



Windchill[®] Maintenance Installation and Configuration Guide

Windchill 8.0 M040

7 May 2007

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GB2363208	25-August-2004	6,545,671 B1	08-April-2003	5,423,023	05-June-1990
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Change Record

The guide is updated for each Windchill 8.0 maintenance release.

Table 1 Changes for 8.0 M040 May 2007 update

Chapter	Description
Chapter 1, Maintenance Release Overview	Added link to TAN for password update functionality in the Windchill PDMLink section of the Notable Changes in M040.

Table 2 Changes for 8.0 M040

Chapter	Description
Chapter 1, Maintenance Release Overview	<p>Updated Customer Updates and Fixes Following an Initial Release section to describe the Temporary Patch Information tool that is available after you install the 8.0 M040 Windchill Service Pack.</p> <p>Updated the product information in the What's New? section and the Product Version Table.</p> <p>Added support for Windchill Index Search powered by FAST InStream to the Versions of Products Supported for this Release section and removed support of Convera RetrievalWare.</p> <p>Corrected Caution for updating Windchill Supplier Management in Versions of Products Supported for this Release section.</p>

Chapter	Description
Chapter 2, Maintenance Installation Planning	Added information for Windchill Index Search powered by FAST InStream to the Maintaining an Inventory of Windchill Products section.
Chapter 3, Installing the Windchill Maintenance Release	<p>Updated Checklists for Installing the Windchill Maintenance Release section to include Aphelion update and WebSphere support.</p> <p>Added M040 special instructions in the Special Instructions Before Starting Windchill Method Servers section.</p> <p>Added M040 special instructions in the Special Instructions After Starting Windchill Method Servers section.</p> <p>Updated Installing Third-Party Products section to better describe third party product updates for Aphelion.</p> <p>Updated Enabling Action Items (M030) section to support localized versions of actions items.</p> <p>Corrected special instruction Creating and Updating wt.epm.EPMDocument Soft Types (M020)</p>

Table 3 Changes for 8.0 M030

Chapter	Description
Chapter 1, Maintenance Release Overview	Updated the product information in the What's New? section and the Product Version Table .
Chapter 3, Installing the Windchill Maintenance Release	Updated the commands in the section, Special Instructions Before Starting Windchill Method Servers .
Chapter 3, Installing the Windchill Maintenance Release	Updated the commands in the section, Special Instructions After Starting Windchill Method Servers .

Table 4 Changes for 8.0 M020 May 2006 update

Chapter	Description
Chapter 1, Maintenance Release Overview	Updated the product information in the What's New? section.
Chapter 3, Installing the Windchill Maintenance Release	Updated the commands in the section, " Fixing the File Sequence List for the Set Revision Function (M020) ."
Chapter 3, Installing the Windchill Maintenance Release	Moved the section Updating Access Policy Rules for Guest Workflow Assignments (M020) so it is executed after the method server is restarted.

Table 5 Changes for 8.0 M020

Chapter	Description
Chapter 1, Maintenance Release Overview	Updated the product information in the What's New? section and the Product Version Table .
Chapter 3, Installing the Windchill Maintenance Release	Updated the section Special Instructions Before Starting Windchill Method Servers .
Chapter 3, Installing the Windchill Maintenance Release	Updated the section Special Instructions After Starting Windchill Method Servers .

Table 6 Changes for 8.0 M010

Chapter	Description
Chapter 1, Maintenance Release Overview	Corrected InterComm Expert 5.1 product information
Chapter 1, Maintenance Release Overview	Inclusion of the Pro/INTRALINK 3.x Application Server CD for the Windchill Pro/INTRALINK Gateway product
Chapter 1, Maintenance Release Overview	Removed the item for DCA demo files from the What's New section

Chapter	Description
Chapter 2, Maintenance Installation Planning	Updated installation directory information for the ProductView ECAD Object Adapter and the ProductView Object Adapters for MCAD and Document Data products
Chapter 3, Installing the Windchill Maintenance Release	In the special instructions, corrected enterpriseOrganization.xml template file name, the use of the Enterprise template, and custom template update information. The correct file name is enterpriseOrganizationTemplate.xml.

For a history of changes in Windchill 7.0 maintenance releases, see the maintenance guide corresponding to the release that you are interested in.

About This Guide

The *Windchill Maintenance Installation and Configuration Guide* provides the instructions to install the Windchill Maintenance Release.

Before you install the maintenance release, read this guide for instructions.

Updated Information

It is important that you have the most up-to-date version of this guide, as well as other information. For the most up-to-date information, see the following:

<http://www.ptc.com/appserver/cs/doc/refdoc.jsp>

This URL directs you to the PTC Online Support Web page for reference documents. For your document search criteria, select **Windchill** from the **Product** drop-down list, select the **8.0** from the **Release** drop-down list, select **Installation and Configuration Guide** from the **Document Type** drop-down list, and select **All User Roles** from the **User Role** drop-down list.

Related Documentation

For a complete list of installation documentation, see [Windchill Installation Documentation](#).

The following documentation may be helpful to assist you when configuring Windchill. These guides are available from the Windchill Publications page.

- *Read This First Windchill Release 8.0*
- *Windchill System Administrator's Guide*
- *Windchill Business Administrator's Guide*
- *Windchill Customizer's Guide*
- *Windchill Performance Tuning Guide*

If books are not installed on your system, see your system administrator.

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Contact PTC Technical Support via the PTC Web site, phone, fax, or e-mail if you encounter problems using Windchill.

For complete details, refer to Contacting Technical Support in the PTC Customer Service Guide enclosed with your shipment. This guide can also be found under the Support Bulletins section of the PTC Web site at:

<http://www.ptc.com/support/index.htm>

The PTC Web site also provides a search facility that allows you to locate Technical Support technical documentation of particular interest. To access this page, use the following link:

<http://www.ptc.com/support/support.htm>

You must have a Service Contract Number (SCN) before you can receive technical support. If you do not have an ID, contact PTC License Management using the instructions found in your PTC Customer Service Guide under Contacting License Management.

Documentation for PTC Products

PTC provides documentation in the following forms:

- Help topics
- PDF books

To view and print PDF books, you must have the Adobe Acrobat Reader installed.

The Windchill installation documentation is included on the CD in the Docs directory. In addition, books updated after release (for example, to support a hardware platform certification) are available from the Reference Documents section of the PTC Web site at the following URL:

<http://www.ptc.com/appserver/cs/doc/refdoc.jsp>

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http://www.ptc.com/go/wc_pubs_feedback

Please include the name of the application and its release number with your comments. For online books, provide the book title.

Documentation Conventions

Windchill documentation uses the following conventions:

Convention	Item	Example
Bold	Names of elements in the user interface such as buttons, menu paths, and dialog box titles. Required elements and keywords or characters in syntax formats.	Click OK . Select File > Save . License File dialog box create_<tablename>.sql
<i>Italic</i>	Variable and user-defined elements in syntax formats. Angle brackets (< and >) enclose individual elements.	create_<tablename>.sql
Monospace	Examples Messages	JavaGen "wt.doc.*" F true Processing completed.
"Quotation marks"	Strings	The string "UsrSCM" . . .
<Product>	Represents a product installation directory (loadpoint). <i>Product</i> is replaced with the actual product name.	<Info*Engine> For additional clarification, a where clause may be included: Where <Info*Engine> is the directory where Info*Engine is installed.
	The CAUTION symbol indicates potentially unsafe situations which may result in minor injury, machine damage or downtime, or corruption or loss of software or data.	When you add a value to an enumerated type (for example, by adding a role in the RolesRB.java resource file), removing that value can result in a serious runtime error. Do not remove a role unless you are certain there is no reference to it within the system.

Third-Party Products

Examples in this guide referencing third-party products are intended for demonstration purposes only. For additional information about third-party products, contact individual product vendors.

Code Examples

Some code examples in this guide have been reformatted for presentation purposes and, therefore, may contain hidden editing characters (such as tabs and end-of-line characters) and extraneous spaces. If you cut and paste code from this manual, check for these characters and remove them before attempting to use the example in your application.

Maintenance Release Overview

This chapter introduces Windchill maintenance concepts and describes the new features and major impacts in the maintenance releases that have occurred since Windchill 8.0.

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Introduction

The *Windchill Maintenance Installation and Configuration Guide* contains pre-installation planning, What's New, maintenance best practices, and installation instructions for applying the maintenance release.

Customer Updates and Fixes Following an Initial Release

The application of code corrections is part of the normal maintenance of your system. PTC provides maintenance for Windchill products and applicable third-party applications via the following release vehicles:

- Maintenance releases
- Temporary patches

Maintenance releases provide code corrections for critical issues. Maintenance releases are planned to occur quarterly. Customers should look to this vehicle to obtain fixes for SPRs they have reported to PTC.

Temporary patches are emergency single-issue code corrections that are customer-specific. Any code delivered in temporary patches is automatically added to the next available maintenance release. After the code has been incorporated into a maintenance release, the temporary patch should not be installed. Technical support for the temporary patch ceases when the maintenance release containing the permanent fix is released.

If there are any generic temporary patches available that PTC has generated for 8.0, you can view them by going to the following Web page:

http://www.ptc.com/cs/doc/Windchill_8_0_Maintenance.htm

Note: If there are no temporary patches listed, then there are none available for 8.0.

After you have installed the 8.0 M040 Windchill Service Pack, you can determine which temporary patches have been applied by running the Temporary Patch Information tool. To run the tool, use either of the following executables from the *<Windchill>/bin* directory (where *<Windchill>* is your installation directory):

- On a Windows system, run wtTPseq.exe.
- On a UNIX system, run wtTPseq.pl.

If no temporary patches have been applied, then the following message is returned:

```
No temp patch exists on this system.
```

Otherwise, the tool returns a list of the temporary patches, ordered by the installation date. Additionally, the temp_patch_sequence.log file is generated in *<Windchill>/installer/logs* and contains the information that is returned. If you

run this tool multiple times, the log file is replaced each time, and, therefore, contains the information from the last time the tool was run.

The following sample output lists six patches that have been applied starting on September 14, 2006 and ending on December 14, 2006:

Temporary Patch	Installation Dates
8.0-m020_1279263.tp	Thu Sep 14 10:02:34 2006
8.0-m020_1277045.tp	Fri Sep 22 13:51:15 2006
8.0-m030_1291256.tp	Thu Oct 19 09:35:46 2006
8.0-m030_1299881.tp	Tue Nov 28 16:19:47 2006
8.0-m020_tmcyj2.tp	Fri Dec 8 09:55:08 2006
8.0-m030_m020_m010_tp1.tp	Thu Dec 14 13:37:14 2006

What Has Changed About Maintenance in R8.0?

The Windchill 8.0 maintenance release continues on with the release process and naming conventions established in Windchill 7.0. Maintenance releases are aligned with the PTC product datecode strategy. This strategy adds distinction between feature releases and maintenance releases. Windchill maintenance releases are identified with the designation of "M" for maintenance followed by three numbers that designate the incremented maintenance release. For example, Windchill 8.0 will have the following planned maintenance releases: M010, M020, M030, and so on.

The Windchill Service Pack updates solution functionality and is the main component of a maintenance release. The additional components are product replacement CDs for products such as Visualization, Info*Engine, and other third-party software. For a complete breakdown of products updated in a Maintenance Release, see [Versions of Products Supported for this Release](#). These updates can be ordered in CD form or downloaded from the [PTC Support Web site](#) (<http://www.ptc.com/support/support.html>). The updates are available quarterly.

Directory of Online Information

To ensure that you have the latest information that is available for this maintenance release, use the links in the following table to locate information:

Information	Link
<i>Read This First</i> information, the latest <i>Windchill Release 8.0 Software Matrices</i> , and the latest updates to all Windchill 8.0 documentation including updates to this guide.	http://www.ptc.com/appserver/cs/doc/refdoc.jsp This URL directs you to the PTC Online Support Web page for reference documents. For your document search criteria, select your product from the Product drop-down list, select the current release from the Release drop-down list, select the appropriate document type from the Document Type drop-down list, and select the appropriate user role from the User Role drop-down list.
PTC Technical Support Web site	http://www.ptc.com/support/support.htm From this location, you can search the knowledge base for Technical Application Notes.
PTC Technical Support Update Advisor	http://www.ptc.com/appserver/cs/update_advisor/UpdateAdvisorSearchCriteria.jsp This link provides a list of new and resolved issues for products.
Maintenance Release	http://www.ptc.com/appserver/cs/doc/refdoc.jsp This URL directs you to the PTC Online Support Web page for reference documents. For your document search criteria, select Windchill from the Product drop-down list, select the current release from the Release drop-down list, select Installation and Configuration Guide from the Document Type drop-down list, and select All User Roles from the User Role drop-down list.
Windchill Supported Upgrade Paths	The Windchill Supported Upgrade Paths document describes which releases PTC supports for upgrading between maintenance releases and new releases. Review this document before planning a maintenance update.

Versions of Products Supported for this Release

The Product Version table below lists the current versions of the products supported for the Windchill 8.0 M040 Maintenance Release, as well as how the maintenance is delivered. The products are listed in alphabetical order by product name and not by CD label. Some CDs contain more than one product; for example, the Windchill Third Party Software CD contains several products. In cases where CDs contain several products, the datecode on the CD itself may be newer than datecode of some of the products on the CD because the product did not change for that maintenance release.

These updates can be ordered in CD form or downloaded from the [PTC Software Update Web site](#).

Note: Convera RetrievalWare is no longer supported as the search engine for Windchill Index Search. Instead, index search uses Windchill Index Search powered by FAST InStream as the supported search engine. For information on converting from RetrievalWare to Windchill Index Search, see the *Windchill Installation and Configuration Guide - Windchill Index Search*.

Note: The 8.0 M040 Windchill Service Pack does not support Arbortext Content Manager and should not be installed on a system running Arbortext Content Manager 8.0 M030.

Note: The 8.0 M010 Windchill Service Pack does not support Windchill Aerospace and Defense Module and should not be installed on a system running Windchill Aerospace and Defense Module 8.0. The 8.0 M020 Windchill Service Pack and later service packs support Windchill Aerospace and Defense Module.



Note: To upgrade Windchill Supplier Management from the 8.0 FCS version to a version beyond M010, you must first install the M010 version of over the top of the FCS version using the M010 replacement CD. Then you can install the Windchill Service Pack to upgrade Windchill Supplier Management to the latest maintenance release. **Warning:** Customizations and configurations created in the FCS version are lost when you install the Windchill Supplier Management from the M010 CD.

Note: When the **Maintenance Delivery** column in the following table contains Replacement CD, then a Replacement CD is available when the **Current Version of Product** column contains a version that starts with M. Replacement CDs are not pushed out to customers. You must order or download them.

Product Version Table

Product Name	CD Label	Current Version of Product	Maintenance Delivery
Adobe Acrobat	Visualization - Adobe 6.0 Acrobat Support (3 CDs)	F000	Replacement CD
Adobe Distiller	Visualization - Adobe 5.0.5 Distiller Support	F000	Replacement CD
Apache Web Server	Windchill 8.0 Third Party Software	M040	Replacement CD
Aphelion LDAP Directory for Windows and UNIX platforms	Aphelion Directory Server for Windchill 8.0	M040	Replacement CD
Arbortext Content Manager	Arbortext Content Manager	M030	Replacement CD
Arbortext Editor 5.3	Arbortext Editor 5.3	M020	Replacement CD
DOORS API Server	Windchill 8.0 Info*Engine DOORS Adapter	M040	Replacement CD
InterComm EDACompare client	InterComm EDACompare 2.1	F000	Replacement CD
InterComm Expert 5.1 M070 + Patch 2 + DSU	InterComm 5.1	M070	Replacement CD
Java Runtime Environment (JRE)	Windchill 8.0 Third Party Software	F000	Replacement CD
Optegra Info*Engine Adapters	Windchill 8.0 Optegra Gateway	M040	Service Pack CD
Oracle Configuration Utility	Windchill 8.0 Third Party Software	M020	Replacement CD
Oracle Patch Set for Oracle 9.2.0.7	Oracle Patch Set for Oracle 9.2.0.7	2002003	Replacement CD
Oracle 9i Tuner for Windchill 8.0 Solutions	Oracle 9i Tuner for Windchill 8.0 Solutions	M040	Replacement CD
Pro/INTRALINK 8.0	Pro/INTRALINK 8.0	M040	Service Pack CD
Pro/INTRALINK Oracle Software Assistant	Pro/INTRALINK Oracle Software Assistant 2.0 (provided when bundled Oracle is purchased)	M050	Replacement CD

Product Name	CD Label	Current Version of Product	Maintenance Delivery
ProductView Collaboration	Visualization 8.0 - Windchill Support	M040	Replacement CD
ProductView Document Viewing Option	Visualization 8.0 - Collective Document Support	M040	Replacement CD
ProductView ECAD Viewer and Object Adapter	Visualization 8.0 - ECAD Support	M040	Replacement CD
ProductView JT Object Adapter and JT Import Filters	Visualization - 11.0 JT Adapter	M040	Replacement CD
ProductView Object Adapters for MCAD and Document Data	Visualization - 11.0 Object Adapter Support	M040	Replacement CD
ProductView Standard Edition and Realizer	Visualization 8.0 - ProductView Client	M040	Replacement CD
SQL Server Configuration Utility (SCU)	Windchill 8.0 Third Party Software	M040	Replacement CD
TIBCO Adapter for Oracle Applications	Windchill 8.0 ESI Adapter for Oracle Applications	M040	Replacement CD
TIBCO Adapter for SAP R/3	Windchill 8.0 ESI Adapter for SAP R/3	M040	Replacement CD
TIBCO BusinessWorks	Windchill 8.0 ESI Integration Suite	M040	Replacement CD
TIBCO Enterprise for JMS	Windchill 8.0 ESI Integration Suite	M040	Replacement CD
TIBCO TurboXML	Windchill 8.0 ESI Integration Suite	M040	Replacement CD
Tomcat Servlet Engine	Windchill 8.0 Third Party Software	M010	Replacement CD
Windchill Aerospace and Defense Module	Windchill 8.0 Aerospace and Defense Module	M040	Service Pack CD
Windchill Archive	Windchill 8.0 Archive	M020	Replacement CD
Windchill Classification Tools	Windchill 8.0 Classification Tools	M040	Service Pack CD
Windchill CounterPart	Windchill 8.0 CounterPart	F000	Replacement CD

Product Name	CD Label	Current Version of Product	Maintenance Delivery
Windchill ESI Business Logic for Oracle Applications	Windchill 8.0 ESI Business Logic for Oracle Applications	M040	Replacement CD
Windchill ESI Business Logic for SAP R/3	Windchill 8.0 ESI Business Logic for SAP R/3	M040	Replacement CD
Windchill Foundation & PDM	Windchill 8.0 Foundation & PDM	M040	Service Pack CD
Windchill Index Search powered by FAST InStream 4.3	Windchill Index Search powered by FAST InStream 4.3	M040	New CD
Windchill Info*Engine	Windchill 8.0 Info*Engine	M040	Service Pack CD
Windchill Info*Engine DOORS Adapter	Windchill 8.0 Info*Engine DOORS Adapter	M040	Replacement CD
Windchill Info*Engine Enterprise Business Applications Interface Adapter	Windchill 8.0 Info*Engine Enterprise Business Applications Interface Adapter	F000	Replacement CD
Windchill Info*Engine JDBC Adapter	Windchill 8.0 Info*Engine JDBC Adapter	M020	Replacement CD
Windchill Info*Engine Java Adapter Development Kit	Windchill 8.0 Info*Engine Java Adapter Development Kit	F000	Replacement CD
Windchill Info*Engine Metaphase Adapter	Windchill 8.0 Info*Engine Metaphase Adapter	M040	Replacement CD
Windchill Information Modeler	Windchill 8.0 Information Modeler	M040	Service Pack CD
Windchill Integration for Rational ClearCase	Windchill 8.0 Integration for Rational ClearCase	M040	Service Pack CD
Windchill Multilanguage Pack	Windchill 8.0 MultiLanguage Pack	M040	Service Pack CD/ Replacement CD
Windchill Optegra Gateway	Windchill 8.0 Optegra Gateway	M040	Service Pack CD
Windchill PartsLink	Windchill 8.0 PartsLink	M040	Service Pack CD

Product Name	CD Label	Current Version of Product	Maintenance Delivery
Windchill PartsLink Catalog	Windchill 8.0 PartsLink Catalog	M040	Service Pack CD
Windchill PDMLink	Windchill 8.0 PDMLink	M040	Service Pack CD
Windchill Pro/INTRALINK Gateway	Windchill 8.0 Pro/INTRALINK Gateway	M040	Service Pack CD
Windchill ProjectLink	Windchill 8.0 ProjectLink	M040	Service Pack CD
Windchill Services	Windchill 8.0 Services	M040	Service Pack CD
Windchill Supplier Management	Windchill 8.0 Supplier Management	M040	Service Pack CD
Windchill Visualization Services	Visualization 8.0 - Windchill Support	M040	Replacement CD
Windchill Workgroup Manager for AutoCAD	Windchill 8.0 Workgroup Managers	M040	Replacement CD
Windchill Workgroup Manager for Autodesk Inventor	Windchill 8.0 Workgroup Managers	M040	Replacement CD
Windchill Workgroup Manager for CADDs	Windchill 8.0 Workgroup Manager for CADDs	M040	Service Pack CD
Windchill Workgroup Manager for CATIA V4	Windchill 8.0 Workgroup Manager for CATIA V4	M040	Service Pack CD
Windchill Workgroup Manager for CATIA V5	Windchill 8.0 Workgroup Manager for CATIA V5	M040	Replacement CD
Windchill Workgroup Manager for ECAD	Windchill 8.0 Workgroup Manager for ECAD	M040	Replacement CD
Windchill Workgroup Manager for I-DEAS	Windchill 8.0 Workgroup Managers	M040	Replacement CD
Windchill Workgroup Manager for SolidWorks	Windchill 8.0 Workgroup Managers	M040	Replacement CD
Windchill Workgroup Manager for Unigraphics	Windchill 8.0 Workgroup Managers	M040	Replacement CD

For all products maintained by the service pack, the version changes to match the version of the service pack, whether there were actual changes to the product or

not. For those products identified that the maintenance delivery will be service pack after a specific version, the version changes after a change has been made.

Maintenance Fixes Table

The Maintenance Fixes table, formerly known as the SPR table, contains important information about the software performance reports (SPRs) addressed in this Windchill 8.0 maintenance release. The table provides information about the Technical Application Notes (TANs) and related SPRs that fix known issues.

You can get the latest version of the Maintenance Fixes table from the PTC Online Support Web page for reference documents:

<http://www.ptc.com/appserver/cs/doc/refdoc.jsp>

For your document search criteria, select **Windchill** from the **Product** drop-down list, select the **8.0** from the **Release** drop-down list, select **Installation and Configuration Guide** from the **Document Type** drop-down list, and select **All User Roles** from the **User Role** drop-down list. Then click **Browse the reference documents**. In the results displayed, locate 8.0 <release_designation> Maintenance Fixes.

You can be notified automatically when additional TANs are written for the Windchill products. The ability to do this is referenced in the Customer Service Guide at: http://www.ptc.com/support/cs_guide/index.htm.

The instructions to set it up are located on the support page at <http://www.ptc.com/support/support.htm>. Click **Subscribe to Knowledgebase Alerts**.

What's New?

This section provides information about new features and notable end user, administrator, and customizer impacts.

The information is divided into sections that define which maintenance release includes the change. Be sure to read through all applicable sections. For example, if your site has previously installed the M030 maintenance release, read the Notable Changes in M040 and skip the Notable Changes in earlier release sections. If your site has not installed any maintenance release, read every section. The most current maintenance release information is listed first.

Notable Changes in M040

The M040 release for Windchill 8.0 has many changes that are grouped in the following sections for easy access:

- [Improved Search](#)
- [Import and Export using Microsoft Excel](#)
- [Change Management](#)
- [Windchill PDMLink](#)
- [Windchill Third Party Products](#)
- [Visualization Improvements](#)
- [Enterprise Resource Planning \(ERP\) Connector](#)
- [CAD Data Management](#)
- [Windchill Workgroup Manager for ECAD](#)
- [Windchill Foundation & PDM to Windchill PDMLink Migration](#)
- [SQL Server Support](#)
- [Oracle 9i Tuner](#)
- [Updated Platform Support](#)
- [Product Requirements](#)
- [Temporary Patch Information Tool](#)

Improved Search

Windchill Index Search powered by FAST InStream replaces Convera RetrievalWare as the Windchill index search engine. Windchill Index Search provides the following:

- Improved search capabilities, including:
 - Improved platform support
 - Improved language support
 - Spell checking
 - Content teasers
- Prevention of empty queries -- Windchill users can no longer accidentally query for every object in Windchill without any additional search criteria.

Note: The replacement requires that you index your Windchill database again.

Import and Export using Microsoft Excel

Windchill PDMLink users are able to use the following capabilities:

- Import parts and BOMs, including the following:
 - Creating new and updating existing parts and BOMs
 - Support for classification
- Import approved manufacture list
- E-mail notifications when the import is completed
- History information available for the import, including the Microsoft Excel file used.

Change Management

- BOM and ProductView markups can now be attached to change objects. Prior to Windchill 8.0 M040, markups could only be referenced in the description field of a change object.
- Markups are exposed on the properties pages, as follows:
 - Third-level navigation shows any BOM and ProductView markups on parts, documents, and CAD documents.
 - You can open the annotation in the Product Structure Explorer.
- With M040, you can use a Where Used action in the collector to find and add parents to change to affected date for a change notices.
- The need date field is no longer required on change notices. The removal of the requirement will facilitate the Windchill Foundation & PDM to Windchill PDMLink migration.

Windchill PDMLink

- A utility is provided to allow users to change their passwords. To enable this functionality, see [TAN 137035](#).

Windchill Third Party Products

- Support of WebSphere on an AIX platform.

For configuration information, see the updated *Info*Engine Installation and Configuration Guide*.
- Support of SQL Server -- see [SQL Server Support](#).

Visualization Improvements

- Marking viewables out of date is triggered when you check something in or when you revise it.

- Leverages existing Pro/ENGINEER capabilities to create graphical representations with an optional ability to configure Windchill Visualization Services to create a dynamic document with the image.
- Associates CAD representations to graphical references within Arbortext publications.
 - With Arbortext Editor 5.3 M020
 - Includes support for annotation sets

Enterprise Resource Planning (ERP) Connector

Windchill Info*Engine introduces an extension of the ESI Services, including the following:

- Provides a lightweight way to get ERP releases out of Windchill
- Takes full advantage of ESI user interfaces and workflows
- Leverages Windchill net change logic just like ESI
- Provides open-loop publishing
- Extensible architecture to support different publication channels
- Is useful for:
 - Plugging into an existing ERP import routine
 - Providing more consistent input to a manual ERP entry process
 - Writing your own integration

CAD Data Management

Improved to maintain modified status after an upload. This provides accurate status communicated to the user and eliminates potential for loss of changes.

Windchill Workgroup Manager for ECAD

Support for wiring schematics. Capabilities include:

- Simplified workgroup manager interface to interact on schematic data only
- Schematic design archiving
- Enabling all PLM-related activities (change management, project tracking, and so forth)
- Automatically attaching associated files
- Support for Pro/INTRALINK, Windchill PDMLink, and Windchill ProjectLink
- Optional BOM uploading based on the file exported from an application

- Additional features with Routed Systems Designer release 7
- Supported with Windchill 8.0 M040 and RSD release 6.0 M040 or release 7.0

Windchill Foundation & PDM to Windchill PDMLink Migration

Windchill Foundation & PDM to Windchill PDMLink Migration tools are available, but not released, with Windchill 8.0 M040. However, these migration tools will be released asynchronously with M040 and will be available at a later date. Documentation will be available when these tools are released.

The tools will convert a Windchill Foundation & PDM 8.0 system into a one-library Windchill PDMLink system preserving, among other things, all access control rules, folder structure, and groups from the Windchill Foundation & PDM. CAD support will not be in M040; it will be provided in M050.

In order to facilitate the migration the following implementation has occurred:

- Access control rules preserved
- Users can be added to a library team
- Cabinets are converted to folders
- Reassign Life Cycles and Reset Teams actions are provided for parts and documents

Note: The capability to select a life cycle or team template when creating a document, as well as the Reassign Life Cycle and Reset Team actions for documents are not supported for Windchill Desktop Integration.

SQL Server Support

PTC supports using the SQL Server 2005 Enterprise Edition, Standard Edition, and Workgroup Edition software as the Windchill database with this maintenance release.

Also included is the support of SQL Server Configuration Utility.

For information on installing and configuring the SQL Server software, see the latest update to the *Windchill Installation and Configuration Guide -Windchill*.

Oracle 9i Tuner

The Oracle 9i Tuner replaces the Tune-up Package for Oracle 9i that was delivered in an earlier release.

Install this tuner to:

- Update the previous tune-up package.
- Automate the tuning of the major Oracle cache buffers.
- Gather operating system and Windchill schema statistics.

As part of the installation, you can choose to only gather statistics or to also automate tuning. For information on the Oracle 9i Tuner installation options and other performance tuning activities for Oracle 9i, see the 8.0 M040 update to the *Windchill Performance Tuning Guide*.

Updated Platform Support

- SQL Server Production
- AIX 5.3 WebSphere support
- IE7 Support
- Support Java 1.6 Plug-In
- Adobe 8.0 Reader support

Product Requirements

- Pro/INTRALINK Gateway Compatibility includes the following:

Windchill Pro/INTRALINK Gateway Release	Pro/INTRALINK Application Server (IAS) (Datecode)	Pro/INTRALINK Multi-site (Datecode)
8.0 M040	3.3 (M0213)	3.3 (M021)
	3.4 (M028)	3.4 (M020)
	3.4 (M036)	3.4 (M030)
	3.4 (M041)	3.4 (M040)

- Pro/ENGINEER versions are qualified:
 - Pro/E Wildfire 2.0: M250
 - Pro/E Wildfire 3.0: M070

Temporary Patch Information Tool

After installing the 8.0 M040 Windchill Service Pack, you have the ability to list all of the temporary patches that you have applied on a given system. For details, see [Customer Updates and Fixes Following an Initial Release](#).

Notable Changes in M030

The M030 release for Windchill 8.0 has many changes that are grouped in the following sections for easy access:

- [Localized Online Help](#)
- New product release--[Arbortext Content Manager](#)
- [PDS Interoperability](#)
- [Windchill Services and Solutions](#)
- [Windchill Third Party Products](#)
- [Windchill Visualization](#)
- [Workgroup Managers](#)

Localized Online Help

The Windchill MultiLanguage Pack includes the localized Windchill 8.0 M030 version of the newly updated online help, including Arbortext Content Manager.

Product Requirements

- Pro/INTRALINK Gateway Compatibility includes the following:

Pro/INTRALINK Application Server (IAS) (Datecode)	Pro/INTRALINK Multi-site (Datecode)
3.3 (M0211)	3.3 (M021)
3.4 (M026)	3.4 (M020)
3.4 (M034)	3.4 (M030)

- Pro/ENGINEER versions are qualified:
 - Pro/E Wildfire 2.0: M220
 - Pro/E Wildfire 3.0: M020
- New Third Part Software Qualifications: None

Arbortext Content Manager

PTC introduces a Windchill-based content management system, Arbortext Content Manager (ATCM), to be used in specific non-manufacturing verticals and organizations outside of engineering in manufacturing verticals.

PDS Interoperability

- Check out meta data only (Non-Pro/ENGINEER workgroup manager HTML workspace restrictions)

Removal of the **Checkout Metadata Only** state check in Windchill 8.0 caused undesired behavior and loss of functionality in the HTML workspace for non-Pro/ENGINEER authored CAD documents. In 7.0 and earlier versions of Windchill, the CADx HTML UI used this state to identify non-Pro/ENGINEER authored CAD documents that were checked out or downloaded by the workgroup managers and thereby prevent certain product data management operations from being performed on such CAD Documents in the standalone HTML workspace.

This feature introduced a **Reserved by WGM** flag based implementation to address the limitation caused by the removal of the checkout metadata only state in Windchill 8.0.

- Support of 64-bit Pro/ENGINEER on Windows XP interacting with Windchill 8.0 M030.

Windchill Services and Solutions

The following Windchill 8.0 M030 changes apply to Windchill Services or one or more of the Windchill solutions:

Revision Standard: PTC supports the use of the ASME Y 14.35M revision standard for revisions; however, none of the out-of-the-box versioning schemes fully implements this standard. For details on how to update your versioning scheme to this standard, see the 8.0 M030 update to the *Windchill Business Administrator's Guide*.

Windchill Aerospace and Defense Module

Windchill Aerospace & Defense Module provides the ability for customers to set the end date in the incorporation range (unincorporate) for a product instance. Providing this capability enables customers to subsequently re-allocate a child product instance to a second higher level product instance (for example, unincorporate a serialized engine from a helicopter and place it in a second helicopter). The Windchill Aerospace & Defense Module will be the only product to deliver this capability.

Windchill PDMLink Business Object Uniqueness Considerations

The following Windchill 8.0 M030 changes apply when Windchill PDMLink is configured to restrict data use to specific organizations.

- CAD document uniqueness

CAD documents must be unique across all organizations within the site, regardless of the business object uniqueness configuration. If CADDoc1 exists within Org1, a user cannot create a CADDoc1 in any other organization within your site.

- Search capabilities

The capability that allows users to search for all objects across all organizations in the site is limited only by user access controls and other site configurations. If your site is configured for business object uniqueness by organization, however, business objects from one organization cannot be selected from the search results and used within a different organization. For example, a part from one organization cannot be added as a child part to a parent part that is from a different organization.

- Support for Supplier Management when Windchill PDMLink is configured to allow business object uniqueness across multiple organizations
- Visualization Object Adapter is supported when Windchill PDMLink is configured to allow business object uniqueness by organization

Includes the following Object adapters:

- Visualization 11.0 M030 – JT Adapter support
- Visualization 11.0 M030 – Object Adapter Support (Pro/ENGINEER, SW, and AutoCAD)

For information on configuring Windchill PDMLink to support business object uniqueness by organization, see the *Windchill Installation and Configuration Guide - Windchill*.

Windchill Supplier Management

Provide the ability to import part and product structure data from a Microsoft Excel spreadsheet into a library or a product. This allows you to build product structures from existing parts, create new parts, or update existing parts using data in the input spreadsheet. In addition, it also allows you to import the AML/AVL information into Windchill.

Windchill Integration for Rational ClearCase

- Export to spreadsheet

Provides the ability to export Windchill parts to a Microsoft Excel spreadsheet file that can be later imported back in Windchill.

- Asian language support for the online help for Windchill Integration for Rational ClearCase.

Windchill PDMLink

- Product Structure Browser Enhancements

The Table View Manager, formerly available only on the Workspaces table, is now available on the Product Structure Browser table. The Table View Manager allows users to select which attributes, including soft attributes, display in the table's columns. Users can create and save different views,

depending on which attributes they want to display, and the order in which the attributes should appear.

- Change Management

Windchill PDMLink introduces some performance improvements in displaying or refreshing the change notice details page when there are a large number of items in the Affected Data table.

In order to take full advantage of these improvements, the following preferences need to be set at the site level.

```
/wt/part/display_thumbnail_in_table=false  
/wt/part/render_icon_as_link=false  
/wt/part/display_product_view_link=false  
/wt/change2/DisplayPendingChanges=false
```

Windchill ProjectLink

- Enhance the current action items in Windchill ProjectLink to support the following capabilities:
 - Expose for use a large set of out of the box attributes which can be repurposed or hidden and which can be viewed and updated both through web interfaces and using Microsoft Excel.
 - Define, update, and export action items through Microsoft Excel
 - Link action items to parts, documents, CAD documents (including parts and documents that are checked out from PDMLink), milestones, activities, and deliverables
 - Support discussion forums for action items
 - Send automatic e-mail notifications to users when an action item is assigned, reassigned, overdue, or resolved
- The discussion forums are displayed on the plan object details pages. This includes deliverables, milestones, activities, and summary activities.

Windchill Third Party Products

- Support for Oracle 10g
- Client Certification - AIX 5.3 with Mozilla 1.7 and latest JPI 1.5Beta Release of SQL Server

This release includes support of SQL Server Configuration Utility

Windchill Visualization

Support of publishing geometric dimensioning and tolerancing information on inheritance features in the Visualization WF3 adapter and the corresponding viewing of this information with ProductView.

Workgroup Managers

Add Support for CATIA V5 R16, Unigraphics NX4, and AutoCAD 2006

Notable Changes in M020

The M020 release for Windchill 8.0 has many changes that are grouped in the following sections for easy access:

- [PDS Interoperability](#)
- [Pro/INTRALINK 8.0 Licenses](#)
- [Windchill Services and Solutions](#)
- [Windchill Third Party Products](#)
- [Windchill Workgroup Manager for ECAD](#)

PDS Interoperability

With Pro/ENGINEER Wildfire 3.0, the following new capabilities are available:

Capability	Windchill PDMLink	Windchill ProjectLink	Pro/INTRALINK 8.0
Bulk item support	X	X	X
Improved difference reporting: <ul style="list-style-type: none">• Report generation from details pages• Save difference report to Windchill• Saved reports are viewable by non-Pro/ENGINEER users	X X X	 X X	X X X
Improvements to checkout-on-the-fly	X	X	X
Status reporting model tree	X	X	X
Improvements to event console	X	X	X

Capability	Windchill PDMLink	Windchill ProjectLink	Pro/INTRALINK 8.0
Portable workspace capabilities that allow CAD designers to work offline in a data management-controlled environment: <ul style="list-style-type: none"> • Intentionally take a workspace offline • Export an entire workspace - attach to an e-mail, or write to a CD/DVD or removable disk • Connect to the workspace without any network connection • While offline, track changes and enforce unauthorized modifications • When returning online, easily identify changes and check-in modifications 	X	X	X
Floating License checks for working with Pro/INTRALINK 8.0			X
Ability for customer to customize the Pro/E download service to create Pro/ENGINEER system parameters from any information in Windchill. These parameter values are set on the server and passed read-only into Pro/E as system parameters.	X	X	X

Pro/INTRALINK 8.0 Licenses

With the introduction of Wildfire 3.0, Pro/ENGINEER users must have a Pro/INTRALINK 8.0 license to work with a Pro/INTRALINK 8 server, Pro/INTRALINK 8.0 workspace, or Pro/INTRALINK 8.0 portable workspace.

This new Pro/INTRALINK 8.0 license impacts only interactions with Pro/INTRALINK 8.0 servers and workspaces. The interaction between Pro/ENGINEER and Windchill Foundation & PDM, Windchill PDMLink, and Windchill ProjectLink is not changed.

With this licensing change, Pro/INTRALINK 8.0 license options will be distributed to existing and new customers with the following products:

- Flex3C package (with Pro/INTRALINK)
- Pro/INTRALINK Single-site
- Pro/INTRALINK Multi-site

Since Pro/INTRALINK 8.0 is included with Windchill PDMLink, Windchill PDMLink customers are also entitled to this license option. The license option allows Windchill PDMLink customers to access Pro/INTRALINK 8.0 portable workspaces. If a Windchill PDMLink user wants to access a Pro/INTRALINK 8.0-generated portable workspace, the Windchill PDMLink user needs a proi8 license. However, if the Windchill PDMLink user is trying to access a Windchill PDMLink-generated portable workspace then a Pro/INTRALINK 8.0 license is *not* required.

Windchill Services and Solutions

The following Windchill 8.0 M020 changes apply to Windchill Services or one or more of the Windchill solutions:

- Soft Typing of Change Objects in Windchill PDMLink includes:
 - The ability to create instances of change objects (either modeled or soft) with soft attributes.
 - The addition of new change object type pickers, providing the ability to select at runtime which (either modeled or soft) type of Problem Report, Change Request, Change Notice, or Change Activity to create.
- Change Usability in Windchill PDMLink include the following:
 - Copy action on Affected Data and Resulting Items tables
 - Paste action on Affected Data and Resulting Items tables
 - Propagate data from a Problem Report to a Change Request
 - Propagate data from a Change Request to a Change Notice
 - Expand-All and Collapse-All actions on Change information pages

- MicrosoftProject actions in Windchill ProjectLink

MicrosoftProject-related actions (Import Microsoft Project Plan, Export Plan to Microsoft Project, and Edit Plan in Microsoft Project) were removed from the **Project Lists** and **Project Details** pages to support the new role-based UI feature. As a result, interaction with MSProject is available in Plan page only.

- Set Revision

The Workspace Revise command has been enhanced to allow a user to select the target revision for a revised object, instead of automatically using the next

revision in the sequence. This same feature is available for new objects, allowing historical data to be created at an initial revision greater than "A."

- Folder Subscriptions in Windchill PDMLink and Windchill ProjectLink

This gives users the ability to subscribe to folders, allowing them to receive an e-mail notification when certain events or actions occur on any item within a folder to which they are subscribed.

The folder subscription feature can be installed and configured with Windchill ProjectLink, Windchill PDMLink, or bundled Windchill ProjectLink PDMLink 8.0 only. For more information, refer to the "Communication Tools" section of the *Windchill ProjectLink User's Guide* or *Windchill PDMLink User's Guide*.

- New Support for Soft Attributes

Windchill Foundation & PDM and Windchill PDMLink allow user-defined attributes on uses relationships. It is possible to create these attributes for the uses relationship between two parts. This change supports only soft attributes.

- Support for the Arbortext Editor and Arbortext Publishing Engine connection to Windchill PDMLink.

Data files created by the Arbortext Editor and saved to Windchill using the Windchill Connection to the editor are managed in Windchill PDMLink as dynamic documents.

For information, see [Getting Started with Windchill PDMLink and Arbortext Editor](#). You can also find information in the readme file located in the directory in which you downloaded Arbortext.

- New Support for iCal

iCal compliant attachments are now delivered with the meeting notifications for Windchill ProjectLink and Windchill PDMLink (from the **Home** tab), and Windchill Foundation & PDM.

This allows a user with an iCal-compliant mail reader to accept the meeting into their calendaring system. This includes meeting updates and cancellations. The user is free to make updates from their personal calendar system, but those updates are not be reflected in Windchill.

By default, a single e-mail is generated with all meeting attendees addressed as "To:". Unfortunately, this localizes the e-mail in the sender's locale.

There is a property to control this behavior,

`wt.meeting.outlookStyleNotifications.`

The default is true. When true, a single email is sent to all of the meeting attendees and localized in the sender's locale. When false, each participant gets their own e-mail appropriately localized.

- Support Change for JAR.CONFIG Files

JAR.CONFIG files are no longer supported in Windchill solutions. Refer to the *Windchill Customizer's Guide* for information on another, supported approach.

- Searching for Deleted Users in Audit Reports

Deleted users are now included in the **Find User** search results for User Access and User-Context reports; however, the user interface has not changed.

- The wt.load.LoadUser.createUser Load Method Was Updated

The wt.load.LoadUser.createUser load method has been updated to enable the loading of enterprise users from corporate LDAP. See the Java Doc for details.

- The following functionality is supported for Windchill PDMLink:

- Automatic UI exposure for display and editing of custom modeled attributes for Windchill documents, parts, products, end items, and change objects.
- Improved consistency of behavior between custom soft attributes and custom modeled attributes.
- Preference-configurable type picker functionality when creating new parts and documents, and change objects (flat vs. hierarchical type display, ability to change default selection).
- Ability for user to control which kind of links are created between parts and documents.
- Option of selecting URLs as well as files for PDMLink document attachments and primary content.

For more information about using the above functionality, see the *Windchill Business Administrator's Guide*.

- Role-Based User Interface in Windchill ProjectLink

This software update introduces a new capability to configure a Windchill ProjectLink system, individual projects and project templates to hide visibility to information and actions globally or based on project team role membership. This capability is intended to allow site administrators and project managers the ability to easily tailor the complexity of the system for all users or for specific users in a project team.

As a site administrator, you may choose not to use the Windchill ProjectLink meeting or plan functionality in any of your projects, and this feature allows you to configure the system to hide the meeting and plan information and action for all users.

As a project manager, you may choose to hide all but the folder and document management functionality for all members of a customer role in a particular project.

The action giving project managers the capability to determine which functionality is visible is called configuring roles. When project managers choose to configure roles, they can provide a focused set of information and actions to suppliers, partners, or customers who may be infrequent participants in a project. Configuring the roles of infrequent participants allows for the display of only the information and capabilities needed for those participants. As a result, confidential and competitor information can be concealed. Also, the interface is focused on specific areas, which avoids confusion caused by inapplicable actions and information.

The following capabilities are supported:

- Project managers can configure a specific project to control the project information and actions are visible to specific project team roles.
- Organization and site administrators can define project templates that pre-define which project information and actions are visible for projects created using the template. Template configurations can be overridden in project instances by project managers.
- Site administrators can hide actions and information from all users and can set defaults to limit the information and actions the project managers can individually configure for team roles in their projects.

Note: In general, the mechanism for configuring roles is not based on access control policies but on mechanisms in the user interface that instruct the system to display or not to display information and actions for a particular role. If some information or actions are extremely sensitive and should never be accessible by members in the role, it is best to create projects for those organization members and roles that should have very limited access to information and to share information from a parent project to each of the separate projects.

For more information on roles, see the online help available on the **Team** page or the "Managing Context Teams" chapter of the *Windchill ProjectLink User's Guide*.

Windchill Third Party Products

- Oracle Software Assistant (OSA) Security Update

The October 2005 Oracle Security patches have been added to the current version of the OSA. The version number for Pro/INTRALINK 8.0 M020 is OSA 2.0 M030.

- Updated Versions of Apache are Available for use.

PTC has created a web page that allows customers to download early release builds of Apache installers that include security fixes. The download page references technical application notes (TANs) that give details about the new installer and instructions on how to install and upgrade Apache. These builds have received only minimal testing to verify basic operation so as to provide these fixes with the minimum possible delay, but they are fully supported by PTC Technical Support for 8.0 MORs. For more information, refer to the following technical point of interest (TPI) on the PTC Web site:

<http://www.ptc.com/appserver/cs/view/solution.jsp?n=132134>

- See [Installing Third-Party Products](#) on page 3-13 for further updates.

Windchill Workgroup Manager for ECAD

The Windchill Workgroup Manager for ECAD includes the following changes:

- Added support for Mentor Graphics DxDesigner, Design Capture, and Expedition.
- Added support for industry standard ASCII file formats (such as EDIF, CADIF, DSN, and GenCAD). These file formats can be associated to any ECAD application for operation by the Workgroup Manager for ECAD.
- Provided local client storage of all design information that is uploaded to Windchill.

Notable Changes in M010

The M010 release for Windchill 8.0 has many changes that are grouped in the following sections for easy access.

Windchill Upgrade

The following upgrade paths are supported for Windchill 8.0 M010:

- Windchill PDMLink 6.2.6 to Windchill PDMLink 8.0
- Windchill ProjectLink 6.2.6 to Windchill ProjectLink 8.0
- Windchill Foundation & PDM 6.2.6 to Windchill Foundation & PDM 8.0
- Interoperable Windchill Foundation & PDM & Windchill ProjectLink 7.0 to Interoperable Windchill Foundation & PDM & Windchill ProjectLink 8.0

For upgrade details, see the *Windchill Upgrade Guide*.

Third Party Products

See [Installing Third-Party Products](#) on page 3-13.

Windchill Services and Solutions

The following Windchill 8.0 M010 changes apply to Windchill Services or one or more of the Windchill solutions:

- The move of an iterated object between folders within a container now updates all iterations of the version, similar to the way the move between containers works. For details on this change, see the online help associated with the move operation.
- To fix a Windchill memory leak, the default property value for `wt.manager.cmd.common.java.args` in `wt.properties` has been changed to remove the "-Xnoclassgc" argument. To ensure that this argument is not set through your `site.xconf` file, use the `xconfmanager` utility to display the property value for `wt.manager.cmd.common.java.args` and, if this argument is included, delete it and propagate your change.
- The `wt.workflow.engine.useLatestTemplateIteration` property has been added to `wt.properties` to ensure that latest iteration gets picked up the first time the subprocess is encountered in the workflow. For workflow information, see the *Administering Workflow Processes* chapter in the *Windchill Business Administrator's Guide*.
- When using the **Rename** action in Windchill PDMLink and autonumbering of the part or document is turned on, Product Managers, organization administrators, and site administrators can now renumber a part or document.
- For Windchill PDMLink, there is a new property to activate a prompt when revising CAD documents and parts when using the **Revise** action from a **Create Change Notice** and **Update Change Notice** window. The property is `com.ptc.windchill.pdmlink.change.server.processors.reviseDialogPreference` and the default value is set to true.

Note: This new property does not change the operation of a **Revise** action initiated from the **Change Notice** details page.

If a CAD document or part is selected for revision on a **Create Change Notice** and **Update Change Notice** window, a window displays to confirm that any objects that have other objects associated to them through active links are revised. If the user clicks **OK**, for every active link found, the associated objects are also revised with the active link propagated to the new versions created. If the actively-associated object already existed in the same Change Activity's (Task) Affected Items, then its new version will also be added to the Resulting Items, notifying that the newly versioned object also is part of the change process. If the actively-associated object is not part of the Affected Items for that Change Activity (Task), the object will be revised with the link propagated, but its newly-versioned object will not be added and the Resulting Items table and does not participate in the change process.

Note: No active links are investigated without the consent of the user (by clicking **OK**).

Since this behavior is significantly different from the current behavior, a new Windchill property is introduced that allows administrators to turn off this new behavior. When this property is turned off, the Revise operation does not change the current behavior. If the system is not used to manage any CAD documents, or the CAD documents in the system do not have active links to parts in the system, turning off the property eliminates the prompt window and results in a slightly increased level of performance. If the system has CAD documents that maintain active links to parts in the system, it is crucial that this property is set to true.

- Windchill PDMLink and Windchill ProjectLink now provides traceability of task reassignment and reassignment history.

Individuals who are the recipients of a reassigned task are made aware that that the task was reassigned by both an indicator in their assignments list and through a reassignment history synopsis that is displayed when they open a task that has been reassigned. The task reassignment information includes the date of reassignment, the reassigner, and the reason for reassignment.

- When project, product, and library managers view a list of assignments, they can see which tasks have been reassigned and can access the task reassignment history by opening the task. Product, project, and library managers can also reassign multiple selected tasks to team members. The action to reassign multiple tasks can be accessed from the list of assignments in a product, project, or library context. Performance Enhancement for Systems with Many Soft Types (M010)

On Windchill PDMLink and interoperable Windchill PDMLink with Windchill ProjectLink, the following preference enhances the performance of systems that contain many soft types. Pages that display the create actions, such as the **Folders** page, take less time to load with the following preference specified using the Preference Manager.

Preference Root: /com/ptc/windchill/enterprise/templateutil

Preference Key: create_valid_check

Preference Values:

- Full - The availability of all create actions are processed using the base-type and all soft/sub-types, thus only showing the action when a user can truly perform a create. This option has the highest overhead and has the poorest performance.
- Base - The create action availability is determined by checking access against the base hard-type (i.e. WTPart, WTDocument, etc) and does not do the extra processing to determine the specific soft/sub-types that a user has create access for. This is the medium performance option.

Note: If create access is denied for a base hard-type, then the create action will not show up even if a user has create permissions for a soft/sub-type.

- Bypass (default) - All create actions will show up by default, bypassing any access checks as a trade-off for higher performance.
- Windchill ProjectLink provides the ability to define and update due dates and instructions for routing.
- The Pro/INTRALINK Oracle Software Assistant (OSA) that is used to install the bundled version of Oracle for Pro/INTRALINK 8.0 has been updated as follows:
 - Includes the Oracle July 2005 Critical Patch Update.
 - Supports installing Oracle on the HP-UX 11i v.2 (Itanium) platform.

To update an existing Oracle database with the July patch, run the OSA installer from the M010 replacement CD and, when prompted, supply the previous OSA installation directory that was used for installing the existing database.

To install a new Oracle database including the July patch, run the OSA installer from the M010 replacement CD. Installing OSA is described in the *Windchill Installation and Configuration Guide - Windchill*.

- The Windchill DCA Configuration Assistant is new with this maintenance release and is installed into Windchill Services. For information about the DCA Configuration Assistant, see the updated *Windchill DCA User's Guide*.
- Windchill Services has been updated so that you can use InterComm EDACompare clients starting from version 2.1 in order to compare EDA files uploaded to Windchill documents and CAD documents.
- If a user uploads a file with a file name longer than 60 characters, the name gets truncated to 60 characters.

Pro/ENGINEER

The following are Pro/ENGINEER-related changes in Windchill 8.0 M010:

- When ITAR restricted files that are published from Pro/ENGINEER are viewed in ProductView, a window displays requiring the user to acknowledge that ITAR restrictions apply.
- The following enhancements are changes made to Pro/ENGINEER to improve the performance when interacting with Windchill:
 - Allow Pro/ENGINEER retrieval and file download to be performed in parallel threads.
 - Allow incremental changes to workspace cache to be saved only in the foreground, and perform save for entire cache in background.
- A change has been made in Pro/ENGINEER so that when a user creates Date type parameter and uploads the item, the time entered will be interpreted using the local time zone preference set by user unless explicitly specified by

the user. Local time zone preferences can be set by user through **Home > Utilities > Preferences**.

Note: After updating to 8.0 M010, inform users that they need to remove CAD Documents from their workspace and download the CAD Documents to workspace again for the CAD Documents that have date IBAs so that the date used comes from the user's local time zone preference.

- From a CAD document details page, users can now change the columns of printable BOM Reports by modifying the CAD Document Structure report columns.

Windchill Info*Engine Adapters

The following are Windchill 8.0 M010 adapter changes:

- The Windchill Info*Engine Metaphase Adapter now supports Teamcenter Enterprise 5.0.
- The Windchill Info*Engine DOORS Adapter now supports DOORS 8.0.
- The third party installer for the DOORS API Server is being replaced by an installer authored by PTC.

Other

The following are other Windchill 8.0 M010 changes:

- The Windchill PartsLink search has been enhanced to allow for searching on parts that have been classified with more than one classification.
- An upgrade script is provided for Pro/INTRALINK Gateway customers upgrading to 8.0. How to upgrade Pro/INTRALINK Gateway is described in the *Windchill Upgrade Guide* provided with this release.
- Desktop Integration for Windchill PDMLink and Windchill ProjectLink has the following changes:
 - Windchill documents can be created directly in Microsoft Office.
 - The Windchill option is disabled, by default, from the right mouse button. For information about enabling the option, see the Managing Documents chapter of the applicable user's guide.
 - Support mapping of soft container attributes. Prior to this maintenance release mapping was limited to modeled attributes.
- The Windchill Workgroup Managers for SolidWorks, AutoCAD, Autodesk Inventor, Unigraphics, I-DEAS and CATIA V5 includes the following changes:
 - Support for checkout and checkin of previous iterations and versions

- Improved handling of structure and package mode with and without model files and viewables during checkin.
- From ProductView Standard Edition, users can disable the end-user actions of Save/Export and Print.
- InterComm EDACompare clients (starting with version 2.1) can integrate with Windchill documents and CAD documents. See the EDACompare online help for information.
- The InterComm Expert client has been updated to integrate with Windchill documents and CAD documents. For more information, see the [*Windchill InterComm Expert Integration Support Release Bulletin*](#).
- The following Windchill ESI enhancements have been made:
 - Substitutes in an assembly (which are assemblies by themselves) can now be published.
 - Error messaging has been improved for failed transactions on account of any of the children in an assembly not having a distribution target associated with it.
- Rational ClearCase can be integrated with Windchill PDMLink and Windchill ProjectLink starting with this release.

For more information, see the *Windchill Integration for Rational ClearCase Administrator's and User's Guide*, which is available from the PTC Online Support Web page for reference documents at:

<http://www.ptc.com/appserver/cs/doc/refdoc.jsp>

2

Maintenance Installation Planning

This chapter contains information that can help you plan your installation or that can be used as reference material during the installation and as your site personnel modifies files provided by PTC.

Topic	Page
Software Matrices.....	2-2
Language Matrices	2-2
Windchill Installation Documentation	2-3
Accessing Updated Documentation	2-4
Maintaining an Inventory of Windchill Products.....	2-5
Using Best Practices When Updating to a Maintenance Release	2-10
Using Both Test and Production Systems	2-11
Using the Windchill Service Pack.....	2-12

Software Matrices

The software matrix lists the combinations of platforms, operating systems, and third-party products that are verified for use with this release on Windows and UNIX operating systems. It provides detailed technical support information for all Windchill products that are included in the release. It also includes information about third party products that are supported with Windchill, but not bundled with the release

Product and version matrix information is updated periodically to adjust to environment changes. To obtain a copy of the latest software matrix, use the following URL:

<http://www.ptc.com/appserver/cs/doc/refdoc.jsp>

This URL directs you to the PTC Online Support Web page for reference documents. For your document search criteria, select your product from the **Product** drop-down list, select the current release from the **Release** drop-down list, select **All User Roles** from the **User Role** drop-down list, and select **Matrices - Software** from the **Document Type** drop-down list.

Language Matrices

The language matrix lists the languages supported with this release.

To obtain a copy of the language matrix, use the following URL:

<http://www.ptc.com/appserver/cs/doc/refdoc.jsp>

This URL directs you to the PTC Online Support Web page for reference documents. For your document search criteria, select your product from the **Product** drop-down list, select the current release from the **Release** drop-down list, select **All User Roles** from the **User Role** drop-down list, and select **Matrices - Language** from the **Document Type** drop-down list.

The language information may be updated periodically to adjust to environment changes. See the PTC Web site (previously listed) for the latest copy of the language matrices.

The language files for most of the Windchill products are delivered on the Windchill MultiLanguage Pack CD in conjunction with the Windchill release. In some cases, however, a Windchill product will deliver its language files on the product installation CD.

Note: In the initial Windchill 8.0 release, the language content for all Windchill products is provided. Additionally, documentation (in the form of translated Windchill guides and tutorials) is delivered with the first maintenance release.

Windchill Installation Documentation

The following is a quick reference list of the Windchill 8.0 products and their associated installation guides:

- An overview of the Windchill 8.0 product suite -- *Windchill Installation Overview*
- Windchill Info*Engine -- *Info*Engine Installation and Configuration Guide*
- Windchill Foundation and Windchill solutions -- *Windchill Installation and Configuration Guide - Windchill*
- Windchill Visualization Services -- *Windchill Installation and Configuration Guide - Visualization Services*
- Windchill Visualization Object Adapters -- *Windchill Installation and Configuration Guide - Visualization Services Object Adapters*
- Windchill Information Modeler -- *Windchill Installation and Configuration Guide - Information Modeler*
- Windchill Index Search -- *Windchill Installation and Configuration Guide - Windchill Index Search*
- Windchill Classification Tools -- *Windchill Classification Tools Installation Guide*
- Windchill PartsLink -- *Windchill PartsLink Administrator's Guide*
- Windchill PartsLink Catalog -- *Windchill PartsLink Catalog Administrator's Guide*
- Windchill CounterPart -- *Windchill CounterPart Installation Guide*
- Windchill Enterprise Systems Integration for Oracle Applications -- *Windchill Enterprise Systems Integration Installation Configuration Guide - Oracle Applications*
- Windchill Enterprise Systems Integration for SAP -- *Windchill Enterprise Systems Integration Installation Configuration Guide - SAP*
- Optegra Gateway -- *Optegra Gateway Installation and Configuration Guide*
- Windchill Pro/INTRALINK Gateway -- *Windchill Pro/INTRALINK Gateway Installation and Configuration Guide*
- Workgroup Manager for AutoCAD -- *Workgroup Manager for AutoCAD Installation and Configuration Guide*
- Workgroup Manager for AutoDesk -- *Workgroup Manager for AutoDesk Installation and Configuration Guide*
- Workgroup Manager for CADDs -- *Workgroup Manager for CADDs Installation and Configuration Guide*

- Workgroup Manager for ECAD -- *Workgroup Manager for ECAD Installation and Configuration Guide*
- Workgroup Manager for CATIA V4 -- *Workgroup Manager for CATIA V4 Installation and Configuration Guide*
- Workgroup Manager for CATIA V5 -- *Workgroup Manager for CATIA V5 Installation and Configuration Guide*
- Workgroup Manager for I-DEAS -- *Workgroup Manager for I-DEAS Installation and Configuration Guide*
- Workgroup Manager for SolidWorks -- *Workgroup Manager for SolidWorks Installation and Configuration Guide*
- Workgroup Manager for Unigraphics -- *Workgroup Manager for Unigraphics Installation and Configuration Guide*

Accessing Updated Documentation

All updated and new Windchill guides are available from the PTC Online Support Web page for reference documents at the following URL:

<http://www.ptc.com/appserver/cs/doc/refdoc.jsp>

For your document search criteria, select a product from the **Product** drop-down list, select **8.0** from the **Release** drop-down list, select the appropriate document type from the **Document Type** drop-down list (or select **All Document Types** to get all updated guides), and select **All User Roles** from the **User Role** drop-down list.

Additionally, some updated guides reside on the replacement CDs are available with the maintenance release.

The following guides have been updated or are new with this maintenance release:

Note: Some of the guides listed are for optional products; if you have not purchased the product, the guide will not provide you with any information for your installed set of products.

- *Windchill Installation Overview*
- *Windchill Installation and Configuration Guide - Windchill*
- *Windchill Installation and Configuration Guide - Windchill Index Search*
- *Windchill Info*Engine Installation and Configuration Guide*
- *Windchill Business Administrator's Guide*
- *Windchill Performance Tuning Guide*
- *Windchill Upgrade Guide*

- *Windchill Supplier Management Administrator's and User's Guide*
- *Workgroup Manager for ECAD User's Guide*
- *Using Pro/ENGINEER Wildfire with Windchill*
- *ERP Connector User's Guide*
- *Windchill Customizer's Guide*
- *Windchill Maintenance Installation and Configuration Guide (this guide)*

For the complete list of installation guides, see [Windchill Installation Documentation](#).

Maintaining an Inventory of Windchill Products

As part of planning for maintenance releases, you should maintain an inventory of your existing deployment of Windchill products. The inventory provides you with a list of systems and directories to which you should apply updates. You will use this list when determining where to run the Windchill Service Pack installer and where to install the other products on the replacement CDs.

To help you with the task of determining where your products are installed, the following table shows the default directories for the products and identifies how you can determine the version of each product:

Product Name	Default Installation Directory	Identify Version By
Apache Web Server	Windows: C:\ptc\apache UNIX: /opt/hpws/apache	HP-UX: Running the following command: <Apache>/bin/apachectl -version Non HP-UX: Checking the supportDateCode in <Apache>/installer/instreg/apache.ia file ¹
Aphelion LDAP Directory	Windows: <drive>:\ptc\Aphelion UNIX: /opt/ptc/aphelion	Checking the supportDateCode in <Aphelion>/installer/instreg/aphelion.ia file ¹
Arbortext Content Manager	Windchill Services directory	Running the windchill version command ²
DOORS API Server	DOORS installation directory	Checking the supportDateCode in <DOORS>/installer/instreg/doorsapiserver.ia ¹

Product Name	Default Installation Directory	Identify Version By
Java Runtime Environment (JRE)	Windchill Services directory	Running the windchill version command ²
Oracle Configuration Utility	Windows: C:\ptc\ocu_8.0 UNIX: /opt/ptc/ocu_8.0	Checking the supportDateCode in <OCU>/installer/instreg/ocu.ia file ¹
Pro/INTRALINK 8.0	Windchill Services directory	Running the windchill version command ²
ProductView Collaboration	Windchill Services directory	Running the windchill version command ²
ProductView Document Viewing Option	Windchill Services directory	Running the windchill version command ²
ProductView ECAD Object Adapter	Windows: C:\ptc\ecad_object_adapters_11.0 UNIX: /opt/ptc/ecad_object_adapters_11.0	Running an adapter script with the -I option
ProductView ECAD Viewer	Windchill Services directory	Running the windchill version command ²
ProductView JT Object Adapters	Windows: C:\ptc\object_adapters_11.0 UNIX: /opt/ptc/object_adapters_11.0	Running an adapter script with the -I option
ProductView JT import filters	Import into Windchill Services directory	Running the windchill version command ²
ProductView Object Adapters for MCAD and Document Data	Windows: C:\ptc\object_adapters_11.0 UNIX: /opt/ptc/object_adapters_11.0	Running an adapter script with the -I option
ProductView Standard Edition and Realizer	Windows: <Program Files>\ptc\ProductView UNIX: /opt/ptc/productview	Accessing Help > About
TIBCO Adapter for Oracle Applications	Windows: C:\tibco UNIX: /opt/tibco	From the bin directory of the adapter, enter: adbagent -version

Product Name	Default Installation Directory	Identify Version By
TIBCO Adapter for R/3	Windows: C:\tibco UNIX: /opt/tibco	From the bin directory of the adapter, enter: addr3 -version
TIBCO BusinessWorks	Windows: C:\tibco UNIX: /opt/tibco	From <TIBCO>\bw\<version>, open Readme.txt
TIBCO Enterprise for JMS	Windows: C:\tibco UNIX: /user/tibco	Starting the TIBCO Enterprise for JMS server or viewing the documentation
TIBCO TurboXML	Windows: C:\Program Files\TIBCOExtensibility UNIX: /opt/tibco/turboxml	Viewing the Help Index for the application
Tomcat Servlet Engine	Windows: C:\ptc\tomcat5 UNIX: /opt/ptc/tomcat5	Checking the supportDateCode in <Tomcat>/installer/ instreg/tomcat.ia file ¹
Windchill Archive client	Windchill Services directory	
Windchill Archive server	Windows: C:\Windchill_archive UNIX: /opt/wcarchive	From the Windchill Archive Management console, click Help > About . The version number returned is formatted as: <release>.<MOR>.<build> For example, the version number for 8.0 M010 is 8.0.10.02.
Windchill Classification Tools	Windchill Services directory	Running the windchill version command ²
Windchill CounterPart	Windows: C:\ptc\CounterPart UNIX: /opt/CounterPart	Using the About dialog
Windchill ESI Business Logic for Oracle Applications	Windows: C:\tibco UNIX: /opt/tibco	Viewing the TIBCO BusinessWorks repository file name or global variable EAIBuildNumber
Windchill ESI Business Logic for SAP R/3	Windows: C:\tibco UNIX: /opt/tibco	Viewing the TIBCO BusinessWorks repository file name or global variable EAIBuildNumber

Product Name	Default Installation Directory	Identify Version By
Windchill Foundation & PDM	Windchill Services directory	Running the windchill version command ²
Windchill Index Search	Windows: C:\ptc\wst\indexsearch UNIX: /opt/ptc/indexsearch/ instream	<IndexSearch>\installer\ instreg\wis.ia file ¹
Windchill Info*Engine	Windows: C:\ptc\Windchill_8.0 UNIX: /opt/ptc/Windchill_8.0	Running the windchill version command ²
Windchill Info*Engine DOORS Adapter	Windows: C:\ptc\IE_DOORSAdapter UNIX: /opt/ptc/IE_DOORSAdapter	Checking the supportDateCode in <DOORS>/installer/ instreg/doorsadapter.ia ¹
Windchill Info*Engine Enterprise Business Applications Interface Adapter	Windows: C:\ptc\IE_EBAIAdapter UNIX: /opt/ptc/IE_EBAIAdapter	Checking the supportDateCode in <EBAI>/installer/ instreg/ebaiadapter.ia ¹
Windchill Info*Engine JDBC Adapter	Windows: C:\ptc\IE_JDBCAdapter UNIX: /opt/ptc/IE_JDBCAdapter	Checking the supportDateCode in <JDBC>/installer/ instreg/jdbcadapter.ia ¹
Windchill Info*Engine Metaphase Adapter	Windchill Info*Engine directory	Checking the datecode in the version.xml file on the adapter CD
Windchill Information Modeler	Windchill Services directory	Running the windchill version command ²
Windchill Integration for Rational ClearCase	Windchill Services directory	Running the windchill version command ²
Windchill Multilanguage Pack	Windchill Info*Engine directory, Windchill PartsLink directory, or Windchill PartsLink Catalog directory	Checking the supportDateCode in <install dir>/codebase/ instreg/wlp.ia ¹
Windchill Optegra Gateway	Windchill Services directory	Running the windchill version command ²

Product Name	Default Installation Directory	Identify Version By
Windchill PartsLink	Windchill PDMLink directory or for server only, Windows: C:\ptc\WindchillPartsLink UNIX: /opt/ptc/WindchillPartsLink	From the Windchill PDMLink directory, running the windchill version command ² or from the server directory, checking the supportDateCode in <WCPartsLink>/codebase/instreg/ptl.ia. ¹
Windchill PartsLink Catalog	Windows: C:\ptc\partslink UNIX: /opt/ptc/partslink	Checking the supportDateCode in <PartsLinkCat>/codebase/instreg/ptlcat.ia. ¹
Windchill PDMLink	Windchill Services directory	Running the windchill version command ²
Windchill Pro/INTRALINK Gateway	Windchill Services directory	Running the windchill version command ²
Windchill ProjectLink	Windchill Services directory	Running the windchill version command ²
Windchill Services	Windchill Info*Engine directory	Running the windchill version command ²
Windchill Supplier Management	Windchill Services directory	Running the windchill version command ²
Windchill Visualization Services	Windchill Services directory	Running the windchill version command ²
Windchill Workgroup Manager for AutoCAD	Windchill Services directory	Checking the version in <Windchill>/codebase/com/icubed/version.properties
Windchill Workgroup Manager for Autodesk Inventor	Windchill Services directory	Checking the version in <Windchill>/codebase/com/icubed/version.properties
Windchill Workgroup Manager for CADDs	Windchill Services directory	Running the windchill version command
Windchill Workgroup Manager for CATIA V4	Windchill Services directory	Running the windchill version command ²

Product Name	Default Installation Directory	Identify Version By
Windchill Workgroup Manager for CATIA V5	Windchill Services directory	Checking the version in <Windchill>/codebase/com/icubed/version.properties
Windchill Workgroup Manager for ECAD	Windchill Services directory	Running the windchill version command ²
Windchill Workgroup Manager for I-DEAS	Windchill Services directory	Checking the version in <Windchill>/codebase/com/icubed/version.properties
Windchill Workgroup Manager for SolidWorks	Windchill Services directory	Checking the version in <Windchill>/codebase/com/icubed/version.properties
Windchill Workgroup Manager for Unigraphics	Windchill Services directory	Checking the version in <Windchill>/codebase/com/icubed/version.properties

1. The IA files contain the InstalledAssembly element. In this element, there is a supportDateCode attribute. The supportDateCode attribute is set to the datecode of the installed product.
2. The windchill command is described in [About the windchill Command](#) that is in appendix A.

Using Best Practices When Updating to a Maintenance Release

If the implementation of Windchill at your site involves modifying files supplied by PTC, it's important to understand that the maintenance installation process could overwrite any file that is delivered by PTC (except for the site.xconf file). This includes files that you may have modified.

When you are updating to a maintenance release, PTC recommends that you follow the best practices established in the *Windchill Customizer's Guide* and described briefly in the [Managing Site-Modified Files When Installing a Windchill Maintenance Release](#) section on page 3-8.

Using Both Test and Production Systems

PTC recommends that you always use a test (pre-production) system to ensure that your Windchill products are operating as expected before deploying them on in a production environment. On the test system, you can make needed site modifications before moving the system into a production environment. You should always maintain the same set of Windchill products on both your test and production systems. This allows you check out potential issues on the test system without interfering with production system activities.

Installing a maintenance release involves updating code in both your main Windchill directory (the directory where Windchill Services resides) and, possibly, in other directories (depending on which Windchill products you have installed). Be sure to install the maintenance release in all directories that are affected by the release.

Using the test system allows you to incorporate updates from PTC into any site-modified files and validate the maintenance release with your own customizations without interrupting work being done on your production system. PTC recommends that you store a copy of all site-modified files in a safe area directory structure under the Windchill Services installation directory. Then, by running the Windchill Service Pack installer with an installation type option for installing only changed files (and not completing the installation), you have access to the files that PTC has changed for the maintenance release and can update your site-modified files accordingly. After updating your site-modified files, you can complete the installation on your test system. To learn more about managing site-modified files, see [Managing Site-Modified Files When Installing a Windchill Maintenance Release](#) on page 3-8.

After you have installed the maintenance release on a test system and are satisfied with the results, you can copy the site-modified files that you have updated to the safe area directory on your production system. Then, you are ready to repeat the maintenance release installation process on your production system. Because of the work you did on your test system, installing the maintenance release on your production system should take less time.

Using the Windchill Service Pack

The Windchill Service Pack contains updates for the following Windchill solutions: Windchill Foundation & PDM, Windchill PDMLink, Pro/INTRALINK 8.0, and Windchill ProjectLink, as well as a subset of the other Windchill product modules.

The following table lists the product modules that are updated by the Windchill Service Pack for this maintenance release:

Product Module	Installation Directory
Windchill Info*Engine	Windchill Info*Engine
Windchill Services	Windchill Services
Windchill Foundation & PDM	Windchill Services
Windchill Closed-Loop Change Process option for Windchill Foundation & PDM	Windchill Services
Windchill PDMLink	Windchill Services
Windchill ProjectLink	Windchill Services
Pro/INTRALINK 8.0	Windchill Services
Windchill Information Modeler	Windchill Services
Windchill Aerospace and Defense Module	Windchill Services
Windchill Integration for Rational ClearCase	Windchill Services
Windchill Supplier Management	Windchill Services
Windchill Pro/INTRALINK Gateway	Windchill Services
Windchill Workgroup Manager for CADDs	Windchill Services
Windchill Workgroup Manager for CATIA V4	Windchill Services
Windchill Classification Tools	Windchill Services
Optegra Info*Engine Adapter	Optegra Vault Server
Windchill PartsLink	Windchill PDMLink or Windchill PartsLink (server)

Product Module	Installation Directory
Windchill PartsLink Catalog	Windchill PartsLink Catalog
Windchill MultiLanguage Pack	Windchill Services Windchill PartsLink (server)

As mentioned in the [Using Both Test and Production Systems](#) section, PTC recommends that you use a separate test system to prepare and validate the updates before installing them into production. This will help ensure minimal downtime during the installation into the production system. It is also advisable to perform a backup of the product installation directory prior to performing the installation.

When you execute the Windchill Service Pack installer, it first determines which files should be installed onto your system. It does this by locating the directories that contain the Windchill products to be updated by the installer. After you select a directory to update, the installer determines which products are installed in the directory and what datecode versions are already present. This results in the following behavior:

- If the selected directory contains products for which there are no updates, no updates are installed.
- Previously installed updates are not re-applied at every execution of the Windchill Service Pack. This means that if there were no changes for a product between different datecodes of the Windchill Service Pack, and you have already installed the Windchill Service Pack from the earlier datecode, previous updates will not be re-installed during the next Windchill Service Pack installation.
- If the Windchill Service Pack installer detects that the current maintenance release of a Windchill product has already been installed in a selected directory, by default the installer does not reinstall the updated files; however, you are presented with an option to force the reinstallation to take place. You may run into this situation when you have installed the service pack for a given set of Windchill products (such as Windchill Services and Windchill PDMLink) and then you purchase another Windchill product that installs into the same installation directory (such as Windchill ProjectLink). After initially installing Windchill ProjectLink, you then run the Windchill Service Pack to update the product to the current maintenance release. During this update, the service pack detects that Windchill Services and Windchill PDMLink are already at the current maintenance release and, by default, only shows that Windchill ProjectLink needs to be updated. If for some reason you want to reinstall the maintenance updates for Windchill Services or Windchill PDMLink, you can do so by forcing the update.

The same process applies if you have updated a Windchill product to the current maintenance release and then go back and install a new component (such as Text Tailoring) from the original product CD. To update the

component to the current maintenance release, you must run the service pack installer again. By default, the installer updates only the files related to the component and not the entire product. You will have the option to force an update of the other components in the up-to-date products. You do not have the option to selectively force an update for particular products; you can only force the update of all or nothing.

- The installer only updates locale-specific resources on your system if it finds that those locales were previously installed and registered through an installation of the Windchill MultiLanguage Pack.¹

These features are intended to minimize the time it takes to install the Windchill Service Pack. In particular, this avoids re-installing updates to site-modified files when you have previously incorporated those changes, or reinstalling updates to Windchill products that have already been completed. To ensure that the latest site-modified files are used, the files in the siteMod directory are redeployed each time you run the Windchill Service Pack installer using the **Complete** installation type.

Note: Depending on what Windchill products have been installed and how they are deployed across your computer network, you may need to run the Windchill Service Pack installer against multiple directories on the same computer or on multiple computers. The [Maintaining an Inventory of Windchill Products](#) section provides information about where products are installed by default.

Each execution of the Windchill Service Pack updates all of the products it finds in a single directory; it can only address one directory at a time.

The following sections provide more details about installing the service pack in specific directories.

Installing the Service Pack in the Windchill Services Directory

The Windchill Service Pack installer assumes that if you have site-modified files, they are only in the Windchill Services installation directory and a copy of each modified file is maintained in the safe area directory named `<Windchill>/wtSafeArea/siteMod` (where `<Windchill>` is the Windchill Services installation directory). For details, see [Managing Site-Modified Files When Installing a Windchill Maintenance Release](#) on page 3-8.

If the siteMod directory does not exist, you are prompted to confirm that you have not modified files and want to continue with the installation. Continuing with the installation overwrites files without checking for site modifications.

1. For the Windchill 8.0 M010 release, updates to language files are delivered either through the M010 version of the Windchill MultiLanguage Pack or through a replacement of the original product CD images. For information on the products that have language files on the Windchill MultiLanguage Pack, see the *Windchill Installation and Configuration Guide - Windchill*. Language files are provided through the Windchill Service Pack for the M010 release.

If you have site-modified files that are copied to the
<Windchill>/wtSafeArea/siteMod directory, then you can choose from the
following installation types:

Installation Type	Files Updated	Use
Changed Files Only	Copies PTC updates to site-modified files into the <Windchill>/wtSafeArea/ptcCurrent directory and copies all other updated files into the selected directory, overwriting existing files where applicable.	Select either this type or the Updates for Site-Modified Files to Safe Area type before updating your site-modified files. Use this type when you have sophisticated customizations that may require interaction with other files supplied by PTC.
Updates for Site-Modified Files to Safe Area	Copies only PTC updates to site-modified files into the <Windchill>/wtSafeArea/ptcCurrent directory.	Select either this type or the Changed Files Only type before updating your site-modified files. Use this type when you have simple site modifications that do not require interaction with other files supplied by PTC and that can be updated by visually comparing files.
Complete	Copies PTC updates to site-modified files into the <Windchill>/wtSafeArea/ptcCurrent directory and copies all other updated PTC files into the selected directory, overwriting existing files where applicable. It also copies selected files from the wtSafeArea/siteMod directory to the selected directory.	Select this type only after updating your site-modified files. First select either the Changed Files Only or Updates for Site-Modified Files to Safe Area type to obtain PTC updates for site-modified files. Selecting this type runs the configuration actions (described later in this section) after files are updated.

The installer determines which files are relevant by identifying the products that are installed in the selected directory and the locales that have been installed from the MultiLanguage Pack CD.

The following descriptions provide additional information about each installation type:

- **Changed Files Only**

Selecting this installation type copies all updated files to your system, but does not overwrite site-modified files and does not run configuration actions such as updating property files and building JAR files. Therefore, the installation is not complete; the installer registers the beginning of the installation but not the end. After files have been updated, you can inspect all files and manually update the site-modified files in the siteMod directory. After comparing the files in the ptcCurrent directory to the corresponding files in the siteMod directory and then manually updating site-modified files in the siteMod directory, install the service pack again. This time, select the same directory and then select the **Complete** installation type to complete the installation.

- **Updates for Site-Modified Files to Safe Area**

Note: When you select this installation type, the installation directory is not updated so none of the currently installed files are updated. Only the updated files that correspond to the files in the <Windchill>/wtSafeArea/siteMod directory are copied to the ptcCurrent directory.

Selecting this installation type does not do a complete installation and no installation registry entry is made. Instead, it gives you access to the updates for site-modified files so that you can manually update your modified files. After manually updating site-modified files in the siteMod directory, install the service pack again. This time, select the same directory and then select the **Complete** installation type to complete the installation.

- **Complete**

For this installation type, the installer assumes that the files in the siteMod directory have been manually updated and are ready to replace the out-of-date files in the selected directory. PTC provides target options in the swmaint.xml script that can help you manage your site-modified files. For information about using this script, see [PTC Script for Working with Site-Modified Files](#) on page 3-9.

Note: If the version of your site-modified files that are in the siteMod directory are not compatible with the maintenance release, do not select the **Complete** installation type; instead quit the installer and update your files, or select one of the other installation types.

As part of the complete installation, the installer registers the beginning of the installation and executes the following service pack configuration actions:

- Propagates any XCONF file changes. This action uses the xconfmanager to update out-of-the-box default values for properties in property files.
- If codebase/*Registry.properties files are changed, updates Model Registry for Windchill Services, Windchill PDMLink, Pro/INTRALINK 8.0, and Windchill Pro/INTRALINK Gateway.
- Recompiles resource bundle information files (RBINFO files). This action executes only if the Text Tailoring custom option was installed as part of installing Windchill Services, Windchill Foundation & PDM, Windchill PDMLink, Pro/INTRALINK 8.0, or Windchill ProjectLink.
- Rebuilds all PTC and customer-defined client JAR files that are managed through the codebase/MakeJar.xml script or through the codebase/*.jar.config files.
- Updates Info*Engine tasks when ptcdar and ptctar files are included in the service pack.
- Copies all updated online help and tutorials that have been included in the maintenance release to their appropriate locations.
- If Windchill Pro/INTRALINK Gateway is installed, remerges changes to NavigationAndActions.xml and additions to caddoc.properties.

After all of the configuration actions complete successfully, the installer marks the installation as complete for each product updated.

Installing the Service Pack in Non-Windchill Services Directories

For the product directories that do not include Windchill Services, the Windchill Service Pack installer does not present installation type choices; it assumes that there are no site-modified files and copies updated files to the selected directory, overwriting existing files as needed.

You identified these directories in your site inventory. For details, see [Maintaining an Inventory of Windchill Products](#).

In these directories, the Windchill Service Pack installer also performs the following configuration action:

- Propagates any XCONF file changes in case the service pack has changes for the product being updated. This action uses the xconfmanager to perform the action.

After all of the configuration actions complete successfully, the installer completes the installation registry entry.

Installing the Service Pack in Lightweight Replica Installation Directories

Remember to update any lightweight replica sites you may have. These typically contain only Windchill Info*Engine and Windchill Services installations, as described in the *Windchill Installation and Configuration Guide - Windchill*.

Normally, these installations do not contain any site-modified files; therefore, a safe area (<Windchill>/wtSafeArea/siteMod directory) is not needed in the installation directory. If the siteMod directory does not exist when you run the Windchill Service Pack installer, you are prompted to confirm that you have not modified files and want to continue with the installation. Continuing with the installation overwrites files without checking for site modifications. It will, of course, perform any configuration actions needed for a lightweight replica installation.

Also, remember to keep the Web server and servlet engine up-to-date. The lightweight replica site has its own Web server and servlet engine independent of the main Windchill host. If there are maintenance releases for Tomcat or Apache, then they must be updated on any lightweight replica site installations as well.

3

Installing the Windchill Maintenance Release

This chapter describes the steps required in installing this maintenance release, as well as how to install the Windchill Service Pack.

The service pack is installed using the InstallAnywhere utility. For information about using InstallAnywhere, see the [About Windchill Installations](#) appendix.

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Preparing for the Windchill Maintenance Release Installation

To prepare for the maintenance release, read and understand the updates contained in the release and determine how they will affect your systems. This includes not only what steps must be performed to install the updates, but how the updates may affect configurations, site-modified files, and customizations as well as end users. Update information is located in the following places:

- Current Product Versions table that is in the [Versions of Products Supported for this Release](#) section -- identifies the current versions of all products in the Windchill product set and indicates which have been updated this release
- Table of Maintenance Fixes -- identifies resolved issues. This information is organized by the maintenance release. You can get the latest version of this table from the PTC Online Support Web page for reference documents (<http://www.ptc.com/appserver/cs/doc/refdoc.jsp>). For your document search criteria, select **Windchill** from the **Product** drop-down list, select the **8.0** from the **Release** drop-down list, and select **Installation Guide** from the **Document Type** drop-down list.
- Installation instructions for the Windchill Service Pack as described in [Installing the Windchill Service Pack \(WSP\)](#) -- provides the details for installing the updates that are in the service pack
- Installation instructions for products that are on CDs that have been replaced in this maintenance release. In most cases, the instructions reside in the installation guides provided in the Docs directory on the CDs. The list of CDs updated for this release can be found in the [Versions of Products Supported for this Release](#) section. You can identify the replacement CDs by looking for the current release version in the **Supported Version** column of the table. Additionally, you may find it helpful to use the *Windchill Installation Overview* for the basic installation order of Windchill products. The overview is available from the PTC Online Support Web page for reference documents (<http://www.ptc.com/appserver/cs/doc/refdoc.jsp>). For your document search criteria, select **Windchill** from the **Product** drop-down list, select the **8.0** from the **Release** drop-down list, and select **Installation Guide** from the **Document Type** drop-down list.

Service pack updates are cumulative. This means that once a correction has been delivered in one version of the Windchill Service Pack, it will be included in all future versions of the Windchill Service Pack. (Each version of the Windchill Service Pack is identified with a different datecode.)

Checklists for Installing the Windchill Maintenance Release

There are three general categories documented for how to install the Windchill Maintenance Release. The categories relate to what you already have installed. Answering the following questions will determine which category you should use:

- Are you installing the maintenance release on top of an existing Windchill 8.0 installation?

If you answered yes to this question, go to [Checklists for Updating an Existing Windchill 8.0 Installation](#) on page 3-3.

- Are you upgrading from an earlier Windchill release?

If you answered yes to this question, go to [Upgrading to Windchill 8.0 from an Earlier Windchill Release](#) on page 3-8.

- Are you installing the maintenance release on a system that currently does not have any release of Windchill installed?

If you answered yes to this question, go to [Checklist for Installing When a Windchill 8.0 System Is Not Already Installed](#) on page 3-11.

Checklists for Updating an Existing Windchill 8.0 Installation

Note: When installing maintenance releases, always work with your test/pre-production system first. After you have satisfactorily completed the installation on a test system, repeat the installation on your production system.

Complete the following steps to install the Windchill Maintenance Release on top of an existing Windchill 8.0 release. The steps are divided into two major checklists:

- ☐ • Update your test system
- ☐ • Update your production system

Complete updating your test system first and then complete updating your production system.

Note: Updating an existing Windchill system to use SQL Server as the Windchill database is not supported.

Checklist for Updating Your Test System

Use this checklist first when working in an environment that has both a test and production system.

- ☐ 1. Prepare your test system for the update as described in [Preparing Your System for the Update](#) on page 3-12.
- ☐ 2. Install any updated third-party products that you are using and that are on the Windchill Third Party Software CD supplied with the maintenance release. For details, see [Installing Third-Party Products](#) on page 3-13.
- ☐ 3. Optionally install the latest version of the Aphelion LDAP Directory supplied with the maintenance release (if it has not been installed). For details, see [Installing Third-Party Products](#) on page 3-13.
- ☐ 4. Install the Windchill products (other than the Windchill Service Pack) that are part of the maintenance release. These products are on replacement CDs that you received as part of the maintenance release package or that you downloaded from the PTC product support site. A list of the products that are on replacement CDs can be found in the [Versions of Products Supported for this Release](#) section of chapter 2.

Note: If you are using Windchill Index Search, you must re-install this product at M040 and re-index. For additional information, see the *Windchill Installation and Configuration Guide - Windchill Index Search*.

- ☐ 5. Install language files for your installed products. The language files are located on the M010 Windchill 8.0 MultiLanguage Pack CD set. For the installation instructions, see the *Windchill Installation and Configuration Guide - Windchill*.

Note: If you are updating from 8.0 F000, perform this step. If you are updating from a previous 8.0 maintenance release, you do not have to perform this step again.

- ☐ 6. Locate the Windchill Services directory and, in this directory, install the PTC files in the service pack that have been changed in the maintenance release. Installing changed files involves selecting the **Changed Files Only** installation type option when running the Windchill Service Pack installer.

The **Changed Files Only** installation type option is described in [Using the Windchill Service Pack](#) on page 2-12.

The service pack installation is described in [Installing the Windchill Service Pack \(WSP\)](#) on page 3-15.

- ☐ 7. Update site-modified files using the PTC files copied to the test system. The files are located in the <Windchill>/wtSafeArea and <Windchill>/wtCustom directories.

To learn about managing site-modified files, see [Managing Site-Modified Files When Installing a Windchill Maintenance Release](#).

- ❑ 8. After you have completed the update to site-modified files, run the Windchill Service Pack installer a second time. This time, select the **Complete** installation type option to do the complete installation. Using this option installs all updated files and executes configuration actions that include copying site-modified files to the installation directory.

The **Complete** installation type option is described in [Using the Windchill Service Pack](#) on page 2-12.

The service pack installation is described in [Installing the Windchill Service Pack \(WSP\)](#) on page 3-15.

- ❑ 9. Determine what other directories need to be updated by running the Windchill Service Pack installer. You can do this by mapping the product updates (as described in [Using the Windchill Service Pack](#)) to the products you have currently installed. The list of updates that need to be done includes the systems/directories for any Lightweight Replica installation of Windchill as well as other Windchill products (such as Windchill Search Template) that have updates in the service pack. Remember that you came up with the list of current Windchill products as part of planning for the installation (see [Maintaining an Inventory of Windchill Products](#) in chapter 2).
- ❑ 10. Review the instructions contained in the [Special Instructions Before Starting Windchill Method Servers](#) on page 3-23 and complete those instructions that are relevant for products you have installed.
- ❑ 11. If you have installed and updated the Windchill PartsLink server, then review the instructions contained in [Windchill PartsLink Server Special Instructions](#) on page 3-30 and complete the relevant instructions if they were not completed earlier.
- ❑ 12. If you are using WebSphere as your servlet engine, check your configuration as described in the "Configuring WebSphere on AIX" chapter of the *Windchill Info*Engine Installation and Configuration Guide*.
- ❑ 13. Bring your test system back on line, as described in [Bringing Your System Back Online](#) on page 3-31.
- ❑ 14. Review the instructions contained in the [Special Instructions After Starting Windchill Method Servers](#) on page 3-32 and complete those instructions that are relevant for products you have installed.
- ❑ 15. Validate your test system using any site procedures you have established, such as running test scenarios.

When you are satisfied with the results, you can update your production system as described in the next section.

Checklist for Updating Your Production System

Use this checklist after updating and validating your test system.

- ☐ 1. Prepare your production system for the update, as described in [Preparing Your System for the Update](#) on page 3-12.
- ☐ 2. Install any updated third-party products that you are using (including the Aphelion LDAP Directory) that is released with the maintenance release. You should be installing the same set of third party products in this step as you installed on your test system. For details, see [Installing Third-Party Products](#) on page 3-13.
- ☐ 3. Install the Windchill products (other than the Windchill Service Pack) that are part of the maintenance release. This should be the same set of products installed on your test system.

These products are on replacement CDs that you received as part of the maintenance release package or that you downloaded from the PTC product support site. A list of the products that are on replacement CDs can be found in the [Versions of Products Supported for this Release](#) section of chapter 2.

- ☐ 4. Install language files for your installed products. The language files are located on the M010 Windchill 8.0 MultiLanguage Pack CD set.

Note: If you are updating from 8.0 F000, perform this step. If you are updating from a previous 8.0 maintenance release, you do not have to perform this step again.

- ☐ 5. Copy your site-modified files and any newly created files from your test system to your production system. Copy the site-modified files to the parallel safe area directory structure on your production system. The files are located in the <Windchill>/wtSafeArea and <Windchill>/wtCustom directories. The Windchill Service Pack installer will copy them to the installation directory.

Note: New files must be files that are ready for your runtime system and must be copied to the installation directory. The Windchill Service Pack installer does not copy these files.

For best practices related to modified or new files, see [Managing Site-Modified Files When Installing a Windchill Maintenance Release](#).

- ☐ 6. Locate the Windchill Services directory and, in this directory, install the service pack using the **Complete** installation type option. Using this option installs all updated files and executes configuration actions that include copying site-modified files to the installation directory.

The **Complete** installation type option is described in [Using the Windchill Service Pack](#) on page 2-12.

The service pack installation is described in [Installing the Windchill Service Pack \(WSP\)](#) on page 3-15.

- ☐ 7. Determine what other directories need to be updated by running the Windchill Service Pack installer. This should be the same set of directories used on your test system.

You can do this by mapping the product updates (as described in [Using the Windchill Service Pack](#)) to the products you have currently installed. The list of updates that need to be done includes the systems/directories for any Lightweight Replica installation of Windchill as well as other Windchill products (such as Windchill Search Template) that have updates in the service pack. Remember that you came up with the list of current Windchill products as part of planning for the installation (see [Maintaining an Inventory of Windchill Products](#) in chapter 2).

- ☐ 8. Review the instructions contained in [Special Instructions Before Starting Windchill Method Servers](#) on page 3-23 and complete those instructions that are relevant for products you have installed.
- ☐ 9. If you have installed and updated the Windchill PartsLink server, then review the instructions contained in [Windchill PartsLink Server Special Instructions](#) on page 3-30 and complete the relevant instructions.
- ☐ 10. If you are using WebSphere as your servlet engine, check your configuration as described in the "Configuring WebSphere on AIX" chapter of the *Windchill Info*Engine Installation and Configuration Guide*.
- ☐ 11. Bring your production system back on line, as described in [Bringing Your System Back Online](#) on page 3-31.
- ☐ 12. Review the instructions contained in [Special Instructions After Starting Windchill Method Servers](#) on page 3-32 and complete those instructions that are relevant for products you have installed.
- ☐ 13. Validate your production system using any site procedures you have established, such as running test scenarios.
- ☐ 14. Announce that your system is ready for users, as described in [Announcing System Availability](#) on page 3-41.

Upgrading to Windchill 8.0 from an Earlier Windchill Release

This maintenance release supports upgrading from select Windchill solutions at releases earlier than release 8.0. The supported upgrade paths and the instructions on how to do the upgrades are not contained in this guide. For this information, see the latest *Windchill Upgrade Guide*. The latest update to this guide is on the PTC Online Support Web page for reference documents. For details on getting the updated guide, see [Accessing Updated Documentation](#).

Note: Upgrading to release 8.0 from an earlier release is supported for individual Windchill solutions as well as for a system running release 7.0 of both Windchill PDMLink and Windchill ProjectLink.

In the guide you are reading, you will find information about how to install a test system that can be used in the upgrade and how to manage files that have been customized. The next section describes how to install a new Windchill 8.0 system that can be used as a test system. For information on managing site-modified files, see the next section.

Managing Site-Modified Files When Installing a Windchill Maintenance Release

PTC provides a set of best practices that should be used when you are working with files that are supplied by PTC or changing configuration settings that interact with the way PTC delivers software maintenance releases.

Note: These recommendations apply to managing the *<Windchill>* installation directory (where *<Windchill>* is the Windchill Services installation directory). Best practices for products installed into other directories are not described here.

Overview

If the implementation of Windchill at your site involves modifying files supplied by PTC, it's important to understand that the maintenance installation process could overwrite any file that is delivered by PTC (except for the *site.xconf* file). This includes files that you may have modified.

Windchill Service Pack options are designed to help you set up and update site-modified files for Windchill maintenance releases. As a general rule, the Windchill Service Pack installer can overwrite any files that are in established PTC directories under the installation directory where the Windchill product is installed, regardless of their modification status. It is your responsibility to manage your site-modified files to avoid loss of your changes and, when updates are applied, to be able to easily identify PTC changes that affect the files you have modified.

PTC recommends that you manage site-modified files by creating a directory structure known as the safe area. The actual directory name is *<Windchill>/wtSafeArea*, where *<Windchill>* is the directory where Windchill Services is installed. By using the *wtSafeArea* directory, you can store copies of the site-modified versions of PTC files where they will not be overwritten by the

Windchill Service Pack installer, as well as keep versions of the original PTC files. Additionally, the Windchill Service Pack installer uses this safe area to store updated files that correspond to your site-modified files. You can then compare the original files to those updated by PTC to identify where changes have been made. Doing the comparison can assist you in incorporating PTC updates into your site-modified files. PTC provides a script to assist with managing and installing site-modified files into your system runtime locations within the *<Windchill>* installation directory.

Additionally, if you make changes to resource bundle information files (RINFO files), then you must use the *<Windchill>/wtCustom* directory structure to store those changes. The ability to change resource bundles requires that you install the text tailoring option which is selected through the **Custom** installation type of Windchill Services, Windchill Foundation & PDM, Windchill PDMLink, Pro/INTRALINK 8.0, or Windchill ProjectLink.

The *Windchill Customizer's Guide* has best practices information that can help you understand how to structure and maintain the files you modify or add to your Windchill environment. Before running the Windchill Service Pack installer, be sure to read and implement the best practices as described in the *Windchill Customizer's Guide*. The latest update to this guide is on the PTC Online Support Web page for reference documents. For details on getting the updated guide, see [Accessing Updated Documentation](#).

PTC Script for Working with Site-Modified Files

PTC provides the `swmaint.xml` script to help you manage the files in the *<Windchill>/wtSafeArea/siteMod* directory. To run the `swmaint.xml` script, you must have installed Windchill Services.

The `swmaint.xml` script is available in the *<Windchill>/bin* directory.

To obtain a list of all `swmaint.xml` script target options, enter the following ant command from a windchill shell:

```
ant -f bin/swmaint.xml -projecthelp
```

Following is a list of the most common target options:

- `createSafeArea` -- creates the *<Windchill>/wtSafeArea/siteMod*, *<Windchill>/wtSafeArea/ptcCurrent*, and *<Windchill>/wtSafeArea/ptcOrig* directories.
- `listSiteChanges` -- lists the files in the *siteMod* directory.
- `installSiteChanges` -- copies the files under the *<Windchill>/wtSafeArea/siteMod* directories to their corresponding *<Windchill>* installation directories. The timestamps on files from the *siteMod* directory are preserved when the copying is done.

There are a few files and directories that could be present under *wtSafeArea/siteMod* but are not copied. For example, the files under the

following wtSafeArea/siteMod directory structures are not copied to installation directories:

- .xconf-backup
- installer
- logs
- codebase/instreg
- tasks/codebase
- temp
- vaults
- wtCustom
- wtSafeArea

Note: Most of these directories contain files that you should never modify; therefore, the directories should not be in the wtSafeArea/siteMod directory. If you happen to have files in any of these directories, the target reports that the files were not copied.

The following files in the wtSafeArea/siteMod directory structure are also not copied to installation directories:

- bin/swmaint.xml
- codebase/.xconf-target-file-hints
- declarations.xconf
- site.xconf

For an up-to-date list of files and directory structures excluded when the installSiteChanges target option is processed, see the output from the listSiteModExclusions target option (described next).

- listSiteModExclusions -- lists the files and directory tree structure patterns of those files and directories that are excluded when the installSiteChanges target option is processed.
- listSiteChangesIgnored -- lists the files under the *<Windchill>/wtSafeArea/siteMod* directory that are not copied to corresponding *<Windchill>* installation directories when you run installSiteChanges. This target option is also run when you run the swmaint.xml script with the listSiteModExclusions target option.
- make_jar.config_jars -- rebuilds all client JAR files that are based on codebase/*.jar.config files. This covers the workgroup managers and Optegra Gateway products as well as any new *.jar.config JAR files defined by the site. (Client JAR files handled by jarContents and jarManifest specifications are built separately.) For additional information, see the *Windchill Customizer's Guide*.

Executing the swmaint.xml script is always done from an ant command. For example, from a windchill shell, execute the following ant command to copy the siteMod files to their executable location:

```
ant -f bin/swmaint.xml installSiteChanges
```

Checklist for Installing When a Windchill 8.0 System Is Not Already Installed

The *Windchill Installation Overview* may be helpful when you are doing a basic Windchill installation. It contains a flow chart and a set of basic procedures that can guide you through Windchill product installations. The overview is available from the PTC Online Support Web page for reference documents (<http://www.ptc.com/appserver/cs/doc/refdoc.jsp>). For your document search criteria, select **Windchill** from the **Product** drop-down list, select the **8.0** from the **Release** drop-down list, and select **Installation Guide** from the **Document Type** drop-down list.

Additionally, review the following checklist to install the Windchill Maintenance Release as well as install the Windchill 8.0 release on a system that does not have Windchill 8.0 installed:

- ☐ 1. Identify which CDs you will use to do the installation.

You may have the initial Windchill 8.0 CDs (labeled with the F000 datecode) and CDs from maintenance releases. Use the table in the [Versions of Products Supported for this Release](#) section of chapter 2 to identify the CDs you should use to do your installation. Always use the CD with the latest release datecode. For example if you have multiple CDs titled *Windchill Workgroup Managers*, use the latest maintenance (Mxxx) CD instead of the F000 CD.
- ☐ 2. Install all required third-party products and Windchill Info*Engine using the latest Windchill Third Party Software, Aphelion Directory Server for Windchill, and Windchill Info*Engine CDs as described in the *Windchill Info*Engine Installation and Configuration Guide*. The updates for this release are listed in [Installing Third-Party Products](#). For information on how to get the latest guide, see [Accessing Updated Documentation](#) in chapter 2.
- ☐ 3. Install Oracle 9i, Oracle 10g, or SQL Server, Windchill Services, Windchill solutions, and the additional products that are described in the *Windchill Installation and Configuration Guide - Windchill*.
- ☐ 4. Install the other Windchill products that are part of the CD set that you have. Use the installation instructions contained in the installation guide for the product to perform the installation.

Note: If you are installing Windchill PartsLink, also install the Windchill Service Pack in the directory where you have installed Windchill PartsLink before doing the configuration steps described in the *Windchill PartsLink Administrator's Guide*. See [Windchill PartsLink Server Special Instructions](#) for details.
- ☐ 5. Install language files for your installed products. The language files are located on the M010 Windchill 8.0 MultiLanguage Pack CD set.
- ☐ 6. Install the Windchill Service Pack, as described in [Installing the Windchill Service Pack \(WSP\)](#) on page 3-15.

- ☐ 7. Review the instructions contained in [Special Instructions Before Starting Windchill Method Servers](#) on page 3-23 and complete those instructions that are relevant for products you have installed.
- ☐ 8. Bring your system back on line, as described in [Bringing Your System Back Online](#) on page 3-31.
- ☐ 9. Review the instructions contained in [Special Instructions After Starting Windchill Method Servers](#) on page 3-32 and complete those instructions that are relevant for products you have installed.
- ☐ 10. Validate your system using any site procedures you have established, such as running test scenarios.
- ☐ 11. Announce that your system is ready for users, as described in [Announcing System Availability](#) on page 3-41.

Note: If your site will be modifying the files provided by PTC, direct site personnel to follow the best practices established in the *Windchill Customizer's Guide* and described briefly in the [Managing Site-Modified Files When Installing a Windchill Maintenance Release](#) section, earlier in this chapter.

Preparing Your System for the Update

To make the most of working through maintenance release update issues on your test system, you should ensure that your test system and your production system are in sync. If your production system contains code that is not on your test system, then updating your test system may not be as helpful as expected.

Before you install the maintenance release (regardless of whether it is a test system or your production system), take your system offline by stopping any Web server, servlet engine, and Windchill servers that could interact with the Windchill product files. This includes closing any application that may have a Windchill file open (for example, a text editor, a windchill shell, or a Windchill log file).

Next, delete the content of <TEMP>\ptcServlet and Tomcat\work\ folders.

Additionally, if you have the Workgroup Manager for CADDs or CATIA V4, be sure to stop the registry server that is used by these products.

When your system is offline but before installing the maintenance release, you should perform all necessary backups. Backing up your files is an important step in the process. If you do not have backup files, you may not be able to restore files if an error occurs.

Installing Third-Party Products

Third-party products are on the Windchill Third Party Software CD and the Aphelion Directory Server for Windchill CD. The installation and configuration of these products can be found in the *Windchill Info*Engine Installation and Configuration Guide*. For information on how to get the latest version of the guide, see [Accessing Updated Documentation](#).

When you are updating an existing Windchill 8.0 system, update only those third-party products that you are using in your Windchill 8.0 system.

Note: To download early release builds of Apache installers that include security fixes, PTC has created a web download page. The download page references technical application notes (TANs) that give details about the new installer and instructions on how to install and upgrade Apache. These builds have received only minimal testing to verify basic operation so as to provide these fixes with the minimum possible delay, but they are fully supported by PTC Technical Support for 8.0 MORs. For more information, refer to the following technical point of interest (TPI) on the PTC Web site:

<http://www.ptc.com/appserver/cs/view/solution.jsp?n=132134>

If you are installing a new Windchill 8.0 system, use the latest Windchill Third Party Software and Aphelion Directory Server for Windchill CDs in place of the CDs shipped with Windchill 8.0.

Note: It is very common that third party products are installed on multiple systems. Be sure to update the products on all systems where they are used.

Reviewing Third-Party Product Updates for 8.0 M040

For M040, the following third party products have updates:

- Updated versions of Apache for Windows, Solaris, AIX, and HP-UX are available for use from the Windchill Third Party Software replacement CD.

The updates include OpenSSL and mod_jk updates.

- An updated version of the Aphelion LDAP Directory is available from the Aphelion Directory Server for Windchill replacement CD.

This update was to fix reported bugs and to improve performance. To use this update, you must export your existing LDAP directory (if you want to use the data in the new version) and uninstall the old version of Aphelion before installing the latest version of Aphelion.

Note: As documented in the *Windchill Info*Engine Installation and Configuration Guide*, you should not be scanning the Aphelion files with anti-virus software. Check your software to ensure that this is not being done.

Reviewing Third-Party Product Updates for 8.0 M030

For M030, the following item describes the update on the Windchill Third Party Software CD:

- Updated versions of Apache for HP-UX are available for use.

Additionally, the Aphelion LDAP Directory was updated for M030. This update was to fix reported bugs. To use this update, you must export your existing LDAP directory (if you want to use the data in the new version) and uninstall the old version of Aphelion before installing the latest version of Aphelion.

Reviewing Third-Party Product Updates for 8.0 M020

For M020, the following items describe the updates on the Windchill Third Party Software CD:

- Oracle Software Assistant (OSA) Security Update

The January 2006 Oracle Security patches have been added to the current version of the OSA. The version number for Pro/INTRALINK 8.0 M020 is OSA 2.0 M020.

- Updated Versions of Apache are Available for use.

Reviewing Third-Party Product Updates for 8.0 M010

For M010, the following items describe the updates on the Windchill Third Party Software CD:

- Apache files have been updated with security and performance fixes as well as the support for the Itanium HP-UX platform. Update any existing Apache installations using the 8.0 M010 CD.

When updating an existing non HP-UX version of Apache, be sure to select the **Overwrite Existing Configuration Files** option.

Updated instructions for installing Apache on the Itanium HP-UX platform are located in the updated version of the *Windchill Info*Engine Installation and Configuration Guide*.

- The IIS/Tomcat connector isapi_redirect.dll file was updated. If you are using Internet Information Services (IIS), you should install Tomcat from the M010 CD into the existing Tomcat installation directory and then copy the updated isapi_redirect.dll file from the <Tomcat>/connectors/iis directory (where <Tomcat> is the Tomcat installation directory) to the connector directory <IISConnectorDir> (replacing the existing file).

Note: If you had modified the existing isapi_redirect.dll file, you will need to make those modifications again in the updated file.

The use of the isapi_redirect.dll file is described in Configuring IIS and Tomcat chapter of the *Windchill Info*Engine Installation and Configuration Guide*.

- The Oracle Configuration Utility (OCU) has been updated to support the Itanium HP-UX platform.

Installing Other Windchill Products

After installing the third-party products, you may have Windchill products (other than the Windchill Service Pack) to install. As part of each maintenance release, replacement CDs for some products are included. As part of your planning process (described in [Preparing for the Windchill Maintenance Release Installation](#) on page 3-2), you determined which products need to be installed. Use the installation instructions contained in the installation guide for the product to do the installation.

Note: If you were using Windchill Index Search prior to M040, you must install Windchill Index Search powered by FAST InStream at M040 and index your database again. For additional information, see the *Windchill Installation and Configuration Guide - Windchill Index Search*.

If you are using the Oracle 9i database with Windchill, PTC provides a tuner that can be used to help tune your database. For information on the Oracle 9i Tuner and other performance tuning activities for Oracle 9i, see the 8.0 M040 update to the *Windchill Performance Tuning Guide*.

For all workgroup managers that you install, ensure that their client JAR files are up-to-date. The Windchill Service Pack installation automatically rebuilds client JAR files. For the details on manually rebuilding client JAR files, see the *Windchill Customizer's Guide*.

Installing the Windchill Service Pack (WSP)

The following section gives detailed steps that you can use to do the installation.

When performing the Windchill Service Pack installation, the installation user should be:

- On Windows -- The same user that will run the application.
- On UNIX -- A non-root user.

Note: The installer does not overwrite read-only files. If an update to a read-only file is encountered, the installer aborts after installing all writable files. To successfully complete the installation, you must change the permissions on read-only files so that the installer can update the files. Then, rerun the installer.

Windchill Service Pack is located on the Windchill Service Pack CD. Complete the following steps for the combination of each computer and directory where a Windchill product is installed:

1. As described in [Preparing Your System for the Update](#), be sure to stop any Web server, servlet engine, or Windchill servers that could interact with the Windchill product files being updated and back up your files. This includes closing any application that may have a Windchill file open (for example, a text editor, a windchill shell, or a Windchill log file). Additionally, if you have modified any files delivered by PTC, make sure they have all been copied to the <Windchill>/wtSafeArea/siteMod directory.
2. Ensure that the Aphelion Directory is running. The service pack interacts with this directory and, therefore, it must be running when you install the service pack.

For details on starting and stopping the Aphelion Directory, see the *Windchill Info*Engine Installation and Configuration Guide*.

3. Verify that the Windchill components installed in your Windchill Services directory are at a supported version for this maintenance release. To determine the version of your components, run the windchill version command from the directory where Windchill Services is installed. For example, if you have installed the Windchill 8.0 F000 version of Windchill Info*Engine, Windchill Services, Windchill ProjectLink, Windchill PDMLink, and Windchill MultiLanguage Pack with all locales are installed, then the output of the windchill version command is similar to the following:

```
D:\PTC\PDMPJL800\PDMPJL\bin>windchill version
```

Support Datecode	Support Release Number	Release Id	Installer Sequence	Display Label
F000	8.0	ie.8.0.00.73	01	Info*Engine
F000	8.0	wlp.8.0.00.73	01	Windchill MultiLanguage Pack
F000	8.0	pjl.8.0.00.73	01	Windchill ProjectLink
F000	8.0	pdl.8.0.00.73	01	Windchill PDMLink
F000	8.0	wnc.8.0.00.73	02	Windchill Services

There are no temp patches installed.

Non-Default Locale Support:

Code	Name
zh_TW	
zh	
de	
ko	
ja	
it	
es	
zh_CN	
fr	

4. Compare the datecodes listed in the output with the supported datecodes listed in the [Versions of Products Supported for this Release](#) section of chapter 1 and verify that there are no incomplete or regressed product components in

the list. Incomplete installations are noted by a % symbol before the datecode. Regressed components are noted by a ! symbol before the datecode. If the version listed is not supported, you must reinstall or update the component to the supported version before proceeding with the Windchill Service Pack installation. If either the % or ! symbol is before the datecode, rerun the installer associated with the listed datecode. If you see both the % and ! symbols before a component, reinstall the F000 version of the product component.

For information about running the windchill version command, see [About the windchill Command](#) in appendix A.

5. Insert the Windchill Service Pack CD on a computer where one or more Windchill products are installed.

As part of preparing for the maintenance release, you identified the systems on which to run the Windchill Service Pack installer (see [Preparing for the Windchill Maintenance Release Installation](#)).

6. If you are installing on Windows and have the autorun feature enabled, the installer starts automatically. Otherwise, run the setup script:

- On Windows: <CD-ROM>\setup.vbs
- On UNIX: <CD-ROM>/setup

Note: Do not run the installer from a windchill shell as the service pack may have updates to the windchill command code. Instead, be sure to modify the system PATH variable to include the path to your installed SDK bin directory before running the setup file.

7. When the Windchill Service Pack installer begins, the first panel that opens is **Before You Begin**. This panel summarizes the preinstallation requirements, lists the products affected by the installer, and provides a link to the software matrices and to this book, *Windchill Maintenance Installation and Configuration Guide*.

Read through the requirements to ensure that they have been met. When you are ready to proceed with the installation, click **Next**.

8. In the **Specify Directory** panel, select the location where one or more Windchill products are installed.

Note: When Windchill products are installed in multiple directories, you must run the installer multiple times. Each time you run the installer, select a different directory from the **Specify Directory** panel.

If the directory you want to choose does not appear in the list of directories, you can also select **Specify a different directory** and then click **Browse** to select the directory.

9. The installer determines which Windchill products are installed in the selected directory.

Whether the selected directory contains the Windchill Services determines what happens next:

- If the selected directory contains Windchill Services, the installer checks for the existence of the <Windchill>/wtSafeArea/siteMod directory (where <Windchill> is the Windchill Services installation directory). The installer assumes that this directory holds a copy of all site-modified files, as described in [Preparing for the Windchill Maintenance Release Installation](#).

Whether the <Windchill>/wtSafeArea/siteMod directory exists determines what happens next:

- If the <Windchill>/wtSafeArea/siteMod directory does not exist, the installer presents the **Confirm No Safe Area Directory** panel as described in the next step.
 - If the <Windchill>/wtSafeArea/siteMod directory exists, the installer presents the **Select Installation Type** panel as described in Step 11, skipping Step 10.
 - If the selected directory does not contain Windchill Services, the installer presents the **Products to be Updated** panel as described in Step 12, skipping Steps 10 and 11.
10. The **Confirm No Safe Area Directory** panel displays **Yes** and **No** radio buttons that allow you to select whether you want to continue with the installation when there is no <Windchill>/wtSafeArea/siteMod directory. The default option is **No**.
- If you do not have site-modified files, click **Yes** and then **Next** to continue with the installation.

The installer presents the **Products to be Updated** panel as described in Step 12.

- If you have site-modified files, click **No** and then **Next** to quit the installation.

The installer presents the **Confirm Quit** window in which you can click **OK** to quit or **Cancel** to return to the previous panel. For additional information about managing your site-modified files, see [Managing Site-Modified Files When Installing a Windchill Maintenance Release](#).

11. If you are installing the Windchill Service Pack when there are site-modified files in the <Windchill>/wtSafeArea/siteMod directory within the selected directory, the **Select Installation Type** panel presents the types of installations that can be performed.

The installation types are described in the following table:

Select Installation Type

Select this type	To
Complete	<p>Copy all relevant updated files to the selected directory and copy the files from the wtSafeArea\siteMod directory to the selected directory.</p> <p>Using this option also executes the configuration actions and registers the installation, as described in Using the Windchill Service Pack in chapter 2.</p>
Changed Files Only	<p>Copy updates to site-modified files into the <Windchill>/wtSafeArea/ptcCurrent directory and copy all other updated files into the selected directory, overwriting existing files where applicable.</p> <p>Using this option flags the product update installation as having begun, but does not execute the configuration actions nor complete the installation. See Using the Windchill Service Pack for additional information.</p>
Updates for Site-Modified Files to Safe Area	<p>Copy only updates to site-modified files into the <Windchill>/wtSafeArea/ptcCurrent directory.</p> <p>Using this option does not execute the configuration actions or register the installation. See Using the Windchill Service Pack for additional information.</p>

After selecting the type of installation, click **Next**.

12. The **Products to be Updated** panel lists the products that will be updated if you continue with the installation.

Click **Next** to continue or click **Previous** to return to the earlier panel.

13. If some product components in the selected directory are up-to-date, the **Force Installation** panel displays. If no product components are up-to-date, this panel is skipped.

In this panel, you can choose to install updates for only those product components that need updating or choose to force the installation of updates for all components found.

Click the appropriate option, and then click **Next** to continue.

14. The **Review Files to be Installed** panel specifies the name of the file that contains a list of all files that will be installed. This list also identifies site-modified files for which there is an update.

Before continuing with the installation, PTC recommends that you open this file and inspect its contents. After you complete your inspection, click **Next** to continue.

15. The **Review Preinstallation Settings** panel lists the selections you specified for the installation. Verify that the information is correct, and then click **Install**.
16. The **Installing WSP** panel displays the installer progress as files are copied to the system and configurations are performed, as described in [Using the Windchill Service Pack](#). Additional progress windows also appear, showing the progress of each action as it is performed.

Note: Clicking **Cancel** during the installation stops the installation from progressing but does not undo the actions that have already completed.

17. When the installation completes successfully, the **Installation Complete** panel displays the directories affected by the installation. Depending on the type of installation performed, the directories can include the selected directory where the installation took place, the selected directory and the `<Windchill>/wtSafeArea/ptcCurrent` directory, or only the `<Windchill>/wtSafeArea/ptcCurrent` directory.

The installation log files are located in the `<Windchill>/installer/logs` directory. The log files for the installation are named:

WSP_InstallLog.xml

WSP_PtcInstall.log

Note: If the installation fails, a panel is displayed that contains error messages and the name of the relevant log files. Document the location and name of the log files. The log files can be helpful in determining the cause of the failure. See the Installation Log Files and Troubleshooting sections in [About Windchill Installations](#) appendix for more information. Additional Windchill Service Pack install troubleshooting information can be found in [Troubleshooting Your Windchill Service Pack Installation](#) on page 3-41.

Be sure to include the log files when filing an installation support request. Remember that there are separate log files for each Windchill Service Pack installation that you do. Each set of log files is located in the `installer/logs` directory under the installation directory.

18. For Windchill Service Pack installations that update the Windchill Services installation directory, verify that the versions of the updated Windchill products are correct by running the windchill version command. For example, assume that Windchill Info*Engine, Windchill Services, Windchill Foundation & PDM, and Windchill MultiLanguage Pack with all locales are installed. Then after completing the service pack installation, the following is a sample of the output for the command when the installation is successful. Notice that the datecode shows M010 for all components:

```
D:\PTC\PDMPJL800\PDMPJL\bin>windchill version
```

Support Datecode	Support Release Number	Release Id	Installer Sequence	Display Label
M010	8.0	wsp.8.0.10.13	05	Windchill Service Pack
M010	8.0	ie.8.0.10.13	02	Info*Engine
M010	8.0	wlp.8.0.10.13	01	Windchill MultiLanguage Pack
M010	8.0	pjl.8.0.10.13	02	Windchill ProjectLink
M010	8.0	pdm.8.0.10.13	02	Windchill PDMLink
M010	8.0	wnc.8.0.10.13	02	Windchill Services

There are no temp patches installed.

Non-Default Locale Support:

Code	Name
zh_TW	
zh	
de	
ko	
ja	
it	
es	
zh_CN	
fr	

Note: The maintenance release in the previous sample uses M010 as an example. The datecode displayed should match the datecode of the maintenance release you are installing.

The following is a sample of the output for the command when the installation did not complete successfully. Notice the % symbol before the datecode indicating the Windchill Service Pack was not complete:

```

\PTC\PDMPJL800\PDMPJL\bin>windchill version

  Support      Support
  Datecode     Release Number  Release Id      Installer
-----
% M010         8.0          wsp.8.0.10.13    05
  F000         8.0          ie.8.0.00.73     01
  F000         8.0          wlp.8.0.00.73     01
  F000         8.0          pj1.8.0.00.73     01
  F000         8.0          pdml.8.0.00.73    01
  F000         8.0          wnc.8.0.00.73     02
  Display Label
-----
Windchill Service Pack
Info*Engine
Windchill MultiLanguage Pack
Windchill ProjectLink
Windchill PDMLink
Windchill Services

Legend:
% - The installation or updating of this assembly is not complete.

There are no temp patches installed.

Non-Default Locale Support:
Code   Name
-----
zh_TW
zh
de
ko
ja
it
es
zh_CN
fr

```

If the windchill version shows that any component installations are incomplete, repeat the installation, selecting the **Complete** installation type option.

You may also be interested in knowing which temporary patches have been applied to your system. You can get a list of the temporary patches using the Temporary Patch Information tool (that is new with 8.0 M040). For details, see [Customer Updates and Fixes Following an Initial Release](#).

19. Repeat the installation steps 1 through 16 for each computer and directory combination that has installed Windchill products that are updated by the service pack.

Note: If you are first installing into a test system, you will also need to repeat the installations in your production system.

After completing the Windchill Service Pack installation, return to [Checklists for Installing the Windchill Maintenance Release](#) on page 3-3 to complete the maintenance release steps. These steps include updating other Windchill products and completing special instructions, as described in the following sections.

Special Instructions Before Starting Windchill Method Servers

Review the following sections before you bring your system back online. The instructions include new instructions added for the current maintenance release as well as instructions from previous maintenance releases that are still relevant if you have not installed the previous releases.

Complete only those instructions that are relevant for the products you have installed and for the maintenance releases you are installing. Remember that maintenance releases are cumulative, meaning that all code from previous maintenance releases is included in the current maintenance release. However, if you have installed previous releases, the service pack detects this and does not reinstall the previously installed code (unless you choose to force the reinstallation).

The following table shows the source versions that you can update from and the special instructions that you need to apply based on the source version. The maintenance release in which the instruction was introduced is noted at the end of each instruction title.

Source Version	Special Instructions to Apply
8.0 F000	M010, M020, M030, and M040
8.0 M010	M020, M030, and M040
8.0 M020	M030 and M040
8.0 M030	M040

For example, if you had previously installed the 8.0 M030 maintenance release, review only the M040 special instructions; you do not need to reapply the special instructions for the M010, M020, and M030 releases.

Note: These instructions apply only to your main Windchill installation and not to any lightweight replica installation of Windchill.

Update the Windchill Database (M040)

Note: If you are using SQL Server for your Windchill database, skip this special instruction.

After you have installed the Windchill Service Pack for Windchill Foundation & PDM, Windchill PDMLink, Windchill ProjectLink, or Pro/INTRALINK 8.0, follow these instructions to update the Windchill database.

Note: To run the script, the user you are logged in as must be able to create the log file and recompile files. Specify the database user that you used to create the database.

Update Script

PTC includes the wnc-wsp.sql script for doing the update. The wnc-wsp.sql script runs other scripts that update the Windchill database in the following manner:

- Many scripts drop and recreate indexes.
- Other scripts make updates to maintain and optimize database operation.
- Another creates a new table to track the indexing status of an object, updates the code so the bulk index tool uses the table instead of attributes on business objects to create indexing lists.

Running the wnc-wsp.sql script creates the wnc-wsp.log file. The log file is created in the directory from which you ran the script.

Note: Complete the instructions one time. If you accidentally run the script multiple times, no problems should occur. However, running the script multiple times from the same directory overwrites the log file.

Procedure

To update your Windchill 8.0 database for use with the latest Windchill maintenance release, manually execute the wnc-wsp.sql script one time. For example, do the following:

1. Open a command window and enter the windchill shell command.
2. Change your directory to *<Windchill>\db\sql* (on Windows) or *<Windchill>/db/sql* (on UNIX).
3. Log on to the database using SQL*Plus. For example, at the command prompt enter:

```
sqlplus <username>/<password>@<database service name>
```

Where *<username>* and *<password>* are the user name and password to access the database that is identified in the db.properties file. Where *<database service name>* is the name assigned to the database.

4. Run the script. For example, enter:

```
SQL> @wnc-wsp.sql
```

Note: As the script executes, you may see multiple instances of the following messages:

```
ORA-01408: such column list already indexed
ORA-01418: specified index does not exist
ORA-00955: name is already used by an existing object
ORA-02303: cannot drop or replace a type with type or table
dependents
ORA-01430: column being added already exists in table
ORA-04080: specified trigger does not exist
```

You can ignore all instances of these messages. The messages can appear in the window or in the log file.

5. Review the contents of the wnc-wsp.log file to check for other errors. In this example, the complete file path for the log file is
<Windchill>/db/sql/wnc-wsp.log.

Rebuilding Client JAR Files to Improve Product Structure Explorer Performance (M040)

Note: Complete the instructions in this section if you have installed Windchill PDMLink or Windchill Foundation & PDM, and want to take advantage of all performance improvements that have been made to the Product Structure Explorer.

To improve the performance of the Product Structure Explorer, you must deploy a new command delegate by manually rebuilding the client JAR files after installing the M040 Windchill Service Pack.

Complete the following steps to rebuild the JAR files:

1. Open a command window and enter the windchill shell command.
2. Enter the following Ant command (replacing <Windchill> with the Windchill installation directory):

```
ant -f <Windchill>/codebase/MakeJar.xml -DremoveStaleEntries=true
```

Deleting the Info*Engine Compiled Tasks Directory (M030)

To prevent issues with search pages that can occur after updating to the latest release, delete the following folder:

```
<Windchill>\tasks\codebase\com\infoengine\compiledTasks.
```

Improving Performance of Queries Used for Replication (M020)

Queries that are used for replication require large amounts of Oracle resources for processing. To improve performance when large numbers of content files are to be replicated, the administrator can, using the xconfmanager utility, increase the value of the wt.fv.revaultQuerySize property in the wt.properties file.

Note: This might strain the memory resources of the method server.

Setting Synch Robots Access Permissions to Operate Under Different Contexts (M020)

Class-based SynchRobots execute as the user that caused the event to occur, for example, the event-principal. Class-based SynchRobots in one container can listen to events emitted system wide, and, thus, if an event-principal does not have sufficient access permissions to the workflow objects in the target container, the SynchRobot fails by throwing an exception.

Set the following property in the wt.properties file using the xconfmanager utility:

```
wt.workflow.robots.executeAsOrgAdmin.enabled=true
```

This property sets the effective principal to the organization administrator of the organization container in which the robot's workflow process is contained for the duration of the robot execution. If the process is in an application container, such as a product, the organization container parenting the application container will be used.

Out of the box, the organization administrator has sufficient access permissions to the necessary workflow objects to execute and complete the SynchRobot.

Fixing the File Sequence List for the Set Revision Function (M020)

The file-based versioning scheme loaded for Windchill PDMLink is missing entries 51-59.

If you are using the out of the box file based versioning, review your numeric series and add the missing entries.

To view the versioning that is currently installed, run the following from within a windchill shell:

```
java wt.series.LoadFileBasedSeries <xml_file_location> -read
```

The StateBasedVersioning.xml file included with this maintenance release can be used as an example. To load the updated file provided with this maintenance release, use the -load option from a windchill shell, for example:

```
java wt.series.LoadFileBasedSeries <xml_file_location> -load
```



Do not load the included StateBasedVersioning.xml file as-is unless you are certain that you have not customized the system's file-based versioning scheme.

Windchill Supplier Management Change History Update (M020)

The Change History report for M020 Windchill Supplier Management has been enhanced to show the previous values of the supplier name or state. To enable this enhancement, you must run the suma-wsp.sql script by performing the following steps:

1. Open a command window and enter the windchill shell command.
2. Change your directory to <Windchill>\db\sql (on Windows) or <Windchill>/db/sql (on UNIX).
3. Log on to the database using SQL*Plus. For example, at the command prompt enter:

```
sqlplus <username>/<password>@<database service name>
```

where <username> and <password> are the user name and password to access the database that is identified in the db.properties file. Where <database service name> is the name assigned to the database.

4. Run the script. For example, enter:

```
SQL> @suma-wsp.sql
```

Updating Windchill Aerospace and Defense Module (M020)

If you are updating a system with the Windchill Aerospace and Defense Module, refer to the *Windchill Aerospace and Defense Module Installation and Configuration Guide* for special instructions.

Updating Windchill Properties to Work with Microsoft's Eolas Patch (M020)

Microsoft has released a patch that changes Internet Explorer's behavior so that behavior of the plug-ins and applets do not violate the last Eolas patent lawsuit ruling. You should not install this particular patch unless you have some other need to do so. For more information on the patch, refer to the information on Microsoft's web site on the Eolas patch at

<http://support.microsoft.com/kb/912945>

If you install the patch or if some end-users have done so, then you need to apply the following properties changes to avoid adverse symptoms within Internet Explorer.

If you use Microsoft Internet Explorer and the Eolas patch is installed on one or more machines, set the following properties using xconfmanager:

```
<Property
name="wt.taglib.util.plugin.attr.useMicrosoftEolasWorkaround"
overridable="true" targetFile="codebase/wt.properties"
value="false"/>

<Property
name="wt.taglib.util.plugin.clientmod.MSIE.attr.useMicrosoftEol
asWorkaround" overridable="true"
targetFile="codebase/wt.properties" value="true"/>
```

Installing the Arbortext Editor, Arbortext Publishing Engine, and Windchill PDMLink Connection (M020)

If you have purchased the Arbortext Editor and the Arbortext Publishing Engine, the instructions for installing the Windchill PDMLink connection can be found in the following documentation:

- The readme file located in the directory in which you downloaded the Arbortext.
- *Windchill Installation and Configuration Guide - Visualization Services*

Change UNIX File Permissions and Content for InterComm Integration (M010)

Note: The following instructions need only be completed if your site is accessing Windchill on a UNIX platform through the use of an InterComm EDACompare client.

Complete the following steps to add the execute permission to the InterComm cadence2eda and workerstart files and change a line in the workerstart file:

1. Log in as the Windchill administrator.
2. From a command prompt, enter the `chmod +x` command to add the execute permission on each of the following files:

```
<Windchill>/codebase/install/WgmClient/CADWorker/intercommWorker/cadence2eda
```

```
<Windchill>/codebase/install/WgmClient/CADWorker/intercommWorker/workerstart
```

where *<Windchill>* is the directory where Windchill is installed.

3. Edit the workerstart file identified in step 2 to change the following line:

```
set DIR=$WT_HOME"/temp"
```

to:

```
set DIR=$WT_HOME"/tmp"
```

4. Save your changes to the workerstart file.

Apply Maintenance Updates to Windchill ESI (M010)

Note: Windchill Enterprise Systems Integration (Windchill ESI) is an optional product that works with your Windchill solution. If you have not installed Windchill ESI, you can skip this section.

After you have installed Windchill ESI and installed the 8.0 M010 Windchill Service Pack, use the following sections to determine the manual steps that need to be executed to implement the latest Windchill ESI updates on your system.

Updating the ESIORALookups.properties File for Windchill ESI Oracle Applications

Note: Complete the steps in this section only if you have installed the Windchill ESI Business Logic for Oracle Applications.

Complete the following steps to update the ESIORALookups.properties file:

1. If you have customized the ESIORALookups.properties file, back up your current file so that you have your customizations. The file is located in the *<TIBCO>/esi* directory, where *<TIBCO>* is the directory path where you have installed the TIBCO Adapter for Oracle Applications.
2. View the contents of the 8.0 M010 Windchill ESI Business Logic for Oracle Applications CD and find the ESIORALookups.properties file. The file is located in the esi/app/bin directory.
3. Copy the ESIORALookups.properties file from the CD to the *<TIBCO>/esi* directory, overwriting the existing file.
4. If you had customized the ESIORALookups.properties file prior to 8.0 M010, make the same customizations in the updated file (using your backup file for reference).

Running Updated Scripts for Windchill ESI Oracle Applications

Note: Complete the steps in this section only if you have installed the Windchill ESI Business Logic for Oracle Applications.

The 8.0 M010 Windchill ESI Business Logic for Oracle Applications CD contains updated SQL scripts that need to be run to update your database.

Complete the following steps to update your database:

1. Copy all of the updated SQL scripts from the esi/apps/scripts directory on the CD to your system.

2. Using the same user name and password that was used when originally installing Windchill ESI Oracle Applications, execute the scripts in the following order:

- a. Run all undo scripts first in the following order:

```
@MasterConfiguration_EnggChangeOrder_undo_all_Mods.sql
@MasterConfiguration_BillsOfMtlAPI_undo_all_Mods.sql
@MasterConfiguration_OpenItem_undo_all_Mods.sql
@MasterConfiguration_TIBCOLogTablePublisher_undo_all.sql
@common_all_undo.sql
```

- b. Run the remaining scripts in the following order:

```
@common_all_Mods.sql
@MasterConfiguration_TIBCOLogTablePublisher_all_Mods.sql
@MasterConfiguration_OpenItem_all_Mods.sql
@MasterConfiguration_BillsOfMtlAPI_all_Mods.sql
@MasterConfiguration_EnggChangeOrder_all_Mods.sql
```

Updating the ESI Registry

To update the Windchill ESI registry, execute the following command from within a windchill shell:

```
<Windchill>windchill com.ptc.windchill.instasm.UpdateInstallationRegistry
<Windchill>/codebase/com/ptc/windchill/esi/conf/esi.ia
```

where *<Windchill>* is the Windchill Services installation directory.

Updating the Windchill ESI registry ensures that the release version of Windchill ESI is updated and appears when you run the Windchill version command.

Windchill PartsLink Server Special Instructions

Note: This section is only relevant if you have installed Windchill PartsLink. If you do not have Windchill PartsLink, you can skip this section.

Recreating the Windchill PartsLink Database Schema (M010)

After installing the 8.0 M010 Windchill Service Pack for Windchill PartsLink, you must recreate the database schema for Windchill PartsLink. You can either use the existing database user and run some scripts to update the existing schema or create a new database schema as described in the following sections.

Note: This section should only be completed once. If you have performed the instructions in this section for a previous maintenance release, you should not perform it again for the current maintenance release.

Update the Existing Windchill PartsLink Database Schema

The Windchill Service Pack installs the `alter_Table_Obj.sql` and `merge_Changes.sql` into the `<PartsLink>/db/sql/com/ptc/windchill` directory, where `<PartsLink>` is the installation directory for Windchill PartsLink.

To update Windchill PartsLink schema in the Windchill PDMLink database, complete the following steps:

1. From the machine where Windchill PartsLink is installed, log into SQL*Plus using the existing Windchill PartsLink user that was used when the initial schema was created.
2. Run the following scripts from the `<PartsLink>/db/sql/com/ptc/windchill` directory:

```
alter_Table_Obj.sql
```

```
merge_Changes.sql
```

Create a New Windchill PartsLink Database Schema

To create a new Windchill PartsLink database schema after installing the Windchill Service Pack, run the `make_schema_ora.sql` that is located in the `<PartsLink>/db/sql` directory where `<PartsLink>` is the installation directory for Windchill PartsLink.

1. From the machine where Windchill PartsLink is installed, log into SQL*Plus using the Windchill PDMLink database user that you want used for Windchill PartsLink.
2. Run the following script from the `<PartsLink>/db/sql/` directory:

```
make_schema_ora.sql
```

Note: This is the same script you ran to create the initial schema.

SQL Server Special Instructions

In order to enable the code that supports SQL Server, refer to the *Windchill Installation and Configuration Guide - Windchill*.

Bringing Your System Back Online

After you have completed the steps described in the [Special Instructions Before Starting Windchill Method Servers](#) section, you can restart your Web server, servlet engine, and Windchill servers.

To start your method servers, enter the following command from a windchill shell:

```
windchill start
```

Be sure that you have rebuilt the JAR files so that changes are incorporated. This is done automatically for you when you install the Windchill Service Pack using the **Complete** installation type; otherwise, you can manually rebuild JAR files, as described in the *Windchill Customizer's Guide*.

Additionally, if you have Workgroup Manager for CADDs or CATIA V4 installed, be sure to start the Registry server that is used by these products.

Special Instructions After Starting Windchill Method Servers

Review the following sections after you bring your system back online, but before you tell users they can logon. The instructions include new instructions added for the current maintenance release as well as instructions from previous maintenance releases that are still relevant if you have not installed the previous releases.

Complete only those instructions that are relevant for the products you have installed and for the maintenance releases you are installing. Remember that maintenance releases are cumulative, meaning that all code from previous maintenance releases is included in the current maintenance release. However, if you have installed previous releases, the service pack detects this and does not reinstall the previously installed code (unless you choose to force the reinstallation).

The following table shows the source versions that you can update from and the special instructions that you need to apply based on the source version. The maintenance release in which the instruction was introduced is noted at the end of each instruction title.

Source Version	Special Instructions to Apply
8.0 F000	M010, M020, M030, and M040
8.0 M010	M020, M030, and M040
8.0 M020	M030 and M040
8.0 M030	M040

For example, if you had previously installed the 8.0 M030 maintenance release, review only the M040 special instructions; you do not need to reapply the special instructions for the M010, M020, and M030 releases.

Note: These instructions apply only to your main Windchill installation and not to any lightweight replica installation of Windchill.

Adding Support for Authoring Application Versions of Workgroup Managers (M040)

The system supports more versions of the following CAD systems:
Pro/ENGINEER Wildfire and AutoCAD.

To enable support, perform the following steps:

1. Open a command window and enter the windchill shell command.
2. Execute the following command from the windchill shell:

```
windchill wt.load.LoadFromFile -d  
<Windchill>\loadFiles\epmAuthoringAppVersion.xml
```

Displaying Meetings for Participants (M040)

Prior to this maintenance release, meetings were only displayed on the meeting creator's **Home** page. Participants could not see their meeting on their **Home** pages.

To enable participants to see their meetings, perform the following steps:

1. Open a command window and enter the windchill shell command.
2. Execute the following command from the windchill shell:

```
java wt.meeting.GrantMeetingReadPermission
```

Ad Hoc Access Control Rules on Checked In Objects (M040)

An ad hoc access control rule granting the Product Manager group all permissions on the working copy of an object is created at when an object is checked out. This rule allows members of the group to undo the checkout if necessary. These permissions should be removed when the object is checked in, but were not being removed in cases where the original object had no ad hoc access control rules and the wt.vc.wip.copyAdHocAcls property was set to false (the default value). Not removing the permission allowed members of the group to perform actions, such as Set Life Cycle State, that might otherwise have been denied by policy rules.

The maintenance release fixes the issue of the ad hoc access control rule for the Product Manager group remaining when the object is checked in. With the fix, the ad hoc rule is removed on check in.

To remove the ad hoc rule on objects checked out and then checked back in before the fix was in place, complete the following steps:

1. Open a command window and enter the windchill shell command.
2. Execute the following command from the windchill shell:

```
windchill wt.access.RemoveAdminAdHocs
```

You can safely execute this command multiple times. If there are no objects with ad hoc access control rules that need to be removed, the utility will report the following:

```
No ad hoc access control entries need to be removed
```

Otherwise, it will report the number of rules removed, for example:

```
Removed ad hoc access control entries for 4 out of 4 objects
```

Enabling Action Items (M030)

This software update is required to use the enhanced capabilities to create and manage action items in Windchill ProjectLink. This update supports the following new capabilities:

- Action items can be efficiently created and updated using Microsoft Excel 2002 (or later) and can be exported to Microsoft Excel for off-line viewing, printing, and manipulation.

Note: Microsoft Excel/Office versions 2000 and earlier are not supported

- Action items can be associated with parts, documents, CAD documents (including parts and documents that are checked out from PDMLink), milestones, activities, and deliverables.
- An action item can be associated with more than one item.
- Automatic e-mail notifications are sent to users when an action item is assigned, reassigned, overdue, or resolved.
- Discussion forums are available for action items.
- Administrators can limit update privileges for updating action item attributes.
- Customizable action item attributes in a variety of formats can be exposed or hidden, reordered, renamed, and designated as required to meet the needs of the customer.

Determining which Files to Use

The following files contain the English versions of the data files that allow you to create action items:

```
<Windchill>/loadXMLFiles/lifecycles/ActionItem.xml  
<Windchill>/loadXMLFiles/rules/actionitem_lifecycle_rule.xml
```

where *<Windchill>* is the Windchill installation directory.

You can install the action item data files for only one locale. If you want to use the English locale, skip to the [Installing the Files](#) section. If you want to use a locale other than English, complete the following steps to set up the files:

1. Make backups of the English XML files:

```
<Windchill>/loadXMLFiles/lifecycles/ActionItem.xml  
<Windchill>/loadXMLFiles/rules/actionitem_lifecycle_rule.xml
```

2. Locate the localized versions of the XML files identified in Step 1 that you want to load. The files are in the same directories as the files you backed up in Step 1. For example to load the French versions, locate the files named ActionItem_fr.xml and actionitem_lifecycle_rule_fr.xml.

For information about the naming conventions for localized files and about loading data in general, see the *Windchill Installation and Configuration Guide - Windchill*.

3. Rename the localized versions of the files you want to load to ActionItem.xml and actionitem_lifecycle_rule.xml.
4. Load and install the files as described in the [Installing the Files](#) section.
5. Rename the files back to their original names so that you have a copy of the localized files.
6. Copy the files that were backed up in Step 1 back into the loadXMLFiles directory.

Installing the Files

From a Windchill shell, execute the following commands to install this capability:

```
windchill wt.load.LoadFromFile -d  
<Windchill>\loadXMLFiles\lifecycles\ActionItem.xml -u  
<adminuser> -p <adminpw> -CONT_PATH /  
  
windchill wt.load.LoadFromFile -d  
<Windchill>\loadFiles\actionItemPreference.xml -u <adminuser>  
-p <adminpw> -CONT_PATH /  
  
windchill com.ptc.windchill.projectlink.load.LoadActionItemRule
```

where <adminuser> and <adminpw> are the user name and password of the system administrator.

For information on how to use this functionality, refer to the online help.

Adding Support for Authoring Application Versions of I-Cubed Workgroup Managers and Arbortext (M020)

The system supports more versions of the following CAD systems: CATIAV5, IDEAS, INVENTOR, SOLIDWORKS, and UNIGRAPHICS. This is also necessary if you use Arbortext.

To enable support, perform the following steps:

1. Open a command window and enter the windchill shell command.
2. Execute the following command from a windchill shell:

```
windchill wt.load.LoadFromFile -d  
<Windchill>\loadFiles\epmAuthoringAppVersion.xml
```

Loading the Change Usability Feature for Windchill PDMLink (M020)

The preference (/wt/change2/PropagateChangeItems) is defined in a separate load file:

```
<Windchill>\loadFiles\prefsChangeUsability.xml
```

To enable support, perform the following steps:

1. Open a command window and enter the windchill shell command.
2. Execute the following command from a windchill shell:

```
windchill wt.load.LoadFromFile -u <admin-userid> -p  
<admin-password> -d  
<Windchill>\loadFiles\prefsChangeUsability.xml
```

3. The preference is set to false by default and must be set to true to enable the functionality.

Updating the Workflow and Life Cycle Templates (M020)

Updating the workflow and life cycle templates is necessary to make the following actions function properly after the maintenance release is applied:

- Update Route.
- Generating additional tracking tasks (Track Tasks) or specifying additional due dates (Specify Due Date) while routing.

To enable support, perform the following steps:

1. Using the xconfmanager utility, set the following in the <Windchill>\codebase\wt.properties file:
 - a. wt.workflow.engine.recordAssigneeChange=true
 - b. wt.workflow.engine.recordVoting=true

- c. `wt.workflow.engine.useLatestTemplateIteration=true`
2. Open a command window and enter the windchill shell command.
3. Execute the following commands from a windchill shell:

`windchill wt.load.LoadFromFile -d
<Windchill>\loadXMLFiles\workflows\Approval_Process.xml`

`windchill wt.load.LoadFromFile -d
<Windchill>\loadXMLFiles\workflows\Notify_Process.xml`

`windchill wt.load.LoadFromFile -d
<Windchill>\loadXMLFiles\workflows\Release_Process.xml`

`windchill wt.load.LoadFromFile -d
<Windchill>\loadXMLFiles\workflows\Review_Process.xml`

`windchill wt.load.LoadFromFile -d
<Windchill>\loadXMLFiles\workflows\Two_Level_Approval_Process.xml`

`windchill wt.load.LoadFromFile -d
<Windchill>\loadXMLFiles\lifecycles\Two_Level_Approval_Routing.xml`

Creating and Updating wt.epm.EPMDocument Soft Types (M020)

New wt.epm.EPMDocument soft types have been added to support connecting to Windchill through the Arbortext Editor. In addition, the existing root types are renamed.

Use the following steps to create and update wt.epm.EPMDocument soft types:

1. Start a windchill shell.
2. Execute the following:

`windchill wt.epm.util.UpgradeSoftTypes`
3. Log in as system administrator when the authentication dialog is displayed.
4. Restart the Windchill method server.

Updating Access Policy Rules for Guest Workflow Assignments (M020)

To enable guests to complete their workflow assignments, first use xconfmanager to add the following to the wt.properties file:

```
wt.inf.team.displayContainerListForGuest=true
```

Next, create an access policy rule granting guest users Modify and Create permissions to WfExecution objects in all containers.

If create permissions need to be considered on Promotionnotice objects offering the "Set State" operation, set the following preference using the Preference Manager:

```
/com/ptc/windchill/enterprise/templateutil/create_valid_check=full
```

For more information on creating access policy rules, refer to the Administering Containers chapter of the *Windchill Business Administrator's Guide*.

Loading and Updating Templates for Windchill PDMLink and Windchill ProjectLink (M010)

This maintenance release has template updates relating to the following system activities:

- The processing of domains and domain references that are identified in context templates for both Windchill PDMLink and Windchill ProjectLink.
- Windchill ProjectLink provides the ability to define and update due dates and instructions for routing through updated workflow templates.

Context Template Updates for Windchill PDMLink and Windchill ProjectLink

In your 8.0 M010 Windchill PDMLink or Windchill ProjectLink system, the processing of domains and domain references that are identified in context templates has been updated and there is an updated out-of-the-box **Enterprise** organization template.

Before using the **Enterprise** template or using any custom organization, product, project, or library templates, load the updated template and check any custom templates for required changes.

Note: If you are installing an 8.0 system where there is currently no Windchill system installed and have loaded the base data after installing the Windchill Service Pack, the updated template is already loaded and you can skip this section.

Updating the Enterprise Organization Template

Use the following steps to update the out-of-the-box **Enterprise** organization template:

1. Locate the updated source XML files for templates. All files are located in the `<Windchill>/loadXMLFiles` folder, where `<Windchill>` is the installation directory for Windchill PDMLink or Windchill ProjectLink. The source file to use in the update is named:

enterpriseOrganizationTemplate.xml

2. Log on as the system administrator, navigate to the **Site** tab and click the **Templates** link.

3. From the **Current View** drop-down list in the table, select **Organization Templates**. The table updates to show the organization templates that have been loaded.
4. From the **Actions** list for the desired template, click **Update**.
5. In the **Update** window, use the **Browse** button to select the XML file for the template.
6. Click **OK** to update the template.

Updating Custom Templates

If you have custom organization, product, project, or library templates created prior to 8.0 M010, check those templates to ensure that the supported format for identifying domains is being used. The change required is in the domainName subelement of all ACLRule elements.

For example, assume the following are example domains:

Site, Organization Acme /Default/Project/Engineering

Site, Organization Acme /Default/PDM

Domain reference specifications for domains in an ACLRule element that could have been used in 8.0 F000 show only a domain name and not the domain path relative to the container:

```
<domainName>Engineering</domainName>
```

```
<domainName>PDM</domainName>
```

Specifications that are required for 8.0 M010 and beyond are:

```
<domainName>/Default/Project/Engineering</domainName>
```

```
<domainName>/Default/PDM</domainName>
```

Check custom templates to ensure that the domains listed in ACLRule elements are specified correctly. The domain reference specified in an ACLRule is the relative domain path, starting at the top-level in the container. As shown in the example, always include the forward slash (/) at the beginning of the path.

To do an update, you must modify the source XML file and then update the templates as described in the previous section. If you do not have the source file, you can download the file using the **Download** action from the **Templates** table containing the template.

Instructions for creating context templates can be found in the "Creating Containers" section of chapter 3 and the "Creating Business XML Files for Templates" appendix in the *Windchill Business Administrator's Guide*.

Workflow Template updates for Windchill ProjectLink

The following workflow templates have been updated for 8.0 M010 and are located in the *<Windchill>/loadXMLFiles/workflows* directory:

Approval_Process.xml
Release_Approval_Process.xml
Review_Process.xml

The following workflow template is new at 8.0 M010:

Two_Level_Approval_Process.xml

Using these templates provides the ability to define and update due dates and instructions for Windchill ProjectLink routing.

Note: If you are installing an 8.0 system where there is currently no Windchill system installed and have loaded the base data after installing the Windchill Service Pack, the updated workflow templates are already loaded and you can skip this section.

To load the updated workflow templates, enter the following command from a windchill shell:

```
java wt.workflow.MigrateWfOOTBTemplates_X05_M010
```

Note: Loading updated templates overwrites any modifications that your site may made to the existing templates.

To load the new Two_Level_Approval_Process.xml template, perform the following steps:

1. Open a command window and enter the windchill shell command.
2. Execute the following commands from a windchill shell:

```
java wt.load.LoadFromFile -d  
<Windchill>\loadXMLFiles\workflows\  
Two_Level_Approval_Process.xml -u <username> -p <password>  
-CONT_PATH /
```

The loaded workflow templates are used in the following Windchill ProjectLink life cycle templates:

- Approval Routing
- Review Routing
- Release Routing
- Two Level Approval Routing

For information about workflow and life cycle templates, see the *Windchill Business Administrator's Guide*.

Announcing System Availability

After bringing your system back online and completing the special instructions described in [Special Instructions After Starting Windchill Method Servers](#) on page 3-32, you can announce that users can log on.

Explain that some users will experience downloads of updates and may be required to perform re-installations of some applications (depending upon your site usage of client applets and applications).

Troubleshooting Your Windchill Service Pack Installation

In addition to the problems and actions listed in this section, general installation troubleshooting information and log file information can be found in the [About Windchill Installations](#) appendix.

Problem:

You cannot find the Windchill Service Pack log files in the `<Windchill>/installer/logs` directory.

Action:

Look for the log files in the temporary directory that your system uses. Look in `%TMP%` on Windows and either `/var/tmp` or `/tmp` (JVM implementation dependent) on UNIX.

Problem:

You receive an attention window with the following message:

```
ATTENTION: The Windchill Service Pack does not contain any
updates for the products in directory <install_dir>.
```

Action:

The message says that the Windchill Service Pack does not contain any content for updating any products in the selected `<install_dir>` directory.

Check for the selected directory in the list of directories you established when you did your planning (see [Maintaining an Inventory of Windchill Products](#) in chapter 2). The selected directory should not be in the list. Run the installer again, selecting an installation directory that is on your list.

Problem:

You receive an attention window with the following message:

```
ATTENTION: The <install_dir> directory contains 1 base product
installations that are incomplete. In their current state, they
cannot be updated. Quit the Windchill Service Pack and
successfully install these products before doing the update. See
the WSP_PtcInstall.log log for the incomplete products.
```

Action:

The message says that the installation of one or more base products in the *<install_dir>* directory was incomplete.

Rerun the installation of the base products identified in the Windchill Service Pack log file before trying to update them using the service pack.

Problem:

The installer is incorrectly reporting an insufficient amount of disk space available, preventing installation of the product.

Action:

Turn off disk space checking by running the installer from the command line and adding the following option to the installer command.

Windows:

```
cd <CD_ROOT>/Windows
setup.exe -DCHECK_DISK_SPACE=OFF
```

UNIX:

```
cd <CD_ROOT>
setup -DCHECK_DISK_SPACE=OFF
```

A

About Windchill Installations

This appendix provides information about installing Windchill products, the InstallAnywhere installation utility, loading and mounting a CD-ROM on UNIX systems, using the windchill command and the Windchill shell command, and using the xconfmanager utility.

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Overview of an Installation Session

The following sections provide an introduction to the installation utility.

Choosing the Installer Language

When the installer is launched, the language specified by your system is now the default install language. The installer assumes, therefore, that your system is set to the locale of your preference (the locale must be a supported Windchill locale) prior to initiating an installation. Once the language environment variable has been set, any messages issued by the installer are issued in that language. For information about the languages supported with this release, use the following URL:

<http://www.ptc.com/appserver/cs/doc/refdoc.jsp>

This URL directs you to the PTC Online Support Web page for reference documents. For your document search criteria, select your product from the **Product** drop-down list, select the current release from the **Release** drop-down list, select **All User Roles** from the **User Role** drop-down list, and select **Matrices - Language** from the **Document Type** drop-down list.

The following instructions are provided to assist you in verifying (or setting) the language environment variable on your system before you start the installation process:

Windows

To review (or set) the language environment variables, select **Start > Settings > Control Panel > Regional Options**. In the **Regional Options** dialog box select the **General** tab. From the drop down list, choose the appropriate language variable.

Note: Alternatively, you can set (or change) the locale for your system using a command. At the command prompt enter:

```
set LANG=<language>
```

Where *<language>* is the language specification for your platform.

UNIX

You can use the following command to determine the correct values for the locale:

```
locale -a
```

For Latin-1 languages, ISO88591 the option should be used, if available.

At the shell prompt enter:

```
setenv LANG <language>
setenv LC_ALL <language>
```



```
export LANG LC_ALL
```

Where *<language>* is the language specification for your platform.

When the current locale for the system is set to an Asian language, the installer allows you to choose only that Asian locale or English from the locale drop-down list. When the current locale for the system is a non-Asian language, all of the non-Asian languages in the drop-down list, including English, appear.

Navigation and Canceling

Installers operate in a standard wizard paradigm using **Next** and **Previous** to move forward or backward through the steps of the installation. A navigation bar on the side of the installer window gives a course-grained view of where you are in the overall installation process. Be aware, that on busy systems and with complex installers there can occasionally be a delay in moving between steps. Avoid clicking **Next** or **Previous** a second time while you are waiting for the switch as this could cause the wizard to skip the appropriate panel.

The basic interaction of each installer is to first collect information from you, then offer you a chance to review the most critical settings before actually beginning the modification of files on your system. At this point, the label on the **Next** button is changed to **Install** to signal that if you proceed that files on your system will be changed.

Clicking **Cancel** in the installer window can stop an installation; however, if you cancel *after* you have clicked **Install**, be aware that your file system has already been modified and the installers cannot undo what they have changed. If you click **Cancel**, you are prompted to either confirm the cancellation or resume the installation. Unless specifically noted, the installers in the Windchill product suite do not have an uninstall capability.

Installation Type

Some installers offer specialized installation types, execution modes, and custom options. The most common installation types for the Windchill product suite installers are: Typical and Custom. Typical is the most common course of prompts and options. Custom allows you to select options that may not be available using the Typical installation type or allows you to skip portions of the installation. Some installers offer additional installation types that allow for specialized processing.

Choosing Installation Directory

All installers require you to choose where you want to install the software. Some products can be installed in any location, whereas others must be installed into the same installation directory as another product. If the product has no restrictions on where it is installed, you can also enter a new directory path and the installer will create it.

If the product you are installing must be installed in the same location as another product, the panel indicates the name of the prerequisite product or products. It then shows a list of one or more directories that it believes meet the prerequisites.

Note: The list of directories comes from a central registry that the installers maintain on your system. If a previous installation has been deleted, a directory may be shown which no longer exists.

You can then choose one of the listed directories or browse to another directory if the one you want is not shown. After the directory is selected, the installer then performs a more in-depth validation of the chosen directory. If it does not meet the requirements, you are informed and given the chance to choose another location.

Terminology

Installer -- The program that you interact with to perform the installation; for example, setup (or setup.vbs) is referred to as the installer. The term installer is not intended to refer to the person doing the work.

Installation Directory -- The directory where you choose to place the product you are installing.

InstallAnywhere -- The framework and toolset, provided by ZeroG, which is used to develop the Windchill installers.

Java Runtime Environment

To run, the InstallAnywhere software requires the specific version of the Java Runtime Environment (JRE) which is bundled with each installer. When you run an installer using the documented scripts from the CD root, the installer automatically uses the bundled JRE and does not use a JRE from your system. The SDK on the Windchill server system is no longer used when installing Windchill products.

Disk Space Check Process

The installation of some products takes a considerable amount of disk space. The **Review Settings** panel of each installer gives an indication of the estimated disk space requirements to complete the installation based upon the options you have chosen. Once you click **Install** on the **Review Settings** panel, the installer checks your system for the required disk space. If it does not believe there is enough space, the installer presents a dialog box that informs you of this and waits for the space to be freed up. You may also choose to go back and select a different installation directory.

The disk space check can be disabled completely by setting the environment variable CHECK_DISK_SPACE to a value OFF (note all caps) prior to launching the installer.

Launching the Installer

The installer placement and behavior differs depending on the following things:

- Whether the your system platform is Windows or UNIX.
- Whether there is only one or multiple installers on the same CD.

Note: Running installers from a windchill shell or having a windchill shell open when you are installing is not recommended and causes errors to occur if you are installing or updating Windchill Services. Instead, be sure to modify the system PATH variable to include the path to your installed SDK bin directory before running the setup file.

The following sections describe where actual installer executables are located, as well as the installer placement and behavior based on whether there is one installer on the CD or multiple installers on the CD.

Single Installer on CD

The following describes what to expect when there is only one installer on the CD.

Automatic and Manual Execution on Windows

If you are using a CD to do the installation and there is only one installer on the CD, the setup program may automatically start when you insert the CD. Otherwise, to manually run the setup program, double click the **setup.vbs** program that is located in the CD root directory.

UNIX Setup Script

The UNIX installer script name is **setup**. It is located directly under the CD image root. The script automatically launches the program for the operating system on which the installation is taking place.

Before you install, check the DISPLAY environment variable setting to ensure that the installation windows will display on the machine. The DISPLAY value on the machine that runs the setup program should be set to *<machine>*:0.0, where *<machine>* is the name of the system where the setup program is installed.

If the DISPLAY variable is not set correctly, the installation program exits with the following error:

```
Configuring the installer for this system's environment...

Invocation of this Java Application has caused an
InvocationTargetException. This application will now exit. (LAX)
```

Multiple Installers on One CD

In some cases, there are multiple Windchill products on one CD. For example, the Windchill Third Party Software CD has the Tomcat, Apache, OCU, and JRE products. On Windows, the installer does not automatically launch when a CD contains multiple products. The scripts for each installer are located at the root directory of the CD.

To run the installation, navigate to the root directory on the CD and locate the setup script for the product you want to install. Run the setup script, as follows:

- On Windows -- Run the VBS setup file for the product. The actual name of the setup file includes the product name, such as `setup_tomcat.vbs` for the Tomcat product.
- On UNIX -- Run setup script for the product. The actual name of the setup file includes the product name, such as `setup_tomcat` for the Tomcat product.

Before running the setup script on a UNIX system, check the `DISPLAY` environment variable setting to ensure that the installation windows will display on the machine.

Location of Actual Installer setup Executables

As a convenience, the setup VBS file (for Windows) and the setup script file (for UNIX) are located in the root directory of the CD.

The actual setup executable files are located further down in the directory hierarchy:

- For Windows, the `setup.exe` file can be found in the `Disk1\InstData\Windows\NoVM` directory for the product you are installing.
- For UNIX, first locate the UNIX platform directory under the `Disk/InstData` directory for the product you are installing. Within that directory, the `setup.bin` file can be found in the `NoVM` directory.

Note: Do not run the setup executable directly to start an installer. The executable files are not coded to use the bundled JRE. Instead, always use the setup files that are in the CD root directory.

Loading and Mounting the CD-ROM on UNIX

Most UNIX systems automatically mount the CD-ROM after it is loaded into the CD-ROM drive. For users whose machines do not mount automatically, the following instructions explain how to load and mount the CD-ROM both locally and remotely.

Note: Sun Solaris 2.x has automatic CD mounting. For more specific information on how to mount CDs on Sun hardware, visit <http://docs.sun.com/>.

Determining the SCSI ID of the CD-ROM Drive

You specify the SCSI identification number of your CD-ROM drive when you mount the CD-ROM file system to your UNIX workstation.

If you already know the SCSI ID of your CD-ROM drive, proceed to the next step.

If you do not already know the SCSI ID of your CD-ROM drive:

- For external CD-ROM drives, the SCSI ID can be found on the back of your CD-ROM drive. Look for a single-digit switch. The displayed number is the SCSI ID number.
- For internal CD-ROM drives, use the following table to find the command(s) you need to enter to determine the SCSI ID (the number in bold is the ID).

Commands Used to Find the SCSI ID of the CD Device

System	Command and Output	SCSI ID
HP-UX	<ol style="list-style-type: none">1. Insert the CD-ROM into the drive.2. Become root user.3. For each file in the /dev/rdsk directory, type the following at the command line: <code>/etc/diskinfo /dev/rdsk/<device></code> <device> should be replaced with each item in the /dev/dsk directory. For the device file identified as type: CD-ROM, the SCSI ID is to the right of the letter t in this example of a device file name: <code>c0t3d0</code> <p>Note: The identified device file name is the same file name that is used in the command to mount the CD-ROM.</p>	3
SUN	Automatically mounts the CD-ROM.	
AIX	<code>lsdev -C -c cdrom -H</code> IBM eServer p5 and pSeries systems have IDE CD-ROM Drive	4 (in the string 00-08-00-#0)

Note: The inclusion of a system in this table does not indicate support for that system; this information is only included to help you determine the SCSI ID for

CD-ROM drives that are remotely mounted to your workstation. See the software platform matrix (available from <http://www.ptc.com/appserver/cs/doc/refdoc.jsp>) for information on supported systems and platforms.

Loading and Mounting the CD-ROM Locally

1. Turn on the CD-ROM drive and insert the CD-ROM.
2. If the /cdrom directory does not already exist, create it using the following command:
3. To mount the CD-ROM drive, enter the command appropriate for your UNIX workstation system.

```
mkdir /cdrom
```

For Sun, the command is:

```
mount -F hfsfs -o ro /dev/dsk/c0t#d0s0 /cdrom
```

In the command line, replace the # symbol with the SCSI ID of the drive.

For AIX, the command is:

```
/usr/sbin/mount -o ro -v cdrfs -f /dev/cd0 /cdrom
```

For Hewlett-Packard, the procedure is:

- a. Add the following line to the /etc/pfs_fstab file. The first entry is the CD-ROM device file, the second is the mount point. The third entry indicates that the CD-ROM to be mounted is in ISO9660 format with Rockridge extension:

```
<device_file> <mount_point> <filesystem_type>  
<translation_method>
```

Example:

```
/dev/dsk/c5t2do /cdrom pfs-rrip xlat=unix 0 0
```

- b. Perform this step (and steps c through e) as the root user. Run the following file:

```
# nohup /usr/sbin/pfs_mountd &
```

- c. Run the following file:

```
# nohup /usr/sbin/pfsd &
```

- d. Run the following command to mount the CD-ROM:

```
# /usr/sbin/pfs_mount /cdrom
```

- e. Exit the root user account:

```
# exit
```

- f. Change directories to /cdrom, where you can see a lowercase listing of the directories and files on the CD-ROM. The mounted CD-ROM should appear as another read-only file system.

Loading and Mounting the CD-ROM Remotely

The CD-ROM drive should be mounted using NFS version 2. On machines that support NFS 3, an extra argument needs to be added to the mount command to force the use of NFS 2.

1. Load and mount the CD-ROM on the remote UNIX system to which the CD-ROM drive is connected. Use the procedure outlined in the [Loading and Mounting the CD-ROM Locally](#) section.
2. The CD-ROM file system must be exported before a remote UNIX system can allow access to the CD-ROM from your local UNIX workstation. To accomplish this, a line must be added to a file on your local UNIX workstation and, in some cases, a command needs to be executed.
3. Use the following table to look up the system of the remote UNIX system. Select your system from the **System** column, and add the text line in the **Line to Add** column to the file in the **File to Edit** column. You must have correct write permissions to edit these files.
4. If necessary after you have made the changes, execute the command listed in the **Command** column.

Exporting the CD File System

System	File to Edit	Line to Add	Command
HP-UX	/etc/exports	/cdrom -ro	exportfs /cdrom
AIX	/etc/exports	/cdrom -ro (AIX 5.2) /cdrom -sec=sys,ro (AIX 5.3)	/usr/sbin/exportfs /cdrom
Sun	/etc/dfs/dfstab	share -F nfs -o ro /cdrom	shareall

5. If the /cdrom directory does not already exist on your local UNIX workstation, create it using the following command:


```
mkdir /cdrom
```
6. The CD-ROM directory must be mounted from the remote UNIX system to your local workstation. Use the following table to identify your local UNIX workstation type and execute the corresponding command. In the command, specify values, as follows:
 - *<node>* is the name of the remote UNIX system to which the CD-ROM drive is connected.

- `<cdmount>` is the CD-ROM mount directory used on the remote UNIX system.

CD Device Remote Mounting Commands

System	Remote Mounting Command
HP-UX	<code>/etc/mount -o ro,hard <node>:<cdmount> /cdrom</code>
AIX	<code>/usr/sbin/mount -o ro,hard <node>:<cdmount> /cdrom</code>
Sun	<p><code>mount -o ro,hard <node>:<cdmount> /cdrom</code></p> <p>Note: If problems occur while using an installer from a remote-mounted CD-ROM, you can try remounting the remote CD-ROM using one of the following commands:</p> <p>For Sun systems:</p> <pre>mount -o ro,hard,vers=2 <node>:<cdmount> /cdrom</pre> <p>For IBM eServer p5 and pSeries systems:</p> <pre>/usr/sbin/mount -o ro,hard,vers=2 <node>:<cdmount> /cdrom</pre>

7. If your system does not automatically mount the CD-ROM, enter the required command. For example, for Hewlett Packard systems:

```
/etc/mount -F cdfs -o ro /dev/dsk/c?t#d0 /cdrom
```

Note: In the preceding example, the number sign (#) represents the SCSI ID of the CD-ROM drive.

8. The CD-ROM file system must be exported before a remote UNIX system allows access to the CD-ROM from your local UNIX workstation. To accomplish this, you must add a line to a file on your local UNIX workstation, and, in some cases, execute a command.

9. Use the following table, to identify your remote system; add the text in the **Line to Add** column to the file listed in the **File to Edit** column. You must have the correct write permissions to edit the files. If necessary, execute the command listed in the **Command** column. For additional information, see your hardware-specific documentation.

Exporting the CD-ROM File System

System	File to Edit	Line to Add	Command
HP-UX	/etc/exports	/cdrom -ro	exportfs /cdrom
Sun	/etc/dfs/dfstab	share -F nfs -o ro /cdrom	shareall

If problems occur while using an installer from a remote-mounted CD-ROM on Sun Solaris systems, try remounting the remote CD-ROM using the following command:

```
mount -o ro,hard,vers=2 <node>:<cdmount> /cdrom
```

Installation Log Files

During the installation, information is written to various log files. The log files are located in the *<installation directory>/installer/logs* directory. There are generally two log files written per installation session:

- *<installer short name>_InstallLog.xml*
- *<installer short name>_PtcInstall.log*

Note: The *<installer short name>_InstallLog.xml* is only available after the installer terminates.

When multiple executions of the same installer are performed to the same installation directory, these log files are backed up and the file names are changed to include a sequence number. The sequence numbers begin with 000. For example, the log files for the first execution of the installer would be named as follows:

- *<installer short name>_InstallLog.000.xml*. For example, WNC_InstallLog.000.xml
- *<installer short name>_PtcInstall.000.log*. For example, WNC_PtcInstall.000.log

Up until the point where you have actually clicked **Install** on the **Review Settings** panel, the log files are written to the temporary directory controlled by the operating system as follows:

- On Windows, the environment variable %TMP% is used and typically defaults to Local Settings\Temp directory of the current users in the User

Profile directory. For example, d:\User Profiles\<userid.domain>\Local Settings\Temp.

Note: On Windows, the Local Settings directory may be hidden by default. If you cannot find the Local Setting directory using the Windows Explorer, check your folder options to ensure that hidden folders are displayed.

- On UNIX, the logs are temporarily written to either /var/tmp or /tmp (JVM implementation dependent). If the installer does not have permission to write to the temporary directory, it writes the <installer short name>_InstallLog.xml file to the user's <HOME> directory, but the <installer short name>_PtcInstall.log is held in memory until they are both written to <Windchill>/installer/logs. If the installation fails before you have actually clicked **Install**, there is no <installer short name>_PtcInstall.log written when the installer does not have permission to write to the temporary directory.

When the installer is executed in a language other than English, messages in the <installer short name>_PtcInstall.log files are written in both English and the translated form. Not all messages have a translated form.

If problems should occur during the installation, write down the location of the log files and be prepared to send them to PTC Technical Support for analysis. If an installer should fail before the install has actually started, the files are located in the directory identified by the operating system as noted previously.

Troubleshooting

Reading through the following common problem descriptions may help you in troubleshooting your installation problems.

Problem:

When an installation fails, the installer logs are not written to the standard output directory of <installation directory>/installer/logs.

Action:

In this case, the installer displays the location of the installation log files that it has produced. Write down the location specified by the installer. The location of the log files depends upon when in the installation process the installation fails. Refer to the [Installation Log Files](#) section for details.

Problem:

On a UNIX system, the installer does not run.

This can happen if the TMP directory does not have the disk space required by the installer.

Action:

Set the environment variable LAX_DEBUG=1 in the shell where the installer was launched and restart the installer. This should result in output being written to the console window.

If the output produced indicates that the amount of /tmp disk space required to perform this installation is greater than what is available, you can set the IATEMPDIR environment variable to a directory on a disk partition with enough free disk space. Then restart the installer.

To set the variable, enter one of the following commands at the UNIX command line prompt before running this installer again:

- for Bourne shell (sh), ksh, bash and zsh:

```
$ IATEMPDIR=/<your>/<free>/<space>/<directory>
```

```
$ export IATEMPDIR
```

- for C shell (csh) and tcsh:

```
$ setenv IATEMPDIR /<your>/<free>/<space>/<directory>
```

Problem:

On UNIX, the installer terminates unexpectedly.

Action:

PTC has encountered situations where a core dump is caused by corrupt font files. This problem is known to have occurred in 1.4.x JVMs. If you are running a 32-bit JVM, then set the environment variable LAX_DEBUG=1 in the shell where the installer was launched, and restart the installer. Navigate through the installer until it fails. This should result in output being written to the console window. Browse the console output for the following message:

```
Assertion failed: offset <fFileSize, file
../../../../src/share/natvie/sun/awt/font/fontmanager/fontobjects/fon
tObject.cpp, line XXX
Abort - core dumped
```

The solution is to identify the problematic fonts per the Evaluation sections in the following Java Bug Parade reports provided by Sun:

<http://developer.java.sun.com/developer/bugParade/bugs/4838130.html>

Problem:

The installer cannot find a valid Java Virtual Machine.

This can happen in the following situations:

- If you try running the installer using an executable file that is located in a NoVM directory.

- You are trying to install one of the products from the Windchill Third Party Software CD or the Windchill Services CD over a network connection, and you do not have a supported Java VM on your local machine. For the installers, the supported Java VM is a version of Java 1.4 (Java 1.5 cannot be used by the installers).

Either of the following messages could be returned:

- The installer requires Java 1.4 in your path. (on UNIX)
- Could not find a valid Java virtual machine to load. (on Windows).

Action:

If you were not using a setup script that is located at the root directory on the CD, rerun the installer using the setup script located in the root directory. Running the installer from the root directory ensures that the Java Virtual Machine bundled with the installer is used.

If you are installing over a network connection, locate a supported Java VM and rerun the installer using the setup command with the following as the first two arguments on the command line.

UNIX:

```
<install_dir>/<setup_script> LAX_VM <java_install_dir>/bin/java
```

Windows:

```
<install_dir>/<setup_script> LAX_VM <java_install_dir>/bin/java.exe
```

Where *<install_dir>* is the directory path to the setup file, *<setup_script>* is the setup script in the root directory of the CD for the product you are installing (such as *setup_tomcat.vbs*), and *<java_install_dir>* is the installation directory for the Java VM. The second argument is the actual Java VM executable, not a directory. If any other arguments are passed in, they must follow these two arguments.

Alternative Method:

An alternative to running the setup script from command line and including the LAX_VM option is to set the LAX_VM environment variable to the same value that would be used on the command line. When this variable is set, running the setup script that is in the root directory on the CD automatically adds LAX_VM and *<java_install_dir>/bin/java* to the command line for the installer that you are starting.

Problem:

On AIX, the installer core dumps and does not launch.

Action:

This can happen if the IBM_MIXED_MODE_THRESHOLD environment variable is set. Unset the IBM_MIXED_MODE_THRESHOLD variable.

Problem:

Technical Support asks you to provide additional diagnostic information about how the installer launches and what JRE is used to execute the installer.

Action:

There are two ways to obtain additional diagnostics:

- On some Windows versions, you can press the control key when you double-click on the setup.vbs script that is at the root level of the CD. This brings up a command shell window with diagnostic information. You can copy this information into a file to send to Technical Support.
- On UNIX and Windows, you can set the environment variable LAX_DEBUG to 1. Then execute the setup script for the installer that is at the root level of the CD. The diagnostics are shown in the same command window (UNIX) or in a pop-up window (Windows).

Problem:

The installer does not run. The error message returned indicates that one of the following requirements is not true:

- The installer only runs on the following platforms:
AIX, HP-UX, Solaris, Windows 2000, or Windows 2003
- The installer requires Java 1.4 or higher in your path.

Action:

Ensure that you are running on a supported platform. Although the message does not indicate that Windows XP is supported, the installers can run on Windows XP also.

Additionally, ensure that you are running the installer using the scripts located in the root directory of the CD. This ensures that Java Virtual Machine bundled with the installer is being used.

Problem:

Sometimes the installer appears to skip over a step.

Action:

The installers behave in a wizard-like fashion with **Next** and **Previous** buttons. In a system where the response is slow, the wizard may not advance to the next or previous step as quickly as expected and you may click the **Next** or **Previous** button again (repeatedly). This mouse click event is queued up and acted upon when the system responds. This may advance the windows beyond the expected window.

Once the **Next** or **Previous** button has been clicked, wait for the installer to respond and advance to the intended window.

Under normal system conditions, the installer moves forward and backward through the windows with little noticeable delay.

This issue has been filed as a bug with the software vendor ZeroG.

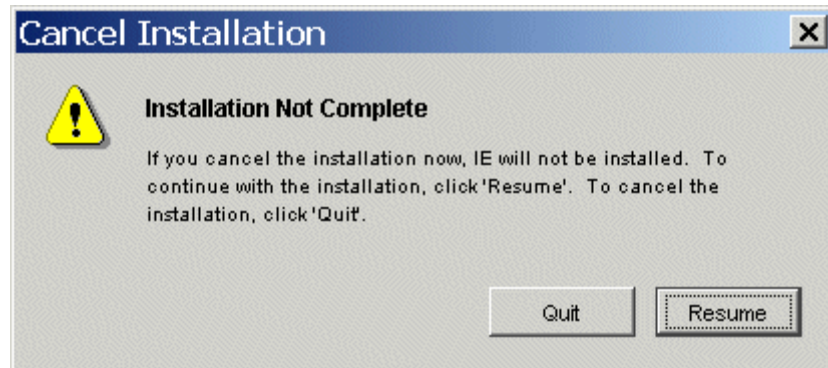
Problem:

On Windows, the installer **Cancel Installation** dialog box demands the user interface focus.

Action:

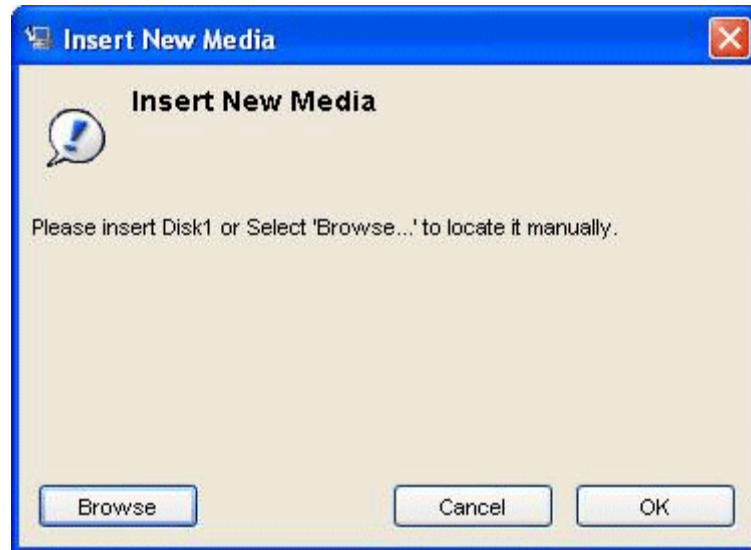
When you try to cancel the installer through the **Cancel Installation** dialog box, the window monopolizes the window focus on the desktop.

To release the focus, click either the cancel (the X in the upper right corner of the dialog box) or **Resume** button.



Problem:

During an installation, the installer displays the following:



Action:

The appearance of this window indicates that the installer could not locate a required file from the current media set.

If you are installing over a network, the window can be an indication that the response time across the network is too slow for the installer. Click **Cancel** and rerun the installer. If the window appears again, try running the installer when there is less network traffic or from another network, or copy the installation files to your local system.

If you are installing from the installation CDs or a local directory, then the installation data set is incomplete. Try downloading the installation files again. If this fails to correct the problem, contact Technical Support for assistance.

Gathering Information for a Support Call

Prior to contacting Technical Support for assistance with your installation problem, gather the log files for your particular installer from the *<installation directory>/installer/logs* directory.

In some cases, the files are quite large. You may want to ZIP or TAR them before sending them to Technical Support.

If you are reporting an issue for a product installed into the Windchill installation directory, also provide the information generated by the Windchill version command. This information can be obtained by executing the following command in a command prompt window:

```
windchill version
```

A report similar to the following report is generated:

```
X:\>windchill version

Support   Support
Datecode  Release Number  Release Id      Installer
-----
F000      8.0            ie.8.0.00.34    06
F000      8.0            uecm.8.0.00.34  01
F000      8.0            pdml.8.0.00.34  01
F000      8.0            unc.8.0.00.34   01
Display Label
-----
Info*Engine
Windchill Classification and Reuse
Windchill PDMLink
Windchill Services

There are no temp patches installed.
There is no non-default locale support installed.
```

Provide the information in this report when submitting your information to Technical Support.

About the windchill Command

PTC has provided a command, windchill, to invoke Windchill actions. For example, the command can be used to stop and start Windchill, check the status of the Windchill server, and create a new shell and set the environment variables. It can also be used as a Java wrapper. In that regard, it can accept a Class file as an argument, just like Java, and execute it without a predefined environment (Windchill classes in CLASSPATH, Java in PATH, and so on).

The windchill command should be used to execute any server-side Windchill Java code. This will ensure that the environment that the command is executed in is properly setup. The environment that actions are executed within, including the windchill shell action, is defined by the wt.env properties in the wt.properties file. For example, the wt.env.CLASSPATH property will set the CLASSPATH environment variable for the action that is being invoked.

The windchill command is a Perl script that has also been compiled into a Windows binary executable. For UNIX systems, Perl 5.0 or greater must be installed. The windchill script assumes that Perl is installed in the standard install location of /usr/bin/perl. If Perl is not installed at this location, you can either create a symbolic link (recommended method) to the Perl install location or edit the windchill script to reference the Perl install location. To modify the windchill script, edit the <Windchill>/bin/windchill file. Locate the #! entry (for example, #!/usr/bin/perl -w) and change the Perl directory to the location where Perl is installed.

The windchill command is located in the <Windchill>\bin directory. If you receive a command not found message when you execute the windchill command, add the <Windchill>\bin directory to your PATH environment variable. The syntax of the windchill command is:

```
windchill [args] action
```

You can display the help for the windchill command by executing windchill with the -h argument or with no argument.

The following tables list some of the arguments and actions applicable to the windchill command. To see a complete list of the arguments, use the report generated from the help (argument).

windchill Arguments:

Arguments (optional)	Description
-h, --help	Displays help and exits.
-v, --[no]verbose	Explains what is being done when a command is executed. Default is noverbose.
-w, --wthome=DIR	Sets the Windchill home directory. Default is the parent directory containing the windchill script. Note: On UNIX systems where you have multiple instances of Windchill installed under the same user account, settings made to WT_HOME and SQLPATH environment variables by using this -w option are overridden by any settings to these same variables in the user's .cshrc, .login, and .profile shell initialization files.
--java=JAVA_EXE	The Java executable. Default is the wt.java.cmd variable value specified in the \$WT_HOME/code-base/wt.properties file.
-cp, --classpath=PATH	Java classpath. Default is the wt.java.classpath variable value specified in the \$WT_HOME/code-base/wt.properties file.
--javaargs=JAVAARGS	Java command line arguments.

windchill Actions

Action	Description
shell	Sets up a Windchill environment in a new instance of the currently running shell.
start	Starts the Windchill server.
stop	Stops the Windchill server.
status	Retrieves the status of the Windchill server.
version	Displays the Windchill installation version.
properties <resource> [,...][?key[&key2]...]	<p>Displays the properties as seen by Windchill for the given resource with substitution and other actions executed. It can be limited to a given set of keys.</p> <p>For example:</p> <p>windchill properties wt.properties — lists all wt.properties</p> <p>windchill properties wt.properties?wt.server.codebase — lists server codebase</p> <p>windchill properties wt.properties?wt.env.* — lists all the environment variables use by windchill shell</p> <p>windchill properties — with no arguments generates the help report</p>
CLASS [CLASS_ARGS]	<p>Run a Windchill class with optional class arguments. For example:</p> <p>windchill wt.load.Developer -UAOps</p>

About the windchill shell

The windchill shell brings up a new command shell, from the parent shell that is setup for the Windchill environment. This includes setting all environment variables defined in wt.env property in the wt.properties file.

To execute the windchill shell, at the command prompt enter the following command:

```
windchill shell
```

When you are finished using the windchill shell, you can exit the shell and return to the parent shell.

PTC recommends running all server-side Windchill applications, tools, and utilities from the windchill shell. Also, you can use the windchill shell to set up your development environment to use javac or Java directly.

About the xconfmanager Utility

The xconfmanager is a command-line utility that is used to add, remove, and modify the properties in the Windchill property files. You should use the xconfmanager (or the System Configurator) to manipulate properties; you should not manually edit property files.

There are property files that should not be modified using the xconfmanager. The following registry files are managed by Windchill Information Modeler and they also should not be edited manually or using the xconfmanager:

```
associationRegistry.properties  
classRegistry.properties  
descendentRegistry.properties  
modelRegistry.properties  
moduleRegistry.properties  
moduleDir.properties  
debug.properties
```

The xconfmanager utility saves your changes in the site.xconf file and provides an option to generate updated property files using those changes. The site.xconf file contains changes made to Windchill property files, starting with installation and continuing with each use of the xconfmanager utility or the System Configurator. The xconfmanager utility is located in the <Windchill>/bin directory.

This chapter describes only the information and instructions necessary to modify specific Windchill properties. A full description of the xconfmanager utility and management of the Windchill property files is documented in the *Windchill System Administrator's Guide* in the Administering Runtime Services chapter.

Anyone with write access to the XCONF files and the property files under the Windchill installation directory can successfully run the xconfmanager utility. The xconfmanager is executed from the command line from within a windchill

shell. See the [About the windchill Command](#) chapter for more information about the windchill shell.

The syntax of xconfmanager command with only commonly used parameters is as follows:

```
xconfmanager {-h} {-r <product_root>} {-s <property_pair>}
{-t <property_file>} {--add <property_pair>}
{--remove <property_pair>} {--reset <property_names>}
{--undefine <property_names>} {-d <property_names>} {-p}
```

For the purposes of modifying Windchill properties, you will primarily use the -s, -t, and -p parameters as follows:

- Use the **-s** (--set) parameter to identify the relevant property and specify the new property value. See the [Formatting Property Value Guidelines](#) section (below) for information about formatting the *<property_pair>* value.
- Use the **-t** (--targetfile) parameter to specify the directory location of the property file. If the file name or path contains spaces, you must enclose the *<property_file>* value in double quotes (" "). It is recommended to use a fully qualified file name to ensure an accurate reference to the file is made.
- Use the **-p** (--propagate) parameter to propagate the changes made to the XCONF files into the property files being modified in order to keep the XCONF and the property files in sync with one another.
- Use the **-h** (--help) parameter to view the help for xconfmanager. The help describes all xconfmanager parameters.

Additionally, you can add and remove property values from properties that are declared as a multi-valued properties using the following parameters:

- Use the **--add** parameter to add the value specified at the end of the set of ordered values already defined in the property.
- Use the **--remove** parameter to remove the value specified from the set of ordered values already defined in the property.

Tip: If you are unsure as to whether a property is multi-valued, you can display the current set of values using the **-d** parameter. The output from this parameter lists the multivalue separator when the property is multi-valued.

Some examples of using the xconfmanager utility are as follows:

- xconfmanager is run from the windchill shell. To open a windchill shell, execute the following command at a command prompt:

```
windchill shell
```

- To display xconfmanager help, execute the following command from the windchill shell:

```
xconfmanager -h
```

- To display the current settings for a property, execute the following command from the windchill shell:

```
xconfmanager -d <property_names>
```

<property_names> is a comma-separated list of property names. This means that you can display the current settings for multiple properties by executing one command.

- To change a property value, execute the following command from the windchill shell:

```
xconfmanager -s <property_name>=<property_value>
-t <property_file> -p
```

Tip: Use the fully qualified name of the property file to ensure an accurate reference. If you are sure that there is only one property file that is known to xconfmanager containing the property, you can omit the -t parameter. When setting a value for a new property not in a property file, you must include the -t parameter to name the property file to which the property is added.

- To add a new classpath entry to the Windchill classpath specified in the wt.java.classpath property, execute the following command from the windchill shell:

```
xconfmanager --add wt.java.classpath=d:\MyLibraries\somelibrary.jar -p
```

The value d:\MyLibraries\somelibrary.jar will be added to the end of the ordered set. You do not have to specify the delimiter \$(path.sep) as this will be added to the property value automatically by the xconfmanager.

Tip: The previous example command did not include the target file in the -t parameter since the property is known to be in only wt.properties.

Formatting Property Value Guidelines

The following guidelines will help ensure that you set properties correctly on the command line when using xconfmanager:

- To specify a property whose value contains characters that might be interpreted by your shell (such as spaces and special characters), escape them using the appropriate technique for the shell you are using.

On a Windows system, you can include spaces in a value by enclosing the argument with double quotes or you can escape the space character with ^. For example, use either of the following:

```
-s "wt.inf.container.SiteOrganization.name=ACME Corporation"
-s wt.inf.container.SiteOrganization.name=ACME^ Corporation
```

On a UNIX system, you can use doubles quotes or you can escape the space character with \. For example, use either of the following:

```
-s "wt.inf.container.SiteOrganization.name=ACME Corporation"
```

```
-s wt.inf.container.SiteOrganization.name=ACME\ Corporation
```

- In many UNIX shells, the use of a backward slash (\) escapes the following character as a literal. In most cases, using forward slashes (/) in file paths is a simple way to specify a path without having to know the intricacies of your shell's command line escaping rules.
- On UNIX, dollar signs are usually interpreted by shells as variable prefixes. To set a property value that has a dollar symbol in it, use single quotes around the argument so that the shell does not interpret it or use backslash to escape the dollar symbols. For example, use either of the following:

```
-s 'wt.homepage.jsp=$(wt.server.codebase)/wtcore/jsp/wt/portal/index.jsp'
```

or

```
-s wt.homepage.jsp=
\$(wt.server.codebase)/wtcore/jsp/wt/portal/index.jsp
```

Other than escaping arguments so that the command-line shell does not misinterpret them, you should not need to escape other values to be compatible with XML or property file syntaxes. The xconfmanager escapes property names and values automatically if necessary.

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