepopulate the FSC. Set to yes to send the latest dataset version or no to use the version specified by the GUID. The default value is yes.

Use this argument with the load function.

- `-output_file`
  Directs the output to a specific file by specifying a file name. If this argument is not used, the default output file is stdout.

- `-config`
  Specifies the file containing default settings. For more information about configuring default settings, use the `-h -config` arguments.

- `-log_filename`
  Specifies the file to which logging messages are printed. If not set, the default location is the stderr file. To display information about configuring logging messages, use the -h and -log_types arguments together.

- `-log_types`
  Specifies which types of messages are logged. Valid values are:

  NONE

  ERROR

  WARNING

  INFORMATION
DEBUG

PERFORMANCE

ALL

Combine log types using the plus (+) symbol as a delimiter. For example:

ERROR+WARNING+INFORMATION

To display information about configuring logging messages, use the -h and -log_types arguments together.

-h
Displays help for this utility. Use the -h and -config arguments together to display more information about configuring default settings. Use -h and -log_types arguments together to display information about logging output.

ENVIRONMENT

As specified in Manually configuring your environment for Teamcenter utilities.

FILES

As specified in Log files produced by Teamcenter.

RESTRICTIONS

None.

EXAMPLES

- To display a list of GUIDs for datasets in the abc001.xml file:
  
  load_fscache -u=infodba -p=password -g=dba -f=list -plmxml=abc001.xml

- To prepopulate the FSC for cvg001 (identified with fscid fsc_cvg001_infodba) with the datasets in the abc001.xml file:

  load_fscache -u=infodba -p=password -g=dba -f=load -plmxml=abc001.xml -fsctargets=fsc_cvg001_infodba

- To create a readtickets.txt file containing the GUIDs of the datasets in the abc001.xml file:

  load_fscache -u=infodba -p=password -g=dba -f=list -plmxml=abc001.xml -output_file=readtickets.txt

- To prepopulate the FSC for cvg001 (identified with fscid fsc_cvg001_infodba) with the datasets in the readtickets.txt file:

  load_fscache -u=infodba -p=password -g=dba -fsctargets=fsc_cvg001_infodba -f=load -input_file=readtickets.txt

- To create a readtickets.txt file containing the GUIDs of all the CAEAnalysisDS datasets:

  load_fscache -u=infodba -p=password -g=dba -f=list -dataset_type=CAEAnalysisDS -output_file=readtickets.txt

- To prepopulate the FSC for cvg001 (identified with fscid fsc_cvg001_infodba) with the datasets in the abc001.xml file and store all types of log messages to the load.out file:

  load_fscache -u=infodba -p=password -g=dba -fsctargets=fsc_cvg001_infodba -f=load -plmxml=abc001.xml -log_types=ALL -log_filename=c:\temp\load.out
Chapter

23  Systems Engineering utilities
**add_req_templates**

Installs the default Microsoft Word and Excel requirements management templates.

**Note**  This utility usually runs during the installation and upgrade processes and does not need to be run manually. However, if the installation or upgrade does not install the templates, you can run this utility manually.

**SYNTAX**

```
add_req_templates  [-u=user-id] [-p=password | -pf=password-file] [-g=group]
                    [-f=path-of-folder -t={SpecTemplate | ObjectTemplate | ExcelTemplate}]
                    [-i=path-of-file]
                    [-h]
```

**ARGUMENTS**

- **u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note**  If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **f**
  Specifies the path of the folder from which the templates are imported. Use this argument to import multiple templates from the same folder.
  If you use this argument, you must also use the **-t** argument.
-t
Specifies the template type being imported. It is either SpecTemplate, ObjectTemplate, or ExcelTemplate.

If you use this argument, you must also use the -f argument.

-i
Specifies the path of the template file to be imported. Use this argument to import a single template.

-h
Displays help for this utility.

ENVIRONMENT
As specified in Manually configuring your environment for Teamcenter utilities.

FILES
As specified in Log files produced by Teamcenter.

RESTRICTIONS
- To use this utility, you must be a user with system administration privileges or be granted authorization by a user with system administration privileges.
- The -f and -t arguments must be used together if they are used.
Chapter 23  Systems Engineering utilities

add_se_templates

Installs the system engineering templates, diagramming templates, and Visio
templates required for Systems Engineering.

Note This utility usually runs during the installation and upgrade processes and
does not need to be run manually. However, if the installation or upgrade
does not install the templates, you can run this utility manually.

SYNTAX

add_se_templates [-u=user-id] [-p=password | -pf=password-file] [-g=group]
-dir=templates-directory
[-h]

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this
argument is used without a value, the operating system user name is used.

Note If Security Services single sign-on (SSO) is enabled for your server, the -u
and -p arguments are authenticated externally through SSO rather than
being authenticated against the Teamcenter database. If you do not supply
these arguments, the utility attempts to join an existing SSO session. If no
session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the
password.

This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null
value. If this argument is not used, the system assumes the user-ID value to be
the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-dir
Specifies the directory containing the Systems Engineering templates; for example,
${TC_INSTALL_DIR}/systemsengineering.
**-h**
Displays help for this utility.

**ENVIRONMENT**
As specified in *Manually configuring your environment for Teamcenter utilities*.

**FILES**
As specified in *Log files produced by Teamcenter*.

**RESTRICTIONS**
To use this utility, you must be a user with system administration privileges or be granted authorization by a user with system administration privileges.
req_convert_to_plaintext

Removes rich text, such as images, URLs, and OLEs, from requirements and converts the body text into plain text. It also applies the content type as plain text to the requirement revision.

**SYNTAX**

```plaintext
```

**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  ![Note](image)
  If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-i**
  Specifies the specification element’s item ID to convert.

- **-r**
  Specifies the revision’s ID.

- **-h**
  Displays help for this utility.
Systems Engineering utilities

ENVIRONMENT
As specified in *Manually configuring your environment for Teamcenter utilities*.

FILES
As specified in *Log files produced by Teamcenter*.

RESTRICTIONS
To use this utility, you must be a user with system administration privileges or be granted authorization by a user with system administration privileges.
req_migrate_fulltext

Migrates all full text from the input PLM XML file to the Teamcenter database. It can create or update the full text and set the rich text contents of full text.

SYNTAX

```
req_migrate_fulltext [-u=user-id] [-p=password | -pf=password-file] [-g=group] [-file=complete-path-to-plmxml-file] [-h]
```

ARGUMENTS

-u
Specifies the user ID.

This is generally infodba or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

Note: If Security Services single sign-on (SSO) is enabled for your server, the -u and -p arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

-p
Specifies the password.

If used without a value, the system assumes a null value.

If this argument is not used, the system assumes the user-ID value to be the password.

This argument is mutually exclusive with the -pf argument.

-pf
Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the user-ID value to be the password.

For more information about managing password files, see Manage password files.

This argument is mutually exclusive with the -p argument.

-g
Specifies the group associated with the user.

If used without a value, the user's default group is assumed.

-file
Specifies the complete path of input PLM XML file.

-h
Displays help for this utility.

ENVIRONMENT

As specified in Manually configuring your environment for Teamcenter utilities.

FILES

As specified in Log files produced by Teamcenter.
RESTRICTIONS

To use this utility, you must be a user with system administration privileges or be granted authorization by a user with system administration privileges.
req_migrate_grm

Migrates all trace links from the input PLM XML file to the Teamcenter database. It creates trace links between the source objects and target objects as specified in the PLM XML file. Trace links that already exist in the database are skipped.

**SYNTAX**


**ARGUMENTS**

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  **Note** If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user's default group is assumed.

- **-file**
  Specifies the complete path of input PLM XML file.

- **-h**
  Displays help for this utility.

**ENVIRONMENT**

As specified in **Manually configuring your environment for Teamcenter utilities**.
FILES

As specified in *Log files produced by Teamcenter*. 

RESTRICTIONS

To use this utility, you must be a user with system administration privileges or be granted authorization by a user with system administration privileges.
req_migrate_richtext

Migrates rich text from Teamcenter 2007 to Teamcenter 8 and later versions. It is required only in special cases to recover rich text from the migrated data that is inaccessible because of format differences.

SYNTAX

```
req_migrate_richtext [-u=userid] [-p=password | -pf=password-file] [-g=group] [-h]
```

ARGUMENTS

- **-u**
  Specifies the user ID.
  This is generally **infodba** or another user with administration privileges. If this argument is used without a value, the operating system user name is used.

  [Note] If Security Services single sign-on (SSO) is enabled for your server, the **-u** and **-p** arguments are authenticated externally through SSO rather than being authenticated against the Teamcenter database. If you do not supply these arguments, the utility attempts to join an existing SSO session. If no session is found, you are prompted to enter a user ID and password.

- **-p**
  Specifies the password.
  If used without a value, the system assumes a null value.
  If this argument is not used, the system assumes the **user-ID** value to be the password.
  This argument is mutually exclusive with the **-pf** argument.

- **-pf**
  Specifies the password file. If used without a value, the system assumes a null value. If this argument is not used, the system assumes the **user-ID** value to be the password.
  For more information about managing password files, see **Manage password files**.
  This argument is mutually exclusive with the **-p** argument.

- **-g**
  Specifies the group associated with the user.
  If used without a value, the user’s default group is assumed.

- **-h**
  Displays help for this utility.

ENVIRONMENT

As specified in **Manually configuring your environment for Teamcenter utilities**.

FILES

As specified in **Log files produced by Teamcenter**.
RESTRICTIONS

To use this utility, you must be a user with system administration privileges or be granted authorization by a user with system administration privileges.
Index

Numerics/Symbols

4gd_populate_cd utility ................. 5-2
4th Generation Design (4GD) utilities 5-2
4gd_populate_cd ................. 5-2
manage_effectivity_options ........... 5-5
ptn0_persist_dynamicMembers ........... 5-7
Ptn0_set_is_partition_owned_true .... 5-9
purge_historical_revisions .......... 5-10
validate_revrule_effectivity ........ 5-12

A

Access Manager utilities
am_install_tree .................. 2-35
ada_utility ..................... 2-37
add_req_templates utility ........ 23-2
add_se_templates utility .......... 23-4
add_specmgr_templates ............ 19-2
add_specmgr_templates utility ..... 19-2
administration.log file ........... 1-3
Aerospace and Defense utilities
default_adschangemanagement:_queries ............... 17-4
default_adsfoundation_queries ....... 17-2
update_locationcode_from_owningorg ... 17-6
am_install_tree utility .......... 2-35
apn_medic utility ............ 3-74

Appearance Configuration utilities
appearance_updater ................ 3-81
appr_update_console ............... 3-78
appr_update_manager .............. 3-76
appr_update_supervisor .......... 3-77
appr_working_scheduler .......... 3-84
assy jt creator .................... 10-20
create_appearances .............. 3-87
fix_appearances .................. 3-89
appearance_updater_utility ...... 3-81
appr_update_console_utility ...... 3-78
.appr_update_env file ............ 3-85
appr_update_manager_utility ...... 3-76
appr_update_supervisor_utility .. 3-77
appr_working_scheduler_utility .. 3-84
AppRegUtil utility ............. 2-152
Assembly on-demand sync .......... 7-130
assy jt_creator utility ............ 10-20
Attribute definitions element, import/export file ............ 11-22
Attribute field, import/export file ............. 11-21
Attribute mapping
        tc_config_attr_mapping utility ...... 2-126
Teamcenter to external attributes .......... 2-126
Attribute sharing utilities
tc_config_attr_mapping ............ 2-126
attribute_export utility ........ 7-2
Audit Manager utilities
audit_archive .................. 13-22
audit_purge .................. 13-19
combine_audit_files ............ 13-26
defineAuditDefs ................ 13-39
migrate_audit_configs .......... 13-14
migrate_audit_data ............. 13-16
audit_archive utility .......... 13-22
audit_purge utility .......... 13-19
Automotive Edition utilities
gmo_migrate_usage_nvses .......... 16-38
rdv_import_usage ................ 16-52

B

Backup and Recovery utilities
backup_modes .................. 13-33
backup_xmlinfo .................. 13-35
sfr_instances .................. 13-37
backup_modes utility .......... 13-33
backup_xmlinfo utility .......... 13-35
Baseline revision, purging ......... 3-47
Batch meshing utilities
cae_execute_datamap ............ 20-13
cae_execute_structuremap ...... 20-15
epm_import_batch_meshing_ results ........ 20-8
epm_notify_batch_meshing_ results ........ 20-11
Batch mode reporting .......... 2-147, 2-150
batch_export_translate_import utility .. 7-8
batchmode_clearance_analysis ....... 3-72
BLD keyword .................. 11-22, 11-33
bmide_commontemplategenerator utility .......... 2-50
bmide_comparator utility .......................... 2-52
bmide_consolidator utility .......................... 2-53
bmide_deployment_lock utility .......................... 2-54
bmide_generate_compare_report
utility ............................................. 2-58
bmide_generate_condition_report
utility ............................................. 2-59
bmide_generate_datamodel_doc_report
utility ............................................. 2-60
bmide_generate_datamodel_report
utility ............................................. 2-63
bmide_generatecode utility .......................... 2-56
bmide_manage_batch_lsvs utility .......................... 2-65
bmide_manage_templates utility .......................... 2-70
bmide_postupgradetote utility .......................... 2-72
bmide_setupknowledgebase utility .......................... 2-74
bom_expand utility .................................. 3-6
bom_roll_up_report utility ................................ 3-11
bomwriter utility ..................................... 9-2
BSM keyword ......................................... 11-22, 11-33
build(|) ts_index utility ................................ 12-2
Business Modeler IDE utilities
bmide_commontemplategenerator .......................... 2-50
bmide_comparator ..................................... 2-52
bmide_consolidator ..................................... 2-53
bmide_deployment_lock .................................. 2-54
bmide_generate_compare_report .......................... 2-58
bmide_generate_condition_report .......................... 2-59
bmide_generate_datamodel_doc_report
report ............................................... 2-60
bmide_generate_datamodel_report .......................... 2-63
bmide_generatecode ..................................... 2-56
bmide_manage_batch_lsvs .................................. 2-65
bmide_manage_templates .................................. 2-70
bmide_postupgradetote .................................... 2-72
business_model_extractor .................................. 2-76
business_model_updater .................................. 2-78
change datasets ......................................... 2-80
clips_dataset_upload ..................................... 2-82
deploy_archive ......................................... 2-90
execute_rbf_rules ....................................... 2-93
get_key_definition ....................................... 2-97
get_key_string .......................................... 2-98
getglobalconstantvalue ................................... 2-95
getpropertyconstantvalue .................................. 2-100
gettypeconstantvalue ..................................... 2-102
manage_icon_files ....................................... 2-104
manage_model_files ....................................... 2-106
mflk_update ............................................ 2-108
package_live_updates ..................................... 2-110
process_action_rules ...................................... 2-112
business_model_extractor utility .......................... 2-76
business_model_updater utility .......................... 2-78

C
CAE utilities
cae_execute_cae_accountability_check
utility .................................................. 20-21
cae_execute_datamap ........................................ 20-13
cae_execute_structuremap .................................... 20-15
cae_migrate_atl_preferences .................................. 20-2
cae_migrate_datamap_definition ................................ 20-17
cae_save_result_data ....................................... 20-5
cae_validate_structuremap .................................... 20-19
epm_import_batch_messaging_results .......................... 20-8
epm_notify_batch_messaging_results .......................... 20-11
cae_execute_cae_accountability_check
utility .................................................. 20-21
cae_execute_datamap utility .................................. 20-13
cae_execute_structuremap utility ................................ 20-15
cae_migrate_atl_preferences utility .......................... 20-2
cae_migrate_datamap_definition utility .......................... 20-17
c_writer utility ........................................... 10-2
change_datasets utility ..................................... 2-80
Class definitions element ................................... 11-22
Classification utilities
ics_connect ............................................. 11-10
icsutility .............................................. 11-2
icxml .................................................. 11-6
mrm_export_resources ...................................... 10-13
smlutility .............................................. 11-12
CLASSPATH preference ..................................... 1-6
clean_backpointer utility .................................... 13-70
cleanup_ic_objects utility .................................... 7-11
cleanup_recovery_table utility .................................. 13-72
clear_process_stage_list utility ................................ 6-2
Clearance analysis .......................................... 3-72
clearlocks utility ......................................... 13-65
clips_dataset_upload utility .................................. 2-82
collect_garbage utility ..................................... 22-2
combine_audit_files utility .................................... 13-26
Component on-demand sync ..................................... 7-130
Configure utilities .......................................... 1-1
Consolidation utilities
txml_xfer_ownership ...................................... 7-150
Consumer Packaged Goods utilities
add_specmgr_templates ..................................... 19-2
Content Management
contmgmt_migration_100 utility ................................ 3-4
contmgmt_upgrade_8x utility .................................. 3-2
contmgmt_migration_100 utility ................................ 3-4
contmgmt_upgrade_8x utility .................................. 3-2
Conventions

Syntax definitions .................................. 1-6
convert_distribution_lists utility .................. 13-47
convert_forms utility ................................ 2-84
convert_license_log utility .......................... 13-74
convert_replica_files_to_stubs utility ............. 7-15
Converting distribution lists ......................... 13-47
create_applications utility ......................... 3-87
create_or_update_bbox_and_tso utility ............. 3-14
create_project utility ................................ 13-51
create_validationdata utility ....................... 2-141
Creating external attribute mapping .................. 2-126
Creating FMS encryption keys ....................... 22-71
Creating projects .................................. 13-51
Customization utilities
  convert_forms ..................................... 2-84
taxonomy ........................................... 2-114

D

DAT keyword ......................................... 11-22, 11-34
Data access management utilities
  ada_util ............................................ 2-37
  install_authorization_rules ....................... 2-43
  install_callback ................................ 2-46
  install_vminfo_acl ................................ 2-48
Data sharing utilities
  attribute_export .................................. 7-2
  batch_export_translate_import .................... 7-8
  cleanup_ic_objects ................................ 7-11
  convert_replica_files_to_stubs .................... 7-15
data_share ......................................... 7-20
data_sync .......................................... 7-39
database_verify ..................................... 7-17
diff_xml ............................................. 7-56
distributed_execute ................................ 7-58
dsa_util ............................................. 7-60
ensure_site_consistency ................................ 7-65
export_recovery ..................................... 7-70
idsmined ........................................... 7-74
import_file ....................................... 7-76
item_export ......................................... 7-80
item_import ......................................... 7-86
item_relink ......................................... 7-89
item_rename ......................................... 7-94
item_report ......................................... 7-97
migrate_organization ................................ 7-102
migrate_saved Searches ............................... 7-106
pdx_export ......................................... 7-108
plmxml_export ...................................... 7-110
plmxml_import ...................................... 7-117
plmxml_tm_edit_xsl ................................ 7-121
step_export ......................................... 7-123
step_import ......................................... 7-126
sync_form util ...................................... 7-128
sync_on_demand ..................................... 7-130
texport ............................................. 10-5
txml_export ......................................... 7-136
txml_import ......................................... 7-144
txml_validate ....................................... 7-148
upload_plmxml_struct ................................ 7-155
validate_and_replicate_assembly .................... 7-157
data_share_utility .................................. 7-20
data_sync_utility ................................... 7-39
database_verify_utility .............................. 7-17
dataset_cleanup_utility .............................. 22-11
default_adschangemanagement_queries ............... 17-4
default_adschangemanagement_queries_utility ....... 17-4
default_adsfoundation_queries ...................... 17-2
default_adsfoundation_queries_utility ............. 17-2
default_queries_utility ............................. 12-8
define_auditdefs_utility ............................ 13-29
delete_item_data_utility ............................ 22-15
Deleting external attribute mapping ................ 2-126
deploy_archive_utility ................................ 2-90
diff_xml_utility .................................... 7-56
Directories
  $TC_TMP_DIR ....................................... 1-4
Dispatcher
  Creating request objects .......................... 13-39
  Generating service requests ....................... 13-45
  Managing request objects ........................ 13-43
Dispatcher utilities
  dispatcher_create_rqst ............................. 13-39
  dispatcher_util ................................... 13-43
  runBatch ......................................... 13-100
  SS_GenSvcRqst .................................... 13-45
dispatcher_create_rqst_utility ..................... 13-39
dispatcher_utility .................................. 13-43
distributed_execute_utility ......................... 7-58
Distribution_list_conversion ......................... 13-47
dsa_util_utility .................................... 7-60

E

Effectivity mode utilities
  effupgrade ......................................... 3-70
effupgrade utility ................................... 3-70
Elements
  Attribute definitions ................................ 11-22
  Class definitions .................................. 11-22
  File header ....................................... 11-21
  Group definitions .................................. 11-22
Index

Import/exports files ......................... 11-21
Instances ................................. 11-22
List definitions ......................... 11-21
Subclass definitions .................... 11-22
Embedded Software Manager ............. 21-2
ensure_site_consistency utility ....... 7-65
Environment variables
TC_DATA .................................. 1-1
TC_ROOT ................................ 1-1
TC_SLOW_SQL .......................... 7-153
TC_SQL_DEBUG ........................ 7-153
epm_import_batch_meshing_results
utility ................................... 20-8
epm_notify_batch_meshing_results
utility ................................... 20-11
Error 100228 ............................. 7-55
execute_rbf_rules utility ............... 2-93
export_attr_mappings utility .......... 14-2
export_recovery utility ................. 7-70
get_bvr_structure utility .............. 16-4
generate_client_meta_cache utility ... 13-76
generate_metadata_cache utility ...... 13-80
generate_tc_ps_path utility .......... 3-18
generate_tc_ps_path utility .......... 3-18
generate_metadata_cacutility ........ 13-68
generate_tc_ps_path utility .......... 3-18
get_key_definition utility ............. 2-97
get_key_string utility .................. 2-98
get_qpl_harvester_assemblies utility 9-49
get_globalconstantvalue utility ...... 2-95
get_propertyconstantvalue utility ..... 2-100
get_typeconstantvalue utility ......... 2-102
Global data caching ..................... 7-20, 7-39
global_transfer utility .................. 6-4
gm_assoc_items_to_project utility ..... 16-10
gm_change_itemid_naming_rule
utility ................................... 16-12
gm_change_owner utility ............... 16-14
gm_check_comp_names utility ........... 16-16
gm_clone utility ...................... 16-18
gm_create_material_form_templates
utility ................................... 16-20
gm_find_changed_install_assem
utility ................................... 16-23
gm_get_partspec utility ............... 16-25
gm_get_pds_info utility ............... 16-26
gm_install_usage_queries utility ..... 16-28
gm_ipvbom_export utility ............. 16-32
gm_ipvbom_import utility ............. 16-30
gm_ipvbom_pulldate utility .......... 16-34
gm_migrate_ulink_to_rdvauto
utility ................................... 16-36
gm_migrate_usage_nvses utility ..... 16-38
gm_set_rel_status utility ............. 16-40
gm_split_usage utility .................. 16-42
gm_update_vas_data utility .......... 16-44
gm_upgrade_dlist_objects utility ..... 16-46
gm_validate_xml utility ............... 16-48
gm_vds_utility ......................... 16-50
Group definitions element ............. 11-22
harvest_mmv_index utility ............. 8-1
harvester_jt.pl utility ................. 9-12
harvester.pl utility .................... 9-9
hsm_capacity_alert utility .......... 22-19
hsm_report utility ..................... 22-21
ics_connect utility ..................... 11-10
ics_localize_class_attributes .......... 2-118
icsutility program .................... 11-20
icsutility utility ..................... 11-2
icsxml utility ........................ 11-6
identify_non_structure_edges utility 3-21
identify_non_structure_edges utility 3-21
idsminetd utility ..................... 7-74
import_attr_mappings utility ......... 14-4
Import/Export file example .......... 11-23
import_export_reports utility .......... 2-150
import_file utility .................. 7-76
import_nxcam_post_files utility ..... 10-8
Importing data, using the smutilty
program ................................ 11-20
Importing workflow templates ......... 7-117
index_verifier utility ................. 22-23
install utility ....................... 13-2
install_algebraicformulas ............ 21-2
install_algebraicformulas utility ..... 21-2
install_authorization_rules utility ... 2-43
install_callback utility .............. 2-46
install_default_report_designs
utility ................................ 2-144
install_encryptionkeys utility .......... 22-71
install_event_types utility .......... 13-82
install_handlers utility .............. 6-6
install_kbi utility .................. 21-4
install_vminfo_acl utility .......... 2-48
Installation utilities, tem ............ 13-13
Installing report designs .......... 2-144
installmgr.bat utility ............... 13-58
Instances
Element ................................ 11-22
Integration utilities
proxy_sync ................................ 15-8
tcc_context_upload .................. 15-2
ipa_b_executor utility .............. 10-27
item_export utility ................. 7-80
item_import utility ................. 7-86
item_relink utility ................. 7-94
item_rename utility ............... 7-94
item_report utility ............... 7-97
item_to_part_design utility ....... 3-25
List definitions element ........... 11-21
list_ir_with_bvr utility .......... 16-6
list_types utility ................. 13-87
list_users utility ................. 13-89
load_fcccache utility .......... 22-73
load_fsccache utility .......... 22-77
Localization utilities
find_all_key_value_pairs .......... 2-116
ics_localize_class_attributes .......... 2-118
l10n_import_export ................ 2-120
Log file best practices .............. 1-3
M
Maintenance utilities
pom_audit_manager ............... 13-31
make_user utility ................. 2-131
manage_effectivity_options utility .. 5-5
manage_icon_files utility .......... 2-104
manage_model_files utility .......... 2-106
Manufacturing utilities
cc_writer ................................ 10-2
gcs_import .......................... 10-16
import_nxcam_post_files .......... 10-8
ipa_b_executor ..................... 10-27
mrm_export_resources .............. 10-13
Mapping to external attributes ....... 2-126
mark_for_migrate utility .......... 22-26
material_export ..................... 18-2
material_export utility .......... 18-2
material_import ..................... 18-4
material_import utility .......... 18-4
Materials Management utilities
material_export ..................... 18-2
material_import ..................... 18-4
subscmpl_import_template .......... 18-6
subscmpl_msd_import .............. 18-8
subscmpl_validate_compliance
results ............................. 18-11
mfk_update utility ................. 2-108
mgrstop utility ................. 13-60
migrate_audit_configs utility .......... 13-14
migrate_audit_data utility .......... 13-16
migrate_edata_data utility .......... 21-7
migrate_gmo_to_gcn_events utility .. 16-8
migrate_home_folder utility .......... 13-91
migrate_organization utility .......... 7-102
migrate_saved_searches utility .......... 7-106
migrate_wf_handlers utility .......... 6-10
Migrating Microsoft Office forms ....... 13-49
Migration utilities
convert_distribution_lists .......... 13-47
move_mso_forms ................... 13-49
Monitoring FMS FSC Servers .......... 22-58

K

Keywords
BLD ........................ 11-22, 11-33
BSM ........................ 11-22, 11-33
DAT ........................ 11-22, 11-34
SMD ........................ 11-30, 11-32
SML ........................ 11-22, 11-30
SMV ........................ 11-22, 11-27
STD ................................ 11-21–11-22, 11-26
STV ........................ 11-21, 11-26

L

l10n_import_export utility ........ 2-120
l10n_purge_translations utility .... 2-124
LDAP synchronization ........... 2-129
ldapsync utility ............... 2-129
Index

Monitoring local FMS cache .................................. 22-66
move_mso_forms utility ....................................... 13-49
move_volume_files utility .................................... 22-28
mrm_export_resources utility ................................. 10-13
multiple_svr_variant_configurator utility .................. 3-30

N
nxmlmgr_upgrade_bvrsyncform utility ....................... 14-10
nxmlmgr_upgrade_transforms utility ......................... 14-13

O
Object on-demand sync ....................................... 7-130
Object validation utilities, create_ validationdata ........ 2-141
On-demand sync assembly report .............................. 7-135
On-demand sync component report ............................ 7-135
On-demand synchronization
Assembly ....................................................... 7-130
Component ..................................................... 7-130
Object .......................................................... 7-130
Site support ..................................................... 7-130
Organization utilities
ldapsync ....................................................... 2-129
make_user ...................................................... 2-131

P
package_live_updates utility ................................. 2-110
pdfgenerator utility ......................................... 13-108
pdx_export utility ............................................. 7-108
plmxml_export utility ........................................ 7-110
plmxml_import utility ....................................... 7-117
plmxml_tm_edit_xsl utility .................................. 7-121
pom_audit_manager utility ................................... 13-31
Portfolio, Program and Project Management utilities
create_project .................................................. 13-51
update_project_data .......................................... 13-54
Preferences
CLASSPATH .................................................... 1-6
TC_Administration_Logging .................................. 1-4
TC_Application_Logging ...................................... 1-4, 1-6
TC_force_remote_sites_exclude_ files .......................... 7-20, 7-39
TC_Journaling .................................................. 1-6
TC_Security_Logging .......................................... 1-4
Preferences Manager utilities
preferences_manager ............................................. 2-2
preferences_manager - mode=append ........................ 2-7
preferences_manager - mode=category ....................... 2-9
preferences_manager - mode=cleanup ......................... 2-11
preferences_manager -mode=cleanup_definitions .......... 2-13
preferences_manager - mode=clear ........................ 2-14
preferences_manager - mode=delete ......................... 2-27
preferences_manager - mode=export ......................... 2-16
preferences_manager - mode=generatexml .................. 2-19
preferences_manager - mode=import ......................... 2-21
preferences_manager - mode=migrate ....................... 2-25
preferences_manager - mode=remove ......................... 2-29
preferences_manager - mode=upgradexml ................... 2-31
preferences_manager utility ................................ 2-2
Prerequisites for the utilities ................................ 1-1
process_action_rules utility .................................. 2-112
Product structure maintenance utilities
bom_expand ....................................................... 3-6
bom_roll_up_report .......................................... 3-11
create_or_update_bbox_and_tso ................................ 3-14
generate_tc_ps_path ......................................... 3-18
Index

identify_non_structure_edges ........ 3-21
item_to_part_design .................. 3-25
multiple_svr_variant_configurator ... 3-30
ps_exportconfignxassembly .......... 3-34
ps_rename_bvrs utility .............. 3-37
ps_traverse utility ................. 3-39
ps_upload utility .................... 3-43
purge_baselined_item_revisions ...... 3-47
qsearch_process_queue ............... 3-49
update_bomchanges ................... 3-55, 3-57
update_objecttype utility .......... 3-59
update_project_bom ................... 3-60
upgrade_rev_rules .................... 3-65
upgrade_variants ..................... 3-67
Properties tab ........................ 11-28, 11-33
proxy_sync utility ................... 15-8
ps_exportconfignxassembly utility ... 3-34
ps_rename_bvrs utility .............. 3-37
ps_traverse utility ................. 3-39
ps_upload utility .................... 3-43
ptn0_persist_dynamicMembers utility 5-7
Ptn0_set_is_partition_owned_true utility .................. 5-9
purge_baselined_item_revisions utility .................. 3-47
purge_datasets utility .............. 22-33
purge_file_cache utility .......... 13-93
purge_historical_revisions .......... 5-10
purge_historical_revisions utility 5-10
purge_invalid_subscriptions utility 13-63
purge_processes utility .......... 6-13
purge_volumes utility .............. 22-37
Purging
Baselined item revisions ............. 3-47
Datasets ............................. 22-33
File cache .......................... 13-93
Invalid subscriptions ............... 13-63
Volumes ............................. 22-37
Workflow processes .................. 6-13

Q
qpl_convert_occs2tc .................. 9-15
qsearch_process_queue utility ...... 3-49
Query utilities
build_fts_index ..................... 12-2
default_queries ..................... 12-8
find_apparances ..................... 12-10
find_recently_saved_item_rev ...... 12-14
find_released_item_rev ............. 12-16
query_xml .......................... 12-18
tc_set_query_where_run ............. 12-25
query_xml utility ................... 12-18
R
rc.tc.mgr_<config> utility .......... 13-61
RDV utilities
bomwriter .......................... 9-2
get_qpl_harvester_assemblies ...... 9-49
harvester_it.pl ..................... 9-12
harvester.pl ........................ 9-9
qpl_convert_occs2tc ............... 9-15
rdv_context_download ............... 9-17
rdv_migrate_architecture ........... 9-23
rdv_migrate_part_solutions ........ 9-25
rdv_run_audit_report ............... 9-27
rdv_set_default_variant_condition . 9-30
start_sco_dispatcher ............... 9-32
sync_product_apns .................. 3-74, 9-35
sync_product_variant_data ......... 9-42
tess_server ........................ 14-8
rdv_context_download_utility ...... 9-17
rdv_import_usage utility .......... 16-52
rdv_migrate_architecture utility .. 9-23
rdv_migrate_part_solutions utility 9-25
rdv_run_audit_report ............... 9-27
rdv_set_default_variant_condition . 9-30
reencode_filenames utility .......... 22-39
refile_info utility ................ 14-6
release_man utility ................. 6-15
released_parts_collector utility .. 6-18
rep_batch_report utility .......... 2-147
Report Designer utilities
import_export_reports ............... 2-150
install_default_report_designs .... 2-144
rep_batch_report .................... 2-147
Report designs, installing .......... 2-144
report_volume utility .............. 22-42
Reporting utilities
import_export_reports ............... 2-150
rep_batch_report .................... 2-147
req_convert_to_plaintext utility ... 23-6
req_migrate_fulltext utility ...... 23-8
req_migrate_grm utility ............ 23-10
req_migrate_richtext utility ...... 23-12
reset_user_home_folder utility .... 13-95
review_volumes utility ............. 22-44
runBatch utility .................... 13-100
S
Sample file directory ............... 11-20
Scripts
tc_cshvars ........................ 1-2
tc_profilevars ..................... 1-2
security.log file ................... 1-4
Index

sfr_instances utility .................................. 13-37
site_util utility ...................................... 13-97
Smart codes
  smartuibldr_configure utility .................. 4-2
smartuibldr_configure utility .................. 4-2
SMD keyword ....................................... 11-30, 11-32
sml file format ..................................... 11-20
SML file format ..................................... 11-20
SML keyword ....................................... 11-22, 11-30
smlutility program ................................. 11-20
smlutility utility .................................. 11-12
SMV keyword ....................................... 11-22, 11-27
SS_GenSvcRqst utility ............................. 13-45
start_sco_dispatcher ............................... 9-32
STD keyword ...................................... 11-21–11-22, 11-26
step_export utility ................................. 7-123
step_import utility ................................. 7-126
STV keyword ........................................ 11-21, 11-26
Subclass definitions element .................... 11-22
subscmpl_import_template ......................... 18-6
subscmpl_import_template utility .............. 18-6
subscmpl_msd_import ............................. 18-8
subscmpl_msd_import utility ..................... 18-8
subscmpl_validate_compliance_results utility 18-11
subscmpl_validate_compliance_results utility 18-11
Subscription Manager utilities,
pdfgenerator ........................................ 13-108
Subscription Manager utilities, purge_invalid_subscriptions ........ 13-63
supervisor.enabled preference ................... 3-85
sync_form_utility ................................ 7-128
sync_on_demand utility ............................ 7-130
sync_product_apns utility ....................... 9-35
sync_product_variant_data utility ............. 9-42
syncCache utility ................................ 22-47
Synchronizing on demand ......................... 7-130
Synchronizing user data .......................... 2-129
Syntax definition conventions ................... 1-6
System maintenance utilities
  clean_backpointer ................................ 13-70
cleanup_recovery_table ........................... 13-72
clearlocks ........................................ 13-65
convert_license_log ................................ 13-74
generate_metadata_cache .......................... 13-80
install ............................................. 13-2
install_event_types ................................ 13-82
installmgr.bat ..................................... 13-58
list_types .......................................... 13-87
list_users .......................................... 13-89
mgrstop ............................................ 13-89
migrate_home_folder .............................. 13-91
purge_cache ........................................ 13-93
rc.tc.mgr_<config> ................................ 13-61
reset_user_home_folder ........................... 13-95
site_util .......................................... 13-97
tc_mail_smtp ....................................... 13-102
uih_to_xml ........................................ 13-106
uninstallmgr.bat ................................... 13-59
Systems Engineering utilities
  add_req_templates ............................... 23-2
add_se_templates ................................. 23-4
req_convert_to_plaintext ....................... 23-6
req_migrate_fulltext ............................. 23-8
req_migrate_grm .................................. 23-10
req_migrate_richtext ............................. 23-12

T

Tabs, properties ................................ 11-28, 11-33
taxonomy utility ................................... 2-114
TC_Administration_Logging
  preference ....................................... 1-4
TC_Application_Logging preference ............ 1-6
TC_Application_Logging preference ............ 1-4
tc_config_attr_mapping utility ............... 2-126
tc_cshvars script ................................... 1-2
TC_DATA environment variable .................. 1-1
TC_force_remote_sites_exclude_files
  preference ....................................... 7-20
TC_force_remote_sites_exclude_files
  preference ....................................... 7-39
tc_install.log file ................................ 1-4
TC_Journalning preference ...................... 1-6
tc_mail_smtp utility ............................... 13-102
tc_profilevars script ............................. 1-2
TC_ROOT environment variable .................. 1-1
TC_Security_Logging preference ............... 1-4
tc_set_query_where_run utility ............... 12-25
$TC_TMP_DIR directory ......................... 1-4
tc_workflow_postprocess utility .............. 6-20
tcc_context_upload utility ...................... 15-2
tcxml_import utility .............................. 10-5
tcememstat utility ................................ 22-48
tcxml_export utility .............................. 7-136
tcxml_import utility .............................. 7-144
tcxml_validate utility ............................ 7-148
tcxml_xfer_ownership ............................. 7-150
Teamcenter Automotive Edition utilities
  find_released_datasets ......................... 16-2
  get_bvr_structure ................................ 16-4
gmo_assoc_items_to_project .................... 16-10
gmo_change_itemid_naming_rule ............... 16-12
gmo_change_owner ................................. 16-14
gmo_check_comp_names ............................ 16-16
gmo_clone .................................. 16-18
  gmo_create_material_form_  templates .................................. 16-20
gmo_find_changed_install_assem .................................. 16-20
gmo_get_partspec .................................. 16-25
gmo_get_pds_info .................................. 16-26
gmo_install_usage_queries .................................. 16-28
gmo_ipvbom_export .................................. 16-32
gmo_ipvbom_import .................................. 16-30
gmo_ipvbom_pulldate .................................. 16-34
gmo_migrate_ulink_to_rdvauto .................................. 16-36
gmo_set_rel_status .................................. 16-40
gmo_split_usage .................................. 16-42
gmo_update_vas_data .................................. 16-44
gmo_upgrade_dlist_objects .................................. 16-46
gmo_validate_xml .................................. 16-48
gmo_vds_util .................................. 16-50
listIr_with_bvr .................................. 16-6
migrate_gmo_to_gcn_events .................................. 16-8
Teamcenter Integration for NX utilities
  export_attr_mappings .................................. 14-2
  import_attr_mappings .................................. 14-4
  nxmgr_upgrade_bvrsyncform .................................. 14-10
  nxmgr_upgrade_transforms .................................. 14-13
refile_info .................................. 14-6
Teamcenter Interface utilities,
  AppRegUtil .................................. 2-152
Teamcenter mechatronics process
  management utilities
    install_algebraicformulas .................................. 21-2
    install_kbli utility .................................. 21-4
    migrate_edata .................................. 21-7
    update_gde_types .................................. 21-5
tem utility .................................. 13-13
tess_server utility .................................. 14-8
tspstat utility .................................. 22-49

U
u1h_to_xml utility .................................. 13-106
uninstallmgr.bat utility .................................. 13-59
unmigrate_from_hsm utility .................................. 22-51
update_bomchanges utility .................................. 3-55
update_gde_types utility .................................. 21-5
update_locationcode_from_owningorg  utility .................................. 17-6
update_locationcode_from_owningorg utility .................................. 17-6
updateLoggeddatetogmt .................................. 3-57
update_objecttype utility .................................. 3-59
update_project_bom utility .................................. 3-60
update_project_data utility .................................. 13-54
Upgrading BOM items in projects .................................. 3-60
upgrade_nx_cam_templates utility .................................. 10-11
upgrade_rev_rules utility .................................. 3-65
upgrade_variants utility .................................. 3-67
upgrade_vendor_part utility .................................. 22-53
upload_plxml_struct utility .................................. 7-155
Utilities
  contmgmt_migration_100 .................................. 3-4
  contmgmt_upgrade_8x .................................. 3-2
  l10n_purge_translations .................................. 2-124

V
validate_and_replicate_assembly utility .................................. 7-157
validate_revrule_effectivity .................................. 5-12
validate_revrule_effectivity utility .................................. 5-12
Variant model
  Upgrading to .................................. 3-67
  Verification verdicts .................................. 7-43
  verify_tasks utility .................................. 6-24
Visualization utilities
  harvest_mmv_index .................................. 8-1
  vm_report utility .................................. 22-54
  vms_upgrade utility .................................. 22-50
Volume and database management utilities
  collect_garbage .................................. 22-2
datasetCleanup .................................. 22-11
delete_item_data .................................. 22-15
hsm_capacity_alert .................................. 22-19
hsm_report .................................. 22-21
index_verifier .................................. 22-23
mark_for_migrate .................................. 22-26
move_volume_files .................................. 22-28
purge_datasets .................................. 22-33
purge_volumes .................................. 22-37
reencode_filenames .................................. 22-39
report_volume .................................. 22-42
review_volumes .................................. 22-44
syncCache .................................. 22-47
tcememstat .................................. 22-48
tspstat .................................. 22-49
unmigrate_from_hsm .................................. 22-51
upgrade_nx_cam_templates .................................. 10-11
upgrade_vendor_part .................................. 22-53
vm_report .................................. 22-54
vms_upgrade .................................. 22-50
xml_validator .................................. 22-56

W
Workflow templates, importing .................................. 7-117
Workflow utilities
  clear_process_stage_list .................................. 6-2
global_transfer .................................. 6-4
install_handlers .................................. 6-6
<table>
<thead>
<tr>
<th>Index</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>migrate_wf_handlers</td>
<td>6-10</td>
</tr>
<tr>
<td>purge_processes</td>
<td>6-13</td>
</tr>
<tr>
<td>release_man</td>
<td>6-15</td>
</tr>
<tr>
<td>released_parts_collector</td>
<td>6-18</td>
</tr>
<tr>
<td>tc_workflow_postprocess</td>
<td>6-20</td>
</tr>
<tr>
<td>verify_tasks</td>
<td>6-24</td>
</tr>
<tr>
<td>xml_validator utility</td>
<td>22-56</td>
</tr>
</tbody>
</table>

X