

# Windchill Diagnostic Utility Guide

## Overview

The Windchill Diagnostic Utility (WinDU) is a read-only utility that reports on various aspects of the current state of a running Windchill system. The set of reports generated depends on the current set of WinDU Diagnostic Tasks (DTs) installed on the system.

Each Diagnostic Task reports on a different part of the system, and generates its own output report (some generate no output if no data of interest is found). Diagnostic Tasks come in three categories:

- 1) **Information Only.** These DTs report on some aspect of the system. Technical Support or another PTC document may request an Informational DT be run to help make a decision about another action.
- 2) **Problem Identification.** Identify issues that need to be resolved before taking some future action, such as upgrading to a new release. These often involve some type of inconsistent or “dirty” data.
- 3) **Problem Debug.** Provide information used to debug a reported system issue. These are likely to be executed at the request of PTC Technical Support to identify the root cause of an existing problem.

DTs are shipped with major releases of Windchill products. They are also shipped with maintenance releases, and some are available for download from PTC’s Technical Support web site.

## Supported Releases

WinDU is supported on the following Windchill suite product releases:

R6.2.6 DSU 12 and later  
R7 M050 and later  
R8 M010 and later

## When to Run WinDU

Periodically to check for data issues that must be resolved.

Before an upgrade (or migration), to ensure there are no data issues that must be resolved to ensure successful completion of the upgrade.

At the request of PTC.

# Installing the WinDU Temp Patch

After downloading and installing the WinDU Temp Patch for R7 and R8 systems, you must follow the following steps:

**1.** Updating your wnccore.xconf file if applying the WinDU Temp Patch to R8 M030 or earlier: (This step can be skipped if applying the WinDU Temp Patch to R8 **M040** or later.)

**A.**

Using a text editor, open the file <WT\_HOME>\codebase\wnccore.xconf and add the following line to the list of .xconf files that are applicable to Windchill Services.

```
<ConfigurationRef xlink:href="windu.xconf"/>
```

**B.**

Save the file.

**C.**

Run windchill xconfmanager -p from a Windchill shell.

**2.** Updating your classpath. (This step can be skipped if applying the WinDU Temp Patch to R8 **M050** or later.)

**A.**

Using a text editor open the file <WT\_HOME>\codebase\wt.properties and locate the property:

**wt.java.classpath=**

Copy the entire value of the property to a temp location.

**B.**

Add the following:

```
$(wt.home)$(dir.sep)lib$(dir.sep)windu.jar$(path.sep)
```

to the front of the property copied above. Save this value for step C.

**C.**

From a windchill shell, run the command:

```
xconfmanager -t <WT_HOME>\codebase\wt.properties -s  
wt.java.classpath=<value_created_above_in_step_B> -p
```

For example:

```
xconfmanager -t <WT_HOME>\codebase\wt.properties -s  
wt.java.classpath=$(wt.home)\$(dir.sep)lib$(dir.sep)windu.jar$(path.sep)$(  
wt.home)\$(dir.sep)codebase$(path.sep)$LIB(wt.webinf.lib)\$(path.sep)$LI  
B(wt.java.lib)\$(path.sep)\$(wt.jdk)\$(dir.sep)lib$(dir.sep)tools.jar -p
```

### 3. Updating your upgrade classpath. (This step can be skipped if applying the WinDU Temp Patch to R8 **M050** or later.)

#### A.

Using a text editor open the file <WT\_HOME>\codebase\wt.properties and locate the property:

**wt.upgrade.tools.classpath.base =**

Copy the entire value of the property to a temp location.

#### B.

Add the following:

`$(wt.home)/lib/windu.jar$(path.sep)`

to the front of the property copied above. Save this value for step C.

#### C.

From a windchill shell, run the command:

```
xconfmanager -t <WT_HOME>\codebase\wt.properties -s  
wt.upgrade.tools.classpath.base =<value_created_above_in_step_B> -p
```

For example:

```
xconfmanager -t <WT_HOME>\codebase\wt.properties -s  
wt.upgrade.tools.classpath.base=$(wt.home)/lib/windu.jar$(path.sep)$(wt.  
home)/lib/wnc.jar$(path.sep)$(wt.java.classpath)\$(path.sep)$(wt.home)/sr  
clib/SystemGeneration.jar$(path.sep)$(wt.home)/srclib/CommonCore.jar$(  
path.sep)$(wt.home)/srclib/CommonXml.jar$(path.sep)$(wt.home)/srclib  
/WindchillUtil.jar$(path.sep)$(wt.home)/lib/wpdm.jar$(path.sep)$(wt.hom  
e)/lib/pjl.jar$(path.sep)$(wt.home)/lib/pdml.jar -p
```

## How to Run WinDU

These instructions are the same for R6.2.6, R7, and R8; however, there were some enhancements introduced starting with R7 which are outlined below.

To launch WinDU, execute the windu script in a Windchill shell window.  
On windows this script is:

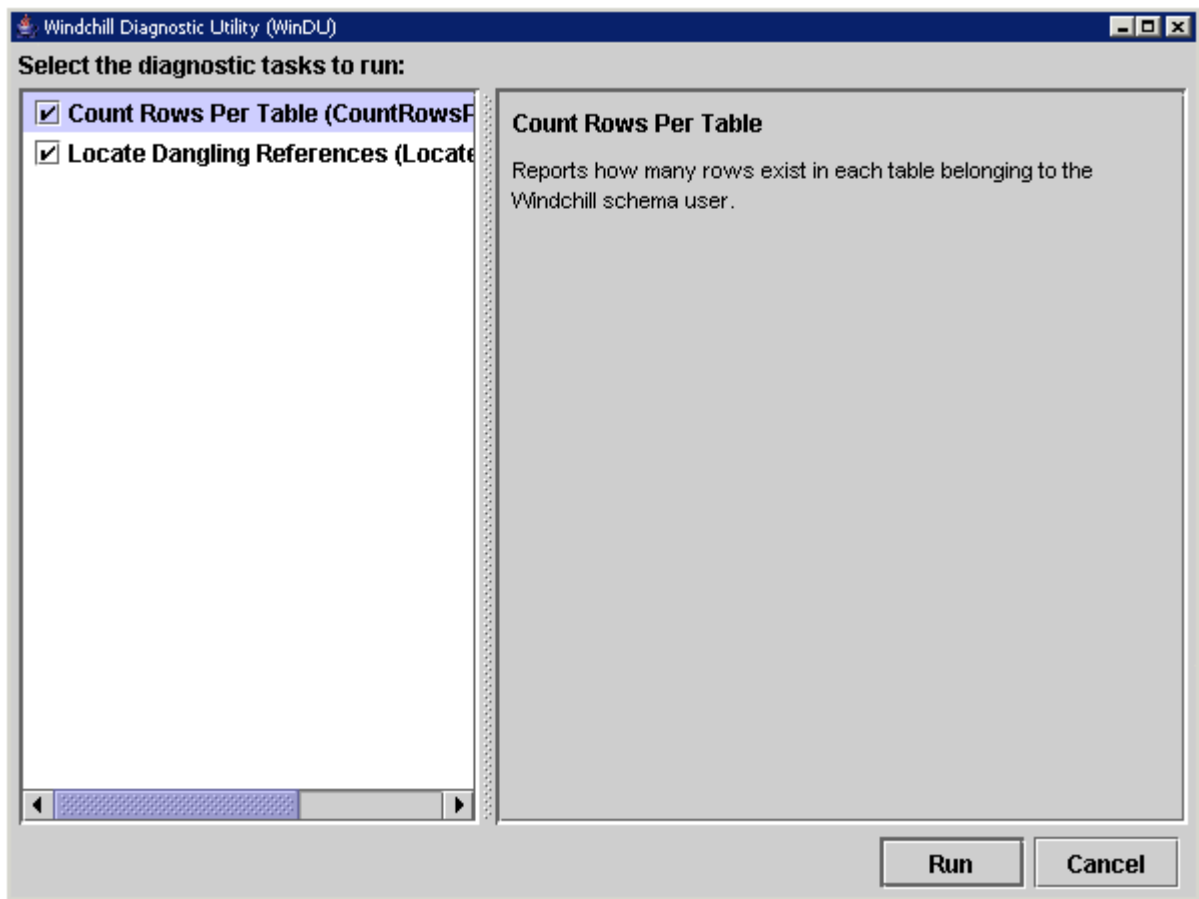
```
windu.bat
```

on UNIX it is

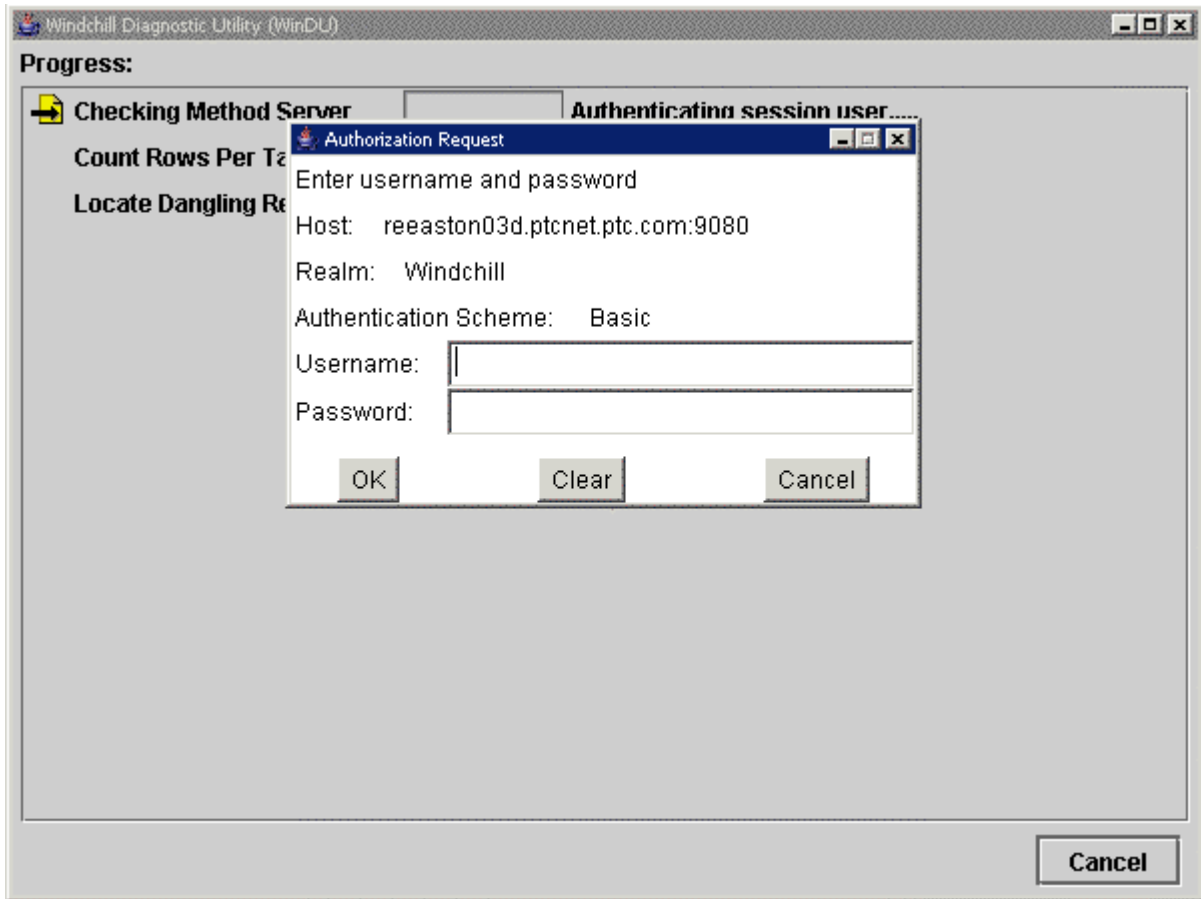
```
windu.sh
```

These scripts must be run from a GUI shell running on the Windchill installation's host.  
They cannot be run from a remote client.

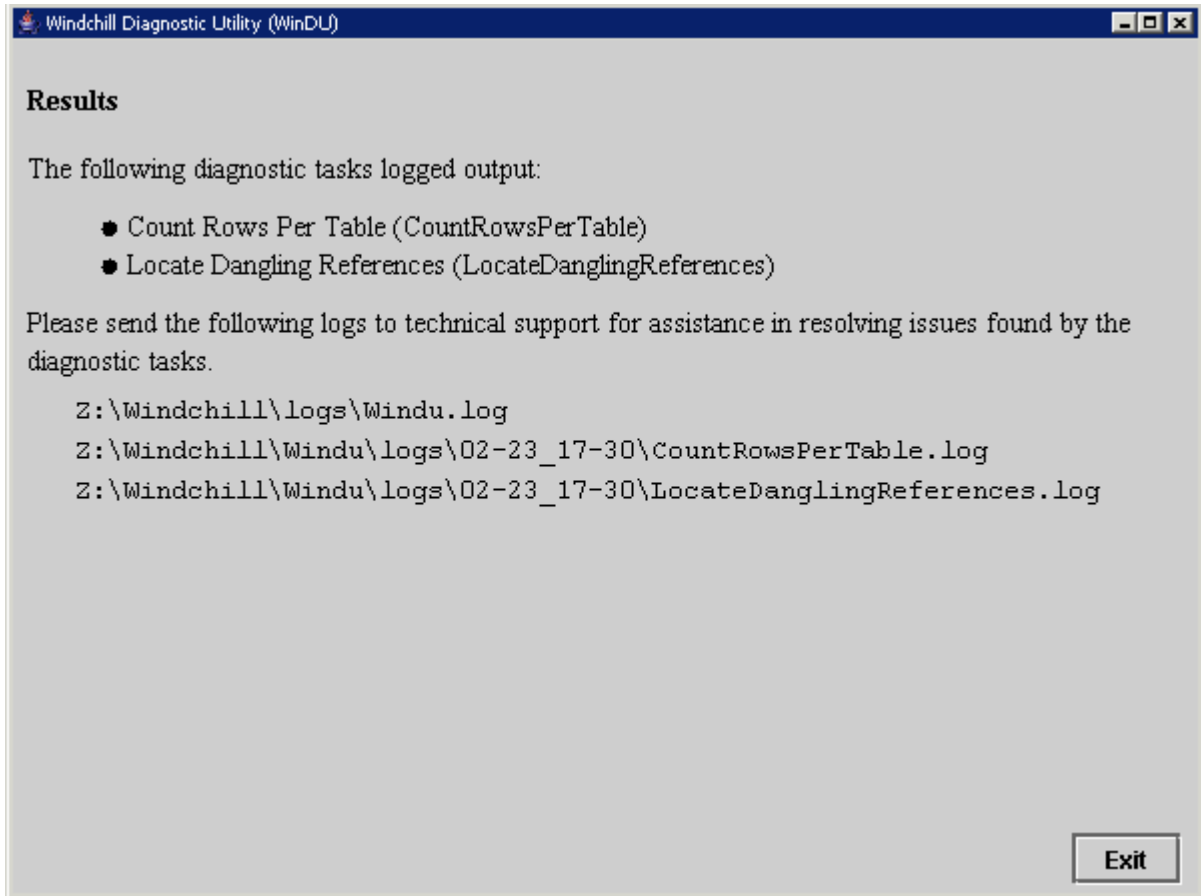
This opens the first screen of the WinDU application which offers a choice of diagnostic tasks to run. Select the ones you would like to run (or deselect the ones you don't want to run) using the checkboxes next to the names of the diagnostic tasks.



Next select **Run** WinDU which will attempt to confirm that the webserver, servlet engine, and method server are running. It will then prompt you to log into the Windchill instance as an administrator. If this succeeds, the diagnostic tasks will run in sequence.

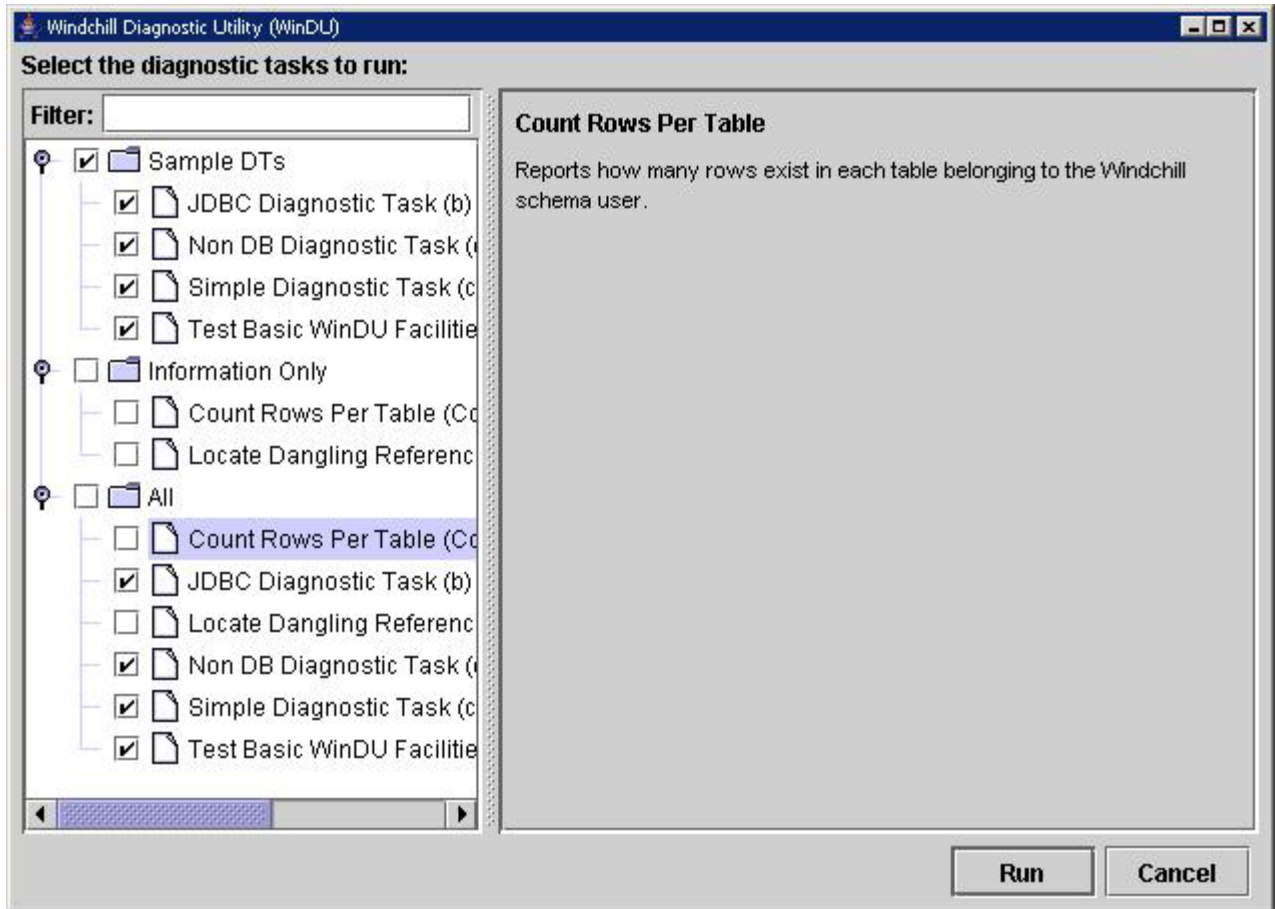


Once the diagnostic tasks complete, WinDU will inform you of the diagnostic tasks which produced logged output, if any, and the paths to the log files.



## ***Release 7 M050 Enhancements***

In release 7 M050, a new feature was added to support categorization and searching of diagnostic tasks.



## Categories

In the new interface, diagnostic tasks will appear in potentially many categories. The **All** category in which all diagnostic tasks are located will always exist, and there may be additional categories created for ease of selection of a group of DTs.

Note that if you use the check boxes located next to a category it will change whether all diagnostic tasks in that category are checked or not, so you can check or uncheck all diagnostic tasks by checking or unchecking the **All** category.

Also note that since diagnostic tasks may appear more than once in the categorized list, if you change the checked state of a diagnostic task, the change in selection will be reflected on all other list entries for that diagnostic task.

## Filtering

You can filter the list of diagnostic tasks that match a pattern by entering a string or regular expression into the text field at the top of the list. Any string you enter will automatically be surrounded with regular expression wildcards before elements are

filtered. For example, if you enter `f○○`, the filtering will match all diagnostic tasks whose string representation matches the regular expression `*f○○.*`.

Note that the filtering does not exclude category names. All categories are always displayed.

## ***Dependencies***

Some WinDU DTs should only be run after 1 or more other DTs have been executed and the results show that no issues need to be resolved. If a predecessor DT reports any issues, these must be resolved before running the successor DT. Please refer to Appendix B for a list of DT Dependencies.



## Appendix A – DT Availability Matrix

This table shows the availability of each Diagnostic Task per release.

### WinDU Diagnostic Tasks

FCS/DSU/MOR	626 DSU 12	626 DSU 13	7.0 M050	7.0 M060	7.0 M070	7.0 M080	7.0 M090	8.0 M010	8.0 M020	8.0 M030	8.0 M040
Cabinet Based Data Container Alignment Report								*	*	*	X
Cabinet Based Data Container Alignment Conflict Report								*	*	*	*
Cabinet Member Data Report								*	*	*	X
Checked Out Cad Documents Check		*									
Container Names With Double Spaces			*	*	*	*	*	*	*	*	*
Container Structure								*	*	*	X
Count Rows Per Table	X	X	X	X	X	X	X	X	X	X	X
Database Index Utility			*	*	*	*	*	*	*	*	X
Detect Missing Domains		*	*	*	*	*	*	*	*	*	*
Domain Administered Objects Domain Reference Check		*	*	*	*	*	*	*	*	*	X
Domain Policy Rule		*	*	*	*	*	*	*	*	*	X
Domain Structure		*	*	*	*	*	*	*	*	*	X
Duplicates In Control Branch		*	*	*	*	*	*				
Extract Workflow Expressions		*									
Generate Data Validation Reports			*	*	*	*	*	*	*	*	X
Group Domain And Location								*	*	*	X
Invalid Container Templates			*	*	*	*	*	*	*	*	*
Invalid LDAP Entries		*	*	*	*	*	*	*	*	*	*
InvalidObjects		*	*	*	*	*	*	*	*	*	X
Invalid Phase Templates								*	*	*	*
Invalid Project Container Names		*									
Invalid Workitems and Workflow Processes without PBOs			*	*	*	*	*	*	*	*	*
Iteration Attribute Alignment								*	*	*	X
Locate Dangling References	X	X	X	X	X	X	X	X	X	X	X
Missing Container References for Notebooks/DiscussionForums								*	*	*	X
Missing Master		*	*	*	*	*	*	*	*	*	*
Missing Representables		*	*	*	*	*	*	*	*	*	X
Missing Url and HolderToContent Reference for Bookmarks								*	*	*	*
Null Container References Check			*	*	*	*	*	*	*	*	X
Null Namespace Attribute Check			*	*	*	*	*	*	*	*	*
Object Initialization Rule Report								*	*	*	X
Object Initialization Rule Conflict Report								*	*	*	X
Organization and User Duplicates Check			*	*	*	*	*	*	*	*	*
Organization Owned Reference			*	*	*	*	*	*	*	*	X
Personal Cabinet Data Report								*	*	*	X
Personal Cabinet Owners Deleted Report								*	*	*	*
Preferences Report								*	*	*	X
ProductView ED to PVS			*	*	*	*	*	*	*	*	*
Report Checked Out and Uploaded Family Tables								*	*	*	*

SQLServer Uniqueness Constraint Violation Report							*	*	*	*
Upgrade Constraints Check	*						*	*	*	*
User And Cabinet Structure							*	*	*	X
Validate context groups and user defined groups in DB and in LDAP (Context Validator)							*	*	*	*
Validate Family Table Data							*	X	X	X
Validate Principals in DB and LDAP (Principal Validator)	*	*	*	*	*	X	*	*	*	X
Verify There are no Checked-Out Container Templates		*	*	*	*	*	*	*	*	*
Version Attribute Alignment		*	X	X	X	X	X	X	X	X
Version Series Validation Utility							*	*	*	*

#### Key

X - DT installed with that release

\* - DT is available for download for that release

### ***Cabinet Based Data Container Alignment Report***

This DT reports all objects that are cabinet based but not Foldered. These objects are relevant to the migration because their cabinet references will likely be updated unless they are already located in the Default cabinet.

#### **Intended Use**

This DT should be executed pre-migration, or when requested by PTC.

### ***Cabinet Based Data Container Alignment Conflict Report***

This informational task reports workflow process template, life cycle template and team template objects that have a naming conflict between the library and the exchange container. These conflicts are handled automatically by the migration, and this report will identify the templates with conflicts and describe how the conflict will be resolved by the migration. This task is applicable only before running the migration.

#### **Intended Use**

This DT should be executed pre-migration, or when requested by PTC.

### ***Cabinet Member Data Report***

This DT simply lists all the CabinetMember data in the system.

#### **Intended Use**

This DT should be executed pre-migration, or when requested by PTC.

### ***Checked Out CAD Documents Check***

This DT checks if

- 1) Any CAD documents are checked out
- 2) Any newly created CAD documents exist in personal folders
- 3) Any newly created objects exist in workspace

Upgrade with checked out CAD documents will cause a migrator to fail and may also indicate the database is corrupt.

#### **Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

### ***Container Names with Double Spaces***

This DT reports all container names and their remote IDs of type container team with multiple spaces.

#### **Intended Use**

This DT should be executed pre- and post-upgrade, or when requested by PTC.

### ***Container Structure***

This DT reports the mapping between the system container/cabinet/folder structure and the system domain structure. The report is available in both an .xgml format and a .csv format. It provides a good picture of the overall system. The .xgml output can be viewed in a tool such as yED.

#### **Intended Use**

This DT should be executed pre-migration, or when requested by PTC.

### ***Count Rows Per Table***

This DT reports the count of rows in each database table.

**Intended Use**

This DT should be executed pre- and post-upgrade, or when requested by PTC.

If during an upgrade procedure it is necessary to contact PTC Technical Support and they request upgrade logs, this report should be included with those logs.

***Database Index Utility***

This diagnostic utility analyzes database indexes to ensure that they are not too long for database limitations. This data could then be used to prevent truncation of data when column lengths are reduced.

**Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

***Detect Missing Domains***

This DT detects missing domains referenced in queue entries.

**Intended Use**

This DT should be executed pre- and post-upgrade, or when requested by PTC.

***Domain Administered Objects Domain Reference Check***

This DT Checks all Domain Administered objects for Domain Reference and reports any domain administered objects with missing domain.

**Intended Use**

This DT should be executed pre- and post-upgrade, or when requested by PTC.

**Dependency:** This DT should only be executed after the Missing Master Discovery Tool DT has been executed successfully.

### ***Domain Policy Rule***

This DT reports all of the policy rules in each Administrative Domain for the entire system.

#### **Intended Use**

This DT should be executed pre- and post-upgrade, or when requested by PTC.

### ***Domain Structure***

This DT outputs the entire Administrative Domain structure for the system.

#### **Intended Use**

This DT should be executed pre- and post-upgrade, or when requested by PTC.

### ***Duplicates in Control Branch***

This DT finds duplicates for the Control Branch.

Upgrade fails at the Add Constraints step if duplicates are not resolved before the upgrade.

#### **Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

### ***Extract Workflow Expressions***

This DT extracts all of the workflow expressions to a text file located in the WinDU directory.

#### **Intended Use**

This DT should be executed pre upgrade when verifying existing workflow expressions, or when requested by PTC.  
Default behavior extracts latest iteration of workflow expressions. To extract all workflow expressions, set the property `wt.workflow.engine.ExtractWorkflowExpressionsDT.extractAll=true`. To extract all workflow expressions that are currently in process, set the property `wt.workflow.engine.ExtractWorkflowExpressionsDT.extractInProgress=true`.

## ***Generate Data Validation Reports***

This DT generates data files in various output formats for the tables/columns that are specified. Customer would need to compare the data created before and after the upgrade using tools of their choice and see if there are any discrepancies and those would need to be resolved or could be ignored if they are expected. Output formats that are currently available are: FixedColumnWidth, OneColumnPerRow, CharacterDelimited. The format of the property that needs to be added for each table (columns) to be compared is:

com.ptc.windchill.upgrade.datavalidation.list.#=<comma separated list of columns to to be compared>

Sample Entry list:

com.ptc.windchill.upgrade.datavalidation.list.1=WTPart,ida2a2,classnamea2a2,updatecounta2  
com.ptc.windchill.upgrade.datavalidation.list.2=WTDocument,ida2a2,classnamea2a2,updatecounta2,createstamp2,updatestamp2  
com.ptc.windchill.upgrade.datavalidation.list.2=Project2,ida2a2,classnamea2a2,updatecounta2,createstamp2,updatestamp2,namecontainerinfo

Output Format to be specified:

com.ptc.windchill.upgrade.datavalidation.outputformat=<Format Type> --- This property will be used to find the output format for this DT.

where <Format Type> = FixedColumnWidth or OneColumnPerRow Or CharacterDelimited

When <Format Type> is specified as FixedColumnWidth, this will read the following property to find the width of the column.

com.ptc.windchill.upgrade.datavalidation.outputformat.columnwidth=<Integer Number>

When <Format Type> is specified as CharacterDelimited, this will read the following property to find the delimiter to be used.

com.ptc.windchill.upgrade.datavalidation.outputformat.delimiter=<character to be used as delimiter>

### **Intended Use**

This DT should be executed pre- and post-upgrade, or when requested by PTC.

## ***Group Domain And Location***

This DT reports administrative domain and LDAP location for all groups in the system. All groups in the system are added to the Classic library's container team during migration. The output of this task is a text file.

**Intended Use**

This DT should be executed pre-migration, or when requested by PTC.

***Invalid Container Templates***

This DT reports all the Container Templates that are not validating with their release specific DTD.

**Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

***Invalid LDAP Entries***

This DT locates illegal characters that exist in the LDAP.

**Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

***Invalid Objects***

This DT lists out all the invalid database objects owned by the Windchill Oracle user.

**Intended Use**

This DT should be executed pre- and post-upgrade, or when requested by PTC.

***Invalid Phase Templates***

This DT reports all the phase templates that are structurally terminal, but not marked as final.

**Intended Use**

This DT should be executed pre- and post-upgrade, or when requested by PTC.

### ***Invalid Project Container Names***

This task detects bad Project Container Names and reports those invalid container names.

For example, “#mycontainer” in project container name would be reported as invalid.

#### **Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

### ***Invalid Workitems and Workflow Processes without PBOs***

This task provides a list of Invalid Workitems and Workflow Processes without Primary Business Objects in the source system. The report will list the names and IDA2A2 of the workflow processes without Primary Business Objects. These details are useful for deleting the invalid workflow processes from the Windchill database.

#### **Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

### ***Iteration Attribute Alignment***

This informational task reports versions that have iterations in different cabinets or domains or have differing ownership. It is not required that all iterations of a version be aligned within the same cabinet or administrative domain or have the same owner for a successful migration. However, before the data can be moved to a different container after migration, all versions must be aligned under the same cabinet or administrative domain and have the same owner.

#### **Intended Use**

This DT should be executed pre-migration, or when requested by PTC.

### ***Locate Dangling References***



This task reports database references that do not exist. Some types of dangling references are expected, so this DT should be used when requested by PTC to help debug a preexisting issue.

**Intended Use**

This DT should be executed when requested by PTC.

***Missing Container References for Notebooks/Discussion Forums***

This DT checks an upgraded 8.0 system to find Discussion forums and Notebooks whose container references are not set correctly.

**Intended Use**

This DT should be executed post PDMLink upgrade to 8.0, or when requested by PTC.

***Missing Master Discovery Tool***

This DT checks for Iterated objects that do not have Masters and reports them.

**Intended Use**

This DT should be executed pre- and post-upgrade, or when requested by PTC.

***Missing Representables***

This DT reports all the missing Representables (currently WTParts (and custom parts), WTDdocuments(custom WTDdocuments) and EPMDdocuments for existing representations(currently DerivedImage).

**Intended Use**

This DT should be executed pre- and post-upgrade, or when requested by PTC.

***Missing URL and HOLDERTOCONTENT reference for Bookmarks***

This DT reports corrupted ImportedBookmarks, such as having URL value of NULL or ImportedBookmarks missing HOLDERTOCONTENT entries.

### **Intended Use**

This DT should be executed when requested by PTC.

### ***Null Container References Check***

This DT checks all contained objects and ensures that each has a reference to the container in which it resides.

### **Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

### ***Null Namespace Attribute Check***

This DT verifies that this namespace (The name space is part of the unique identity of all objects that implement WContainerNameSpace) is NOT null and logs warning messages if it finds an object for which the corresponding namespace is null. The namespace reference is stored on the semantic key table that corresponds to the object which implements WContainerNameSpace.

For Example in the case of WTPart, the corresponding semantic key table is WTPartMasterKey and this table has a column IDA3NAMESPACEREFERENCE that holds a reference to the name space. The DT will now verify that the value assigned to this column is not null.

### **Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

### ***Object Initialization Rule Report***

This informational task reports all the object initialization rules within the system, as well as the container in which they are located.

### **Intended Use**

This DT should be executed pre-migration, or when requested by PTC.

### ***Object Initialization Rule Conflict Report***

This task identifies where there are conflicts for object initialization rules for the same type in both the Exchange container and the Classic library. Customers should use the output of this report to merge the conflicting rules into a single rule at the library level, or to delete one of the conflicting rules. The migration cannot run until all of these conflicts have been resolved, and then it will move all the object initialization rules from the Exchange container to the Classic library. The output for this task is a text file. This task is applicable only before running the migration.

#### **Intended Use**

This DT should be executed pre-migration, or when requested by PTC.

### ***Organization and User Duplicates Check***

This DT should be executed to verify that there are no duplicate user or organization names in the database. At 9.0, duplicate user or organization names are not allowed. If a duplicate exists on the source system, it needs to be resolved before upgrade. The DT will report warning messages if it finds any duplicate user or organization names.

#### **Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

### ***Organization Owned Reference***

This DT should be executed to verify that the organization reference is set correctly on all contained objects that are also organization owned (e.g. WTPart, WTDocument, EPmDocument).

#### **Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

### ***Personal Cabinet Data Report***

This informational task reports all data existing in personal cabinets that is not

checked into a shared location. Unlike standard upgrade, there is no requirement that personal cabinet data be checked in prior to running the migration. This information is provided for tracking purposes in case a customer wants to check the data in pre-migration, or locate it post-migration.

**Intended Use**

This DT should be executed pre-migration, or when requested by PTC.

***Personal Cabinet Owners Deleted Report***

This DT finds personal cabinets whose owners have been disabled or removed. For each such cabinet found, reports the cabinet name, the ida2a2 value of the cabinet, and the user who owned the cabinet. If the user has been removed, not simply disabled, the output will indicate the user has been removed.

**Intended Use**

This DT should be executed pre-migration, or when requested by PTC.

***Preferences Report***

This DT will generate a report to list all the preferences created OOTB, values, and also any user preferences currently set.

**Intended Use**

This DT should be executed when requested by PTC.

***ProductView ED to PVS***

This DT reports information about ED files customers have on their systems. It will display the total count of ED files, the total size of the files, and if any vault content is found to be null.

**Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

***Report Checked Out and Uploaded Family Tables***

This DT reports all Checked Out Family Table members in all workspaces. It reports a list of Workspace Owner Name, Workspace Owner email, Workspace Name and Names of checked out and new family table members in this workspace.

#### **Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

### ***SQLServer Uniqueness Constraint Violation Report***

This DT detects violations of uniqueness constraints defined in the introspection data for each class.

#### **Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

### ***Upgrade Constraints Check***

This DT reports on data that will cause the AddConstraints phase of the UpgradeManager to fail.

For this Windu task there is a property that needs to be set in <Windchill>\codebase\windu.xconf for this task to be successful. The property is com.ptc.windchill.windu.testwindufortargetversion.. The value should be set to the upgrade target release level. Example: When running WinDU on R8 before upgrading to R9, the value should be set to “9.0”. The default value of the property is null and it will fail if a digit value has not be entered.

After the value has been set you need to save the file and propagate. To propagate it you need to run xconfmanager -p from the Windchill shell.

Note: At 6.2.6, this property does not exist and does not need to be set.

#### **Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

### ***User And Cabinet Structure***

This DT reports the AdministrativeDomain of users, the corresponding LDAP node for each user and also the AdministrativeDomain of the user's Personal Cabinet. The output of this task is a text file.

#### **Intended Use**

This DT should be executed pre-migration, or when requested by PTC.

#### ***Validate context groups and user defined groups in DB and in LDAP (Context Validator)***

This DT will:

- Validate the existence of the AdministrativeDomain object of each WTPrincipal object.

- Validate the existence of WTGroup objects for all the context groups and that they are all associated to one and only one context.

- Confirm LDAP entry exists in appropriate adapter for each WTGroup in the database.

- Confirm that all LDAP internal groups have a corresponding WTGroup object in the database.

- Validate dangling application context nodes in LDAP that don't have a corresponding entry in the database.

#### **Intended Use**

This DT should be executed pre-upgrade, or when requested by PTC.

#### ***Validate Family Table Data***

This DT reports possible problems with family tables. It checks all family table members in the database against these possible problems.

#### **Intended Use**

This DT should be executed when requested by PTC.

#### ***Validate Principals in the DB and in LDAP (Principal Validator)***

This DT validates that there are no referential integrity issues between the Windchill database and the JNDI adapters that the system is configured to use.

**Note:** Please ignore the failures reported by this DT with users having the special character “?”. These reported failures are false, and no action needs to be taken for these principals.

#### **Intended Use**

This DT should be executed pre- and post-upgrade, or when requested by PTC.

If during an upgrade procedure it is necessary to contact PTC Technical Support and they request upgrade logs, this report should be included with those logs.

#### ***Verify There are no Checked-Out Container Templates***

This DT verifies that there are no checked out container templates, and reports any that are checked out so that they can be checked in before starting an upgrade to 9.0.

#### **Intended Use**

This DT should be executed pre-upgrade for 9.0, or when requested by PTC.

#### ***Version Attribute Alignment***

This informational task reports masters that have versions in different cabinets, domains or having differing ownerships. It is not required that all versions be aligned within the same cabinet or administrative domain or have the same owner for successful migration. However, before the data can be moved to a different container after migration, all versions must be aligned under the same cabinet, administrative domain and have the same owner.

#### **Intended Use**

This DT should be executed pre-migration, or when requested by PTC.

#### ***Version Series Validation Utility***

This diagnostic utility validates all unique Mastered.series/Versioned.versionIdA2versionInfo pairs, reporting any invalid revisions. Invalid revisions will result in upgrade failures and need to be fixed.

#### **Intended Use**

This DT should be executed pre upgrade, or when requested by PTC.

## Appendix B – DT Dependency Matrix

DT's that should only be executed after the successful completion of 1 or more related DT's:

<b>Predecessor DT</b>	<b>Successor DT</b>
Missing Master	Domain Administered Objects Domain Reference Check
Null Container References Check	Container Team Managed Objects Group Check
Missing Master	Null Container References Check