



Windchill[®]
Installation and Configuration Guide -
RetrievalWare
Windchill 7.0
December 2003

Copyright © 2003 Parametric Technology Corporation. All Rights Reserved.

User and training documentation from Parametric Technology Corporation (PTC) is subject to the copyright laws of the United States and other countries and is provided under a license agreement that restricts copying, disclosure, and use of such documentation. PTC hereby grants to the licensed user the right to make copies in printed form of this documentation if provided on software media, but only for internal/personal use and in accordance with the license agreement under which the applicable software is licensed. Any copy made shall include the PTC copyright notice and any other proprietary notice provided by PTC. This documentation may not be disclosed, transferred, modified, or reduced to any form, including electronic media, or transmitted or made publicly available by any means without the prior written consent of PTC and no authorization is granted to make copies for such purposes.

Information described herein is furnished for general information only, is subject to change without notice, and should not be construed as a warranty or commitment by PTC. PTC assumes no responsibility or liability for any errors or inaccuracies that may appear in this document.

The software described in this document is provided under written license agreement, contains valuable trade secrets and proprietary information, and is protected by the copyright laws of the United States and other countries. It may not be copied or distributed in any form or medium, disclosed to third parties, or used in any manner not provided for in the software licenses agreement except with written prior approval from PTC. UNAUTHORIZED USE OF SOFTWARE OR ITS DOCUMENTATION CAN RESULT IN CIVIL DAMAGES AND CRIMINAL PROSECUTION.

Registered Trademarks of Parametric Technology Corporation or a Subsidiary

Advanced Surface Design, Behavioral Modeling, CADDs, Computervision, EPD, EPD.Connect, Expert Machinist, Flexible Engineering, HARNESSDESIGN, Info*Engine, InPart, MECHANICA, Optegra, Parametric Technology, Parametric Technology Corporation, PHOTORENDER, Pro/DESKTOP, Pro/E, Pro/ENGINEER, Pro/HELP, Pro/INTRALINK, Pro/MECHANICA, Pro/TOOLKIT, PTC, PT/Products, Shaping Innovation, and Windchill.

Trademarks of Parametric Technology Corporation or a Subsidiary

3DPAINT, Associative Topology Bus, AutobuildZ, CDRS, CounterPart, Create Collaborate Control, CV, CVact, CVaec, CVdesign, CV-DORS, CVMAC, CVNC, CVToolmaker, DataDoctor, DesignSuite, DIMENSION III, DIVISION, e/ENGINEER, eNC Explorer, Expert MoldBase, Expert Toolmaker, GRANITE, ISSM, KDiP, Knowledge Discipline in Practice, Knowledge System Driver, ModelCHECK, MoldShop, NC Builder, PartSpeak, Pro/ANIMATE, Pro/ASSEMBLY, Pro/CABLING, Pro/CASTING, Pro/CDT, Pro/CMM, Pro/COLLABORATE, Pro/COMPOSITE, Pro/CONCEPT, Pro/CONVERT, Pro/DATA for PDGS, Pro/DESIGNER, Pro/DETAIL, Pro/DIAGRAM, Pro/DIEFACE, Pro/DRAW, Pro/ECAD, Pro/ENGINE, Pro/FEATURE, Pro/FEM-POST, Pro/FICIENCY, Pro/FLY-THROUGH, Pro/HARNESS, Pro/INTERFACE, Pro/LANGUAGE, Pro/LEGACY, Pro/LIBRARYACCESS, Pro/MESH, Pro/Model.View, Pro/MOLDESIGN, Pro/NC-ADVANCED, Pro/NC-CHECK, Pro/NC-MILL, Pro/NCPOST, Pro/NC-SHEETMETAL, Pro/NC-TURN, Pro/NC-WEDM, Pro/NC-Wire EDM, Pro/NETWORK ANIMATOR, Pro/NOTEBOOK, Pro/PDM, Pro/PHOTORENDER, Pro/PIPING, Pro/PLASTIC ADVISOR, Pro/PLOT, Pro/POWER DESIGN, Pro/PROCESS, Pro/REPORT, Pro/REVIEW, Pro/SCAN-TOOLS, Pro/SHEETMETAL, Pro/SURFACE, Pro/VERIFY, Pro/Web.Link, Pro/Web.Publish, Pro/WELDING, Product Development Means Business, Product First, ProductView, PTC Precision, Shrinkwrap, Simple Powerful Connected, The Product Development Company, The Way to Product First, Wildfire, Windchill DynamicDesignLink, Windchill PartsLink, Windchill PDMLink, Windchill ProjectLink, and Windchill SupplyLink.

Third-Party Trademarks

Adobe is a registered trademark of Adobe Systems. Advanced ClusterProven, ClusterProven, and the ClusterProven design are trademarks or registered trademarks of International Business Machines Corporation in the United States and other countries and are used under license. IBM Corporation does not warrant and is not responsible for the operation of this software product. AIX is a registered trademark of IBM Corporation. Allegro, Cadence, and Concept are registered trademarks of Cadence Design Systems, Inc. AutoCAD and

AutoDesk Inventor are registered trademarks of Autodesk, Inc. Baan is a registered trademark of Baan Company. CADAM and CATIA are registered trademarks of Dassault Systemes. COACH is a trademark of CADTRAIN, Inc. DOORS is a registered trademark of Telelogic AB. FLEXlm is a registered trademark of GLOBEtrouter Software, Inc. Geomagic is a registered trademark of Raindrop Geomagic, Inc. EVERSINC, GROOVE, GROOVEFEST, GROOVE.NET, GROOVE NETWORKS, iGROOVE, PEERWARE, and the interlocking circles logo are trademarks of Groove Networks, Inc. Helix is a trademark of Microcadam, Inc. HOOPS is a trademark of Tech Soft America, Inc. HP-UX is a registered trademark and Tru64 is a trademark of the Hewlett-Packard Company. I-DEAS, Metaphase, Parasolid, SHERPA, Solid Edge, and Unigraphics are trademarks or registered trademarks of Electronic Data Systems Corporation (EDS). InstallShield is a registered trademark and service mark of InstallShield Software Corporation in the United States and/or other countries. Intel is a registered trademark of Intel Corporation. IRIX is a registered trademark of Silicon Graphics, Inc. MatrixOne is a trademark of MatrixOne, Inc. Mentor Graphics and Board Station are registered trademarks and 3D Design, AMPLE, and Design Manager are trademarks of Mentor Graphics Corporation. MEDUSA and STHENO are trademarks of CAD Schroer GmbH. Microsoft, Microsoft Project, Windows, the Windows logo, Windows NT, Visual Basic, and the Visual Basic logo are registered trademarks of Microsoft Corporation in the United States and/or other countries. Netscape and the Netscape N and Ship's Wheel logos are registered trademarks of Netscape Communications Corporation in the U.S. and other countries. Oracle is a registered trademark of Oracle Corporation. OrbixWeb is a registered trademark of IONA Technologies PLC. PDGS is a registered trademark of Ford Motor Company. RAND is a trademark of RAND Worldwide. Rational Rose is a registered trademark of Rational Software Corporation. RetrievalWare is a registered trademark of Convera Corporation. RosettaNet is a trademark and Partner Interface Process and PIP are registered trademarks of "RosettaNet," a nonprofit organization. SAP and R/3 are registered trademarks of SAP AG Germany. SolidWorks is a registered trademark of SolidWorks Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the United States and in other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc. Sun, Sun Microsystems, the Sun logo, Solaris, UltraSPARC, Java and all Java based marks, and "The Network is the Computer" are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and in other countries. VisTools is a trademark of Visual Kinematics, Inc. (VKI). VisualCafé is a trademark of WebGain, Inc. WebEx is a trademark of WebEx Communications, Inc.

Licensed Third-Party Technology Information

Certain PTC software products contain licensed third-party technology: Rational Rose 2000E is copyrighted software of Rational Software Corporation. RetrievalWare is copyrighted software of Convera Corporation. VisualCafé is copyrighted software of WebGain, Inc. VisTools library is copyrighted software of Visual Kinematics, Inc. (VKI) containing confidential trade secret information belonging to VKI. HOOPS graphics system is a proprietary software product of, and is copyrighted by, Tech Soft America, Inc. G-POST is copyrighted software and a registered trademark of Intercim. VERICUT is copyrighted software and a registered trademark of CGTech. Pro/PLASTIC ADVISOR is powered by Moldflow technology. Moldflow is a registered trademark of Moldflow Corporation. The JPEG image output in the Pro/Web.Publish module is based in part on the work of the independent JPEG Group. DFORMD.DLL is copyrighted software from Compaq Computer Corporation and may not be distributed. METIS, developed by George Karypis and Vipin Kumar at the University of Minnesota, can be researched at <http://www.cs.umn.edu/~karypis/metis>. METIS is © 1997 Regents of the University of Minnesota. LightWork Libraries are copyrighted by LightWork Design 1990-2001. Visual Basic for Applications and Internet Explorer is copyrighted software of Microsoft Corporation. Adobe Acrobat Reader is copyrighted software of Adobe Systems. Parasolid © Electronic Data Systems (EDS). Windchill Info*Engine Server contains IBM XML Parser for Java Edition and the IBM Lotus XSL Edition. Pop-up calendar components Copyright © 1998 Netscape Communications Corporation. All Rights Reserved. TECHNOMATIX is copyrighted software and contains proprietary information of Technomatix Technologies Ltd. Apache Server, Tomcat, Xalan, and Xerces are technologies developed by, and are copyrighted software of, the Apache Software Foundation (<http://www.apache.org/>) - their use is subject to the terms and limitations at: <http://www.apache.org/LICENSE.txt>. UnZip (© 1990-2001 Info-ZIP, All Rights Reserved) is provided "AS IS" and WITHOUT WARRANTY OF ANY KIND. For the complete Info-ZIP license see

<ftp://ftp.info-zip.org/pub/infozip/license.html>. Gecko and Mozilla components are subject to the Mozilla Public License Version 1.1 at <http://www.mozilla.org/MPL/>. Software distributed under the MPL is distributed on an "AS IS" basis, WITHOUT WARRANTY OF ANY KIND, either express or implied. See the MPL for the specific language governing rights and limitations. Technology "Powered by Groove" is provided by Groove Networks, Inc. Technology "Powered by WebEx" is provided by WebEx Communications, Inc. Acrobat Reader is Copyright © 1998 Adobe Systems Inc. Oracle 8i run-time, Copyright © 2000 Oracle Corporation. The Java™ Telnet Applet (StatusPeer.java, TelnetIO.java, TelnetWrapper.java, TimedOutException.java), Copyright © 1996, 97 Mattias L. Jugel, Marcus Meißner, is redistributed under the [GNU General Public License](#). This license is from the original copyright holder and the Applet is provided WITHOUT WARRANTY OF ANY KIND. You may obtain a copy of the source code for the Applet at <http://www.mud.de/se/jta> (for a charge of no more than the cost of physically performing the source distribution), by sending e-mail to leo@mud.de or marcus@mud.de-you are allowed to choose either distribution method. The source code is likewise provided under the [GNU General Public License](#). GTK+The GIMP Toolkit are licensed under the [GNU LGPL](#). You may obtain a copy of the source code at <http://www.gtk.org/>, which is likewise provided under the [GNU LGPL](#). zlib software Copyright © 1995-2002 Jean-loup Gailly and Mark Adler.

UNITED STATES GOVERNMENT RESTRICTED RIGHTS LEGEND

This document and the software described herein are Commercial Computer Documentation and Software, pursuant to FAR 12.212(a)-(b) (OCT'95) or DFARS 227.7202-1(a) and 227.7202-3(a) (JUN'95), is provided to the US Government under a limited commercial license only. For procurements predating the above clauses, use, duplication, or disclosure by the Government is subject to the restrictions set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software Clause at DFARS 252.227-7013 (OCT'88) or Commercial Computer Software-Restricted Rights at FAR 52.227-19(c)(1)-(2) (JUN'87), as applicable. 040103

Parametric Technology Corporation, 140 Kendrick Street, Needham, MA 02494 USA

Contents

Change Record	vii
About This Guide.....	ix
Related Documentation	ix
Technical Support.....	ix
Documentation for PTC Products.....	x
Comments	x
Documentation Conventions	x
About Installing Windchill Products.....	1-1
Overview of an Install Session	1-2
Choosing the Installer Language	1-2
Navigation and Cancelling	1-3
Installation Type.....	1-3
Choosing Installation Directory	1-3
Terminology.....	1-4
Java Runtime Environment	1-4
The Docs Directory.....	1-5
Disk Space Check Process	1-5
Launching the Installer	1-5
Loading and Mounting the CD-ROM on UNIX.....	1-6
Determining the SCSI ID of the CD-ROM Drive	1-6
Loading and Mounting the CD-ROM Locally	1-7
Loading and Mounting the CD-ROM Remotely	1-8
Installation Log Files.....	1-10
Troubleshooting.....	1-11
Installing and Configuring RetrievalWare	2-1
Integrated Search and Index Search.....	2-2
Directory of RetrievalWare CDs	2-3
Installing and Configuring RetrievalWare Server.....	2-3
RetrievalWare 7.0 Installation Overview.....	2-3
Checklist for an Upgrade Install.....	2-4
Checklist for a New Install	2-4
Uninstalling RetrievalWare (upgrade from 6.8 to 7.0 only).....	2-5

Go To Next	2-6
Installing RetrievalWare	2-6
Installing RetrievalWare for Windows.....	2-7
Installing RetrievalWare for UNIX.....	2-8
Installing RetrievalWare Components.....	2-9
Verifying the RetrievalWare License File	2-11
Obtaining the RetrievalWare Documentation	2-11
Enabling the Windchill_Indexes Working Directory.....	2-11
Editing the wt.properties for Language Encoding.....	2-12
Setting Field Lengths Exceeding Forty Characters	2-13
Setting Paths for Japanese Language Files.....	2-13
Go To Next	2-14
Installing Index Search.....	2-14
Configuring RetrievalWare for an Upgrade	2-15
Reinitialize the RetrievalWare Library	2-15
Bulk Loading the RetrievalWare Library.....	2-15
Configuration is Complete	2-16
Configuring Windchill for Use with RetrievalWare	2-16
Bulk Loading the RetrievalWare Database	2-16
Performing a Search Test	2-17
Setting PATH Environment Variable for the Toolkit Libraries.....	2-17
Configuration is Complete	2-19
Setting Up the RetrievalWare Servers as a Windows Service.....	2-19
Usage Notes for RetrievalWare 7.0	2-19
About the windchill Command	A-1
About the windchill Command	A-2
About the windchill shell.....	A-4
.....	A-5
About the xconfmanager Utility.....	B-1
About the xconfmanager Utility	B-2
Formatting Property Value Guidelines	B-3
.....	B-5

Index

Change Record

Table 1 Changes for Windchill 7.0

Change	Description
Chapter 1, Installing RetrievalWare	The installation and configuration procedures have been updated to reflect the use of installAnywhere for Windchill 7.0.

About This Guide

RetrievalWare Installation and Configuration Guide - RetrievalWare.

The RetrievalWare installation is no longer dependent upon Windchill PDM being present. Regardless of the order in which you install Windchill PDM and RetrievalWare, be sure to keep your configuration information so that the RetrievalWare components and Windchill Services can be properly installed. For example, information such as the port number and Remote Web Application Name must be known prior to installing RetrievalWare.

Updates to this manual will be posted on the PTC Web Site.

Related Documentation

The following documentation may be helpful:

- *Windchill Installation and Configuration Guide - Windchill*
- *Windchill User's Guide*

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

Technical Support

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
- HTML books
- PDF books

All books are available in HTML and PDF formats, or both, on product CDs. To view HTML books, use your Internet browser. To view and print PDF books, you must have the Adobe Acrobat Reader installed.

All Windchill documentation is included on the CD for the application. 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/cs/doc/reference/>

Comments

PTC welcomes your suggestions and comments on its documentation—send comments to the following address:

documentation@ptc.com

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

Convention	Item	Example
Monospace	Examples Messages	JavaGen "wt.doc.*" F true Processing completed.
"Quotation marks"	Strings	The string "UsrSCM" . . .
	<p>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.</p>	<p>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.</p>

1

About Installing Windchill Products

This chapter provides information about installing Windchill products, the InstallAnywhere installation utility, and loading and mounting a CD-ROM on UNIX systems.

Topic	Page
Overview of an Install Session.....	1-2
Terminology	1-4
Java Runtime Environment	1-4
The Docs Directory	1-5
Disk Space Check Process	1-5
Launching the Installer	1-5
Loading and Mounting the CD-ROM on UNIX	1-6
Installation Log Files.....	1-10
Troubleshooting.....	1-11

Overview of an Install Session

The following sections provide an introduction to the InstallAnywhere installation utility.

Choosing the Installer Language

When the installer is launched, the language specified by your system is now the default install language. The installers assume, therefore, 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. This URL will direct you to the PTC Online Support Web page for reference documents. Select the **Language Matrix** for this release from the returned document list:

<http://www.ptc.com/cs/doc/index.htm>

The following instructions are provided to assist you in verifying (or to set) 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 **locale -a** command to determine the correct values for the locale. For Latin-1 languages, ISO88591 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, InstallAnywhere 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, will appear.

Navigation and Cancelling

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 pressing **Next** or **Previous** a second time while you are waiting for the switch as this could cause the wizard to skip past 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.

Pressing **Cancel** also shown in the installer window may stop an installation. If you cancel **after** you have pressed **Install**, be aware that your file system has already been modified and the installers cannot undo what they have changed. Should you accidentally press **Cancel**, you are prompted to confirm that you really do want to cancel or you may 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 type, execution modes and custom options. The most common installation types for the Windchill product suite installers are Typical and Custom. These offerings are analogous to what you see from some desktop products that offer you to do installations such as Typical, Minimal, Compact, Custom, and so on. Typical would be the most common course of prompts and options. Custom allows you to get to options that may not be available by Typical or allow you to skip portions that Typical would require you to perform. Some installers offer additional installation types that allow for specialized processing.

Choosing Installation Directory

All installers require you to choose where the software will be installed. Some products may 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 could also enter a new directory path and the installer will create it.

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

prerequisites (*). You can then choose one or browse to another directory if the one you want is not shown. After the directory is selected, the installer will then perform a more in-depth validation of the chosen directory. If it does not meet the requirements, you will be told and given the chance to choose another location.

(*)This list is taken 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.

Terminology

Installer — The program that you interact with to perform the installation, for example, setup or setup.exe, 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.

Java Runtime Environment

To run InstallAnywhere, you will need a Java Runtime Environment (JRE). For installations that take place on the Windchill server system, you can use the Software Development Kit (SDK). By installing the SDK on the server you will provide InstallAnywhere with the JRE features that it needs to function. Similarly, Windchill requires the SDK to function. For installations that take place on the Windchill client system you can use the IJRE.

Tip: PTC recommends installing the SDK on the Windchill server system to support both Windchill and InstallAnywhere. The instructions to install an SDK are located in the Installing Java 2 Software Development Kit chapter in the *Windchill Info*Engine Installation and Configuration Guide*. Use the information provided in that chapter to perform the SDK installation.

The JRE is a subset of the files included in the SDK. It does not include the compiler, the debugger or related tools. Instead, it provides the minimum runtime for Java technology-enabled applications (for example, the JVM, JFC, JIT and supporting files). For installations that take place on the Windchill client system, you will only need the JRE.

On many systems, there can be multiple JREs installed. The installer will choose the first JRE it finds in the user's PATH. On Windows, if a JRE is not in the PATH it will also search the Windows registry, moreover, InstallAnywhere will ignore any Java VM that exists in the `<system root>\WINNT\system32` directory. The JRE used by the installer is noted in the *.PtcInstall.log file that is created by the installer. You can also verify the JRE used by the installer by setting the LAX_DEBUG environment variable:

```
LAX_DEBUG=1
```

When the installer executes, it will issue diagnostic messages indicating which JRE was used.

The Windchill software matrix lists the versions of the SDK and JRE that are supported for this release. When selecting the product to download, be sure that it provides support for the language that you need. You can obtain a JRE for download at the following URLs:

Windows and Solaris

<http://java.sun.com/j2se/downloads.html>

AIX

<http://www.ibm.com/developerworks/java/jdk>

HP-UX

<http://www.hp.com/products1/unix/java>

The Docs Directory

For some CD images, a directory named *Docs* is present on the root of the CD image. This directory contains one or more *.pdf files of manuals for the product(s) being installed from that CD. It is common for there to be a copy of the installation guide in that directory, plus possibly other manuals of an administrative nature. These books, along with others that are embedded elsewhere in the installation image, are copied onto your system by the installer.

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 press the **Install** button from the **Review Settings** panel, the installer will check your system for the required disk space. If it does not believe there is enough space, the installer will present a dialog telling you this and will wait 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

Automatic and manual execution on Windows

To manually run the setup program, navigate to the Windows directory and double click the **setup.exe** program.

UNIX Setup Script

The installer script name is **setup**. It is located directly under the CD image root, or in a sub-directory if the install image contains multiple installers. The script will automatically launch 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, such is the case of the Windchill Third Party Software CD. The installer does not automatically launch when a CD contains multiple products. The separate installers are located in the appropriately named subdirectory of the CD.

To run the installation, navigate the CD-ROM directory to locate the directory of the software to install, open the directory, select the directory for your operating system, and locate the setup program within this directory. Run the setup program as follows:

- On Windows — Run setup.exe
- On UNIX — Run setup script

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 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 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 and use the command. 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> 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>	
SUN	Automatically mounts the CD-ROM.	
AIX	<code>lsdev -C -c cdrom -H</code> <code>cd0 Available 00-08-00-40 CD-ROM Drive</code>	4 (in the string 00-08-00-#0)

<device> should be replaced with each item in the /dev/dsk directory.

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 (<http://www.ptc.com/cs/doc/index.htm>) 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 by using the following command:

```
mkdir /cdrom
```

3. To mount the CD-ROM drive, enter the command appropriate for your UNIX workstation system.

For Sun, the command is:

```
mount -F hsfs -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 -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 section, Loading and Mounting the CD-ROM Locally.
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	/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	/etc/mount -o ro,hard <i><node></i> : <i><cdmount></i> /cdrom
AIX	/usr/sbin/mount -o ro,hard <i><node></i> : <i><cdmount></i> /cdrom

SUN ¹	<code>mount -o ro,hard <node>:<cdmount> /cdrom</code>
------------------	---

1. If problems occur while using InstallAnywhere from a remote-mounted CD-ROM, you can try remounting the remote CD-ROM using one of the following commands:

For Sun systems:

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

For IBM RS/6000 systems:

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

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
```

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 will allow 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 InstallAnywhere 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`

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 pressed **Install** on the **Review Settings** panel, the log files are written to the temporary directory controlled by the operating system environment variable TMP. On Windows, this variable 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`.

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 environment variable TMP 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`. In this case, the installer will display the location of the installation log files that it has produced. Write down the location specified by the installer.

Action:

The location of the log files depends upon when during the installation the installation fails. Refer to the section on Installation Log Files for details.

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 1.3.x and 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 the installer 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>

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

Problem:

The installer crashes on AIX and will not launch. This can happen when the JRE used for the installer is for a 64-bit JRE. If a 64-bit JVM is found, this is noted in the *_PtcInstall.log file.

Action:

Change the operating system PATH for the command shell which is used to launch the installer to ensure a 32-bit JRE is in the path before the 64-bit one. This should allow the installer to execute.

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.exe program. This will bring up a command shell window with diagnostic information. This info can be copy and pasted 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 program for the installer. The diagnostics will be shown in the same command window (UNIX) or in a popup window (Windows).

Problem:

Clicking the close button when selecting a language, but the installer does nothing.

Action:

The first window that opens when the installer is launched is the PTC logo window.



On this window, the cancel button (X) located in the upper right corner has no effect. The cancel button will not close the window.

To cancel the installation, click the **OK** button, then click the **Cancel** button in the next window that opens. A message confirmation window will open, from which you can cancel the installation, click **Quit**.

This issue has been filed as a bug with the software vendor ZeroG.

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 will be 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 will move forward and backward through the windows with little noticeable delay.

This issue has been filed as a bug with the software vendor ZeroG.

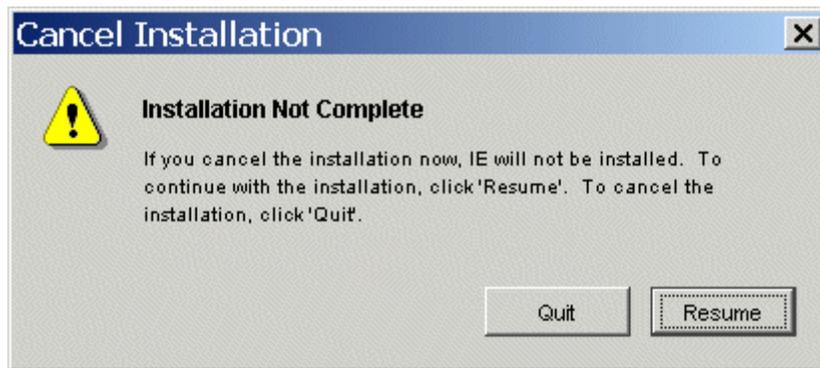
Problem:

On Windows, the installer **Cancel Installation** popup window demands the user interface focus.

Action:

When you try to cancel the installer through the **Cancel Installation** popup window, the window monopolizes the window focus on the desktop.

To release the focus, click either the cancel (X) or **Resume** button.



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
```

The following report is generated:

Support Date Code	Support Release Number	Release Id	Installer Sequence	Display Label
M050	7.0	wmp.7.0.05.01	01	Windchill Maintenance Pack 7.0.5
% M020	7.0	ie.7.0.02.56	01	Info*Engine 7.0.2
%! M020	7.0	wlp.7.0.02.04	02	Windchill Language Pack 7.0.2
! M050	7.0	wnc.7.0.05.56	03	Windchill Services 7.0.5

Legend

% The installation or updating of this assembly is not complete.
! The installed version of this assembly has regressed or is out-of-date compared to other assemblies in this installation directory.

There are no temp patches installed.

Non-Default Locale Support

Code	Name
de	
fr	

Provide the information in this report when submitting your information to Technical Support.

2

Installing and Configuring RetrievalWare

This chapter discusses the installation and configuration of RetrievalWare, a search engine that is an optional component.

Topic	Page
Integrated Search and Index Search	2-2
Directory of RetrievalWare CDs	2-3
Installing and Configuring RetrievalWare Server	2-3
Uninstalling RetrievalWare (upgrade from 6.8 to 7.0 only)	2-5
Installing RetrievalWare	2-6
Installing RetrievalWare Components	2-9
Installing Index Search	2-14
Configuring Windchill for Use with RetrievalWare	2-16
Setting Up the RetrievalWare Servers as a Windows Service	2-19
Usage Notes for RetrievalWare 7.0	2-19

Integrated Search and Index Search

An integrated search consists of querying RetrievalWare, passing the results to Windchill PDM to retrieve the objects from the database, and applying access control. The RetrievalWare search is not access controlled, but access control does occur in the database. This search does not limit the search to metadata; it searches the content of documents to provide a more comprehensive search.

An index search queries RetrievalWare for content and metadata that is indexed into RetrievalWare. There is no interaction with Windchill PDM so there is no access control.

By following the instructions in this chapter you will be able to configure RetrievalWare and Windchill PDM to support integrated searches. While the integrated search and Index search share similar configuration processes, the Index search interface instructions are specific to Index search. Having completed all the instructions in this chapter including the Index search interface, you will not be able to perform an Index search. Additional configuration steps are necessary and those instructions are provided in the *Windchill PDM System Administrator's Guide*.

- Install and configure RetrievalWare (begin with the [Installing and Configuring RetrievalWare Server](#) section)
- Install optional language filters or RetrievalWare documentation and make configurations to RetrievalWare

The RetrievalWare Components allow you to install language filters, RetrievalWare documentation, and make necessary configurations. This installer replaces the RwareworkDirInstaller utility used in previous releases.

- Install the Windchill PDM Index search component

The Windchill Services CD allows you to install the Index Search component.

- Configure Windchill PDM to use RetrievalWare

The Windchill Services CD allows you select a **Custom** install to configure Windchill PDM to use RetrievalWare.

Directory of RetrievalWare CDs

The following table lists the name and contents of each CD that is needed to make Windchill and RetrievalWare operate together:

CD Name	Contents	InstallAnywhere Executable Location
Windchill Services	Index Search (INDX) and configuration components	<ul style="list-style-type: none">CD_WNC\IndexSearch\<i><Operating_System></i>\setup.exeCD_WNC\<i><Operating_System></i>\setup.exe
Convera RetrievalWare (One CD for each supported platform)	Convera's RetrievalWare software	CD_RWR\ <i><Operating_System></i> \setup.exe
RetrievalWare Components	Optional language filters, documentation, and configuration components	CD_RCMP\ <i><Operating_System></i> \setup.exe

Installing and Configuring RetrievalWare Server

Convera's RetrievalWare server must be installed prior to the RetrievalWare Components; however, you can install the RetrievalWare server either before or after installing Windchill PDM.

Note: When you configure Windchill PDM for RetrievalWare using the Windchill Services CD, you need to know the RetrievalWare host name and port number during your RetrievalWare server installation.

RetrievalWare 7.0 Installation Overview

Use these instructions to install a new version of RetrievalWare 7.0. You can assume that the instructions apply to both options and call outs are made where differences or exceptions occur.

Checklists have been provided (in this section) to step you through the procedures to complete a the installation.

For the purposes of this documentation, the following abbreviations denote the default installation directories:

- <RWare>* — RetrievalWare
- <Windchill>* — Windchill PDM

In December 2000 Excalibur Technologies merged with Intel to form a new company — Convera <http://www.convera.com/index.html>. Convera has since replaced previous references to Excalibur Technologies.



Caution: Convera recommends installing RetrievalWare as a RetrievalWare administrator on the UNIX platform.

Checklist for an Upgrade Install

If you are upgrading from RetrievalWare version 6.8 to version 7.0, then you must perform the following procedures. The procedures reference the sections headings for your convenience in locating the instructions contained in this document.

- [Uninstalling RetrievalWare \(upgrade from 6.8 to 7.0 only\)](#)
- Follow the [Checklist for a New Install](#)

Checklist for a New Install

If you are installing RetrievalWare for the first time, or if you have finished uninstalling RetrievalWare 6.8 in order to upgrade to 7.0, then you must perform the following procedures. The procedures reference the sections headings for your convenience in locating the instructions contained in this document.

Note: If you are using a server and servlet engine other than Apache and Tomcat with a **Typical** installation, use the **Custom** install option.

Installation Checklist for Local Search

The following steps need to be performed on the machine where local search will operate:

Note: This installation process assumes Windchill PDM is already installed.

1. [Installing RetrievalWare](#) (required)
2. Install the RetrievalWare Components. Refer to the section [Installing RetrievalWare Components](#).
3. [Configuring Windchill for Use with RetrievalWare](#). Perform this procedure to configure Windchill PDM to work with RetrievalWare. The installer is located on the Windchill Services CD.
4. [Setting Up the RetrievalWare Servers as a Windows Service](#) (optional and Windows only).
5. Run the Bulk Index Tool, as described in the *Windchill System Administrator's Guide* in the section, Administering Convera Libraries.

Installation Checklist for Remote Search

Perform the following steps:

Note: This installation process assumes Windchill PDM is already installed on the remote machine.

1. [Installing RetrievalWare](#) (required)
2. Install the RetrievalWare Components. Refer to the section [Installing RetrievalWare Components](#).
3. [Installing Index Search](#)
Install and configure RetrievalWare for a new install. This installer replaces Enterprise Search from previous releases. The installer is located on the Windchill Services CD.
4. [Configuring Windchill for Use with RetrievalWare](#). Perform this procedure to configure Windchill PDM to work with RetrievalWare. The installer is located on the Windchill Services CD. Perform this step on the second machine where Windchill PDM is installed.
5. [Setting Up the RetrievalWare Servers as a Windows Service](#) (optional and Windows only).
6. Run the Bulk Index Tool, as described in the *Windchill System Administrator's Guide* in the section, Administering Convera Libraries.

Uninstalling RetrievalWare (upgrade from 6.8 to 7.0 only)

Perform these instructions if you are upgrading to RetrievalWare 7.0. In these procedures you will do the following:

- Backup your Windchill PDM RetrievalWare working directory. This is the windchill_indexes directory.
- Backup your index directory.
- Print a report of your current configuration to use when you install RetrievalWare 7.0.
- Remove current version of RetrievalWare

Perform the following steps to uninstall RetrievalWare:

1. Stop the RetrievalWare administration and search/index servers.
2. Stop the Web server.
3. Run **Reconfigure System** from the RetrievalWare menu. This option displays information about the RetrievalWare settings that you specified when you install RetrievalWare.

This information can be used to duplicate a subsequent install if you did not modify your configuration after you installed RetrievalWare. At this time, a means does not exist to list your current RetrievalWare settings. If you modified your RetrievalWare configuration after you installed RetrievalWare, you must rely on other means to determine your configuration.

Windows

- a. Navigate to **Start > Programs > RetrievalWare6.8 > Reconfigure System**.
- b. A DOS window opens and displays information about the current configuration.
- c. Copy the information to a text file.
- d. Type **Q** to exit the Reconfigure System program.

UNIX

- a. At the command prompt, enter the following command:

```
<RWare>/setup_menu
```
- b. Select **Reconfigure System**, option 2.
- c. Copy the information to a text file.
- d. Type **Q** to exit the Reconfigure System program.
4. Uninstall RetrievalWare.
5. Make sure the RetrievalWare installation directory has been removed.
6. Make sure your system and user PATH environment variables no longer refer to RetrievalWare.
7. Start the Web server.

Go To Next

Next, go to section, Installing RetrievalWare.

Installing RetrievalWare

These instructions apply to a new install and an upgrade install.

RetrievalWare can be installed on the same machine as the Windchill PDM server (local install) or on a remote machine (remote install).

Be sure to read the section, [Directory of RetrievalWare CDs](#) before you begin.

These procedures describe how to install RetrievalWare for Windows or install RetrievalWare for UNIX. Perform the install option that is applicable for your platform.

Note: When you first install, a message appears that says, "Unable to Get Key Value." To create the key, press **OK** and the installation will continue.

Note: For added security, set up RetrievalWare with a **Password Enabled** on the RetrievalWare **Administration** page. Security is enhanced further by installing RetrievalWare on its own machine.

Installing RetrievalWare for Windows

Convera recommends that the RetrievalWare software be installed as an NT Administrative user.

Complete the following steps to install RetrievalWare

1. Load the RetrievalWare CD for Windows CD.
2. Double click the Setup.exe file to launch the installation process.
3. Select a **Destination Folder** for RetrievalWare and click **Next**. Avoid using spaces in your directory name.
4. Select **Typical** for the setup type and click **Next**.
5. Specify the name of the program folder for RetrievalWare. This name will appear on the Programs menu.

If you are running an Asian machine with Windows, perform the following to create a "RetrievalWare 7.0" menu in the **Start > Programs** group:

- a. Under **Select Program Folder**, select **Other**.
- b. Browse to a folder that does not contain extended characters.
- c. Clear the **Create Icons for All Users** box or select **Don't Create Icons**.

If you are performing an upgrade to version 7.0, then use the information in the Reconfigure System report as a guideline for the data to be supplied in the following steps. The configuration procedures for an upgrade (in the next section) assume you used the same install definitions for your upgrade install as your previous installation.

6. Specify the Web server document root directory. Click **Next**.
7. Specify the Web server cgi-bin or scripts file directory. Click **Next**.
8. Specify two unique port addresses on which the RetrievalWare search/index and administration servers will listen. Click **Next**.

Note: The defaults are 5327 (for search/index servers) and 5328 (for administration servers). If you are performing an upgrade, use the port numbers from your previous installation; otherwise, choose port numbers that are not used by any other RetrievalWare server located on the same network (to avoid communication problems).

9. Select **No RDBMS** for the RDBMS server type.
10. Specify the Web server **document root** directory. For example, *<apache>\htdocs*. Click **Next**.
11. Select either **RW ISAPI** or **cqcgi.exe**.

Select **cqcgi.exe** if SunOne or Apache is your Web server.

OR

Select **ISAPI** (the default option) if IIS is your Web server; this will use *rwisapi.dll*, which provides faster performance.
12. The setup program displays a summary of your choices. If necessary, you can change an entry. Click **Next** to finalize your entries, and click **Yes** to begin the installation. The program will then do the following:
 - Install the RetrievalWare NT baseline.
 - Install the RetrievalWare executables.
 - Append the RetrievalWare bin directory to the user environment PATH.
 - Sets EXEC_INET_PORT user environment variable.
13. Click **Finish** to complete the CD-ROM installation and to restart your computer.

For the purposes of this documentation, *<RWare>* denotes the RetrievalWare installation directory.

Installing RetrievalWare for UNIX

Do not install RetrievalWare logged in as the `root` user. Instead, define a RetrievalWare Administrator user, such as `rware`, so that the owner of the `rware` files is `rware`. For additional information about the UNIX install user for RetrievalWare, see the *RetrievalWare Installation Guide*.

Complete the following steps to install RetrievalWare:

1. Load the RetrievalWare CD-ROM applicable for your platform.
2. Execute the `RetrievalWare/CD_Rware/setup` script.
3. Enter a **Destination Directory** for RetrievalWare and follow the prompts to confirm your choice. Avoid using spaces in your directory name.

If you are performing an upgrade install, then use the information in the Reconfigure System report as a guideline for the data to be supplied in the following steps. The configuration procedures assume you used the same install definitions for your upgrade install as your previous installation.

4. After the RetrievalWare files are copied to the local system a **Reconfigure System Information** menu is displayed. Use this menu to specify the port addresses.

Note: Specify two unique port addresses on which the RetrievalWare search/index and administration servers will listen. The defaults are 5327 (for search/index servers) and 5328 (for administration servers). Choose port numbers that are not used by any other RetrievalWare server located on the same network (to avoid communication problems).

5. Select **No RDBMS** for the RDBMS server type.
6. Specify the Web server **document root** directory. For example, *<apache>/htdocs*. Click **Next**.
7. Specify the Web server **cgi-bin or scripts** file directory. Click **Next**.

Determine a directory that your Web server recognizes as a cgi directory. Most Web servers have a /cgi-bin alias that maps to a directory that contains executable files. The install script will install the cqcgi executable in this directory.

8. When all information is provided, enter **0** to continue with the installation. Follow the RetrievalWare prompts.
9. Select **None** for the RDBMS Bridge Vendor.
10. Continue to follow the prompts to complete the installation.

Installing RetrievalWare Components

The RetrievalWare Components consist of language filters and RetrievalWare documentation. The filters can be installed in addition to the default filters and provide improvements in handling double-byte characters for Chinese, Japanese, and Korean languages. The filters also improve the handling of French, German, Italian, and Spanish. They provide improvements in handling PDF documents; however, the PDF documents cannot contain custom encodings or custom charsets. Due to the limited capabilities of the filters, this is the extent of the PDF file support provided by RetrievalWare.

To install a filter or the RetrievalWare documentation, load the RetrievalWare Components CD and choose the folder that corresponds to your operating system. Perform the following to install the RetrievalWare components:

1. Execute Setup.{exe|bin}.
2. From the drop-down menu, select your language and click **OK**.
3. Read **Before You Begin** and click **Next**.
4. Select either **Typical** or **Custom**.

Your options are as follows:

- **Typical** configures RetrievalWare components for Windchill PDM.
 - If you are using Apache, you must select this option to install and configure RetrievalWare components for use with Apache. This replaces the RwareworkDirInstaller from previous releases. The **Typical** install does the following:
 - ◆ Copies the license file
 - ◆ Copies the windchill_indexes folder
 - ◆ Configures the windchill_indexes folder
 - ◆ Configures Apache for RetrievalWare
 - **Custom** allows you to choose from the following:
 - Configure RetrievalWare for Windchill PDM

This option allows you to configure RetrievalWare to work with Windchill PDM. This install does the same as a **Typical** install except it does not configure a Web server or servlet engine. You must select this option if you use a Web server or servlet engine other than Apache and Tomcat.
 - Install RetrievalWare Language Filter

Select this option to install a language filter other than English. English language filters are installed as a part of the RetrievalWare server installation.
 - Install RetrievalWare Documentation

Select this option to install the RetrievalWare documentation.
5. Provide the following information as requested by the installation type you selected.

Note: You will only be prompted to enter the information relevant to your installation type. For example, if you select a **Typical** install you will not see the screens to install RetrievalWare Language Filters.

– **Installation Directory for Apache**

Browse to the directory where Apache is located.

– **Installation Directory for RetrievalWare**

Browse to the directory where RetrievalWare is located.

– **RetrievalWare Home Folder**

The directory listed as the home folder automatically matches the location you supplied for the RetrievalWare installation directory.

– **RetrievalWare Indexing Directory**

Specify the directory for RetrievalWare Indexing. The default value is C:\temp. This directory contains the files generated by the Bulk Index Tool.

– **RetrievalWare Port Number**

Specify the RetrievalWare port number. The default value is 5327.

– **DNS Registered Host Name**

Specify the fully-qualified machine name for RetrievalWare.

– **RetrievalWare Language Filter**

Specify the language filter you would like to install. The English filter was installed when you installed the RetrievalWare server.

Verifying the RetrievalWare License File

Verify that the license file was copied correctly:

- Select **Start > RetrievalWare 7.0 -> System Utilities Menu**.
- Select **Licensing Checks, option 13**.

If the license file appears, continue with installation.

Obtaining the RetrievalWare Documentation

The following instructions describe how to access the RetrievalWare documentation. You must first install the documentation using the RetrievalWare Components CD.

1. Install the documentation using the RetrievalWare Components CD.
2. Navigate to the <RWARE>\SystemAdminDocs\browse_docs directory. This directory contains the installation guide as well as numerous other RetrievalWare documents.
3. Select the guide you want to reference.

After you have installed the documentation, refer to the section on Conglomerate Indexing in the RetrievalWare Server Guide. It is recommended that you use conglomerate indexing.

Enabling the Windchill_Indexes Working Directory

The windchill_indexes working directory should be set assuming that there were no errors during the execution of the RetrievalWare Components installer. The next step to set your working directory is to start an Administration server and Search and Indexing servers using the configuration information from this newly installed windchill_indexes working directory.

By default, the working directory is set to `<rware70loadpoint>\demos` so you can use your demo data. In order to perform searches with your Windchill PDM data, perform the following:

1. Start your Web server
2. Start Rware Server (in the menu, option 4)
3. Set the **RetrievalWare Working Directory** (option 2)
4. Enter `<rware70loadpoint>\windchill_indexes`

Editing the wt.properties for Language Encoding

Perform these procedures if your language option is something other than English.

1. Edit the `<Windchill>/wt.properties` file using the `xconfmanager` utility. Refer to [Appendix B](#) for information on the `xconfmanager` utility.
2. Locate the `wt.index.<collection-name>.encoding` property.
3. Set the property value as follows for:

Language	wt.index.<collectionName>.locale	wt.index.collectionName.encoding
Chinese Traditional	zh_TW	Big5
Chinese Simplified	zh_CN	gb2312
English	en	8859_1
French	fr	8859_1
German	de	8859_1
Italian	it	8859_1
Japanese	ja	Shift_JIS
Korean	ko	KSC5601

4. Repeat this edit for each collection-name encoding property defined in the `wt.properties` file.

Save your changes and close the `wt.properties` file.

Setting Field Lengths Exceeding Forty Characters

To allow path entries of longer than 200 characters for objects entered into the database, increase the SIZE value of the SystemId field in the <RWare>\windchill_indexes\config\rware.cfg file as follows:

```
FIELD "SystemId" {
  INFO "Windchill system id that requested this object to be
  indexed. Used to construct a URL that will go to the appropriate
  Windchill system to retrieve the Windchill object.";
  SIZE 200;
  TYPE STRING;
  FLAGS STORED INDEXED VISIBLE TOKENS_ONLY USER_SEARCH WITH_BODY;
```

Set the SIZE variable to the integer value determined sufficient for the path name's that will be used.

Once you have finished generating the configuration file, purge the RetrievalWare libraries. For more information on Purging the RetrievalWare libraries, refer to the section Administering Convera Libraries in the *Windchill System Administrator's Guide*.

Setting Paths for Japanese Language Files

There is an issue with Convera's use of Japanese language files out of the box. Perform the following procedure to correct the problem:

1. Navigate to <RetrievalWare Loadpoint>\resource\rw_japanese
2. Back up the "lang.cfg" file
3. Replace the content of the file using the following as an example:

```
// Japanese Language Plug-in Configuration
MORPHOLOGY      = "..\..\bin\lpi_morph"
  morph_lexicon = ".\rw_japanese.mlx"
  morph_rules   = ".\rw_japanese.mrl";
TOKENIZER       = "..\..\bin\lpi_jptok"
  char_table    = ".\rw_japanese.cpt";
STEMMING        = "..\..\bin\lpi_stem"
  stem_rules    = ".\rw_japanese.srl";
DICTIONARY      = ".\dict";
DICTIONARY      = "..\rw_english\dict";
IDIOM_LEX       = ".\rw_japanese.ilx";
STOP_WORDS      = ".\rw_japanese.slx";
```

4. Save the lang.cfg file.

Go To Next

Next, go to section, Installing Index Search.

Installing Index Search

To install Index Search, load the Windchill Services CD, open the IndexSearch directory, and choose the folder that corresponds to your operating system. Perform the following to install the RetrievalWare components:

1. Execute Setup.{exe|bin}.
2. From the drop-down menu, select your language and click **OK**.
3. Read **Before You Begin** and click **Next**.
4. Select either **Typical** or **Custom**.

Your options are as follows:

- **Typical** installs and configures Index Search for Windchill PDM. Use this option if you use Apache and Tomcat.
- **Custom** allows you to choose from the following:
 - **Install Index Search**
This option installs and configures Index Search.
 - **Configure Apache and Tomcat**
Select this option to configure Apache and Tomcat. If you have a different Web server or servlet engine, clear this check box.
- 5. Provide the following information as requested by the installation type you selected.

Note: You will only be prompted to enter the information relevant to your installation type. For example, if you select a **Custom** install and deselect the **Configure Apache and Tomcat** option, you will not see the screens to Configure Apache and Tomcat.

- **Installation Directory**
Browse to the directory where you want Index Search installed.
- **DNS Registered Host Name**
Specify the fully-qualified machine name of the machine on which Index Search will be installed.
- **Tomcat Installation Directory**
Browse to the directory where Tomcat is installed.

- **Apache Installation Directory**

Browse to the directory where Apache is installed.

- **Web Application Context Root**

Specify the context root of the RetrievalWare Web application.

6. If you are installing Index Search and use a port number for the RetrievalWare server other than the default (5327), manually set your port number in the search.properties file using xconfmanager. For more information about using xconfmanager, refer to [About the xconfmanager Utility](#).

Next, go to one of the following sections depending on whether you are performing an upgrade or a new install (remote):

- [Configuring RetrievalWare for an Upgrade](#)
- [Configuring Windchill for Use with RetrievalWare](#)

Configuring RetrievalWare for an Upgrade

Perform the tasks in this section if you are upgrading from RetrievalWare 6.8 to RetrievalWare 7.0.

Reinitialize the RetrievalWare Library

If your Windchill PDM database contains any Asian language documents or you added new filters, then you can reinitialize your library at this time. The Bulk Indexing Tool allows you to scan the Windchill PDM database for indexable documents and update the library with the new documents.

The instructions for using the Bulk Indexing Tool can be found in the *Windchill PDM Administrator's Guide* in the Administering Convera Libraries chapter. Perform the instructions described in this chapter to reinitialize your RetrievalWare library.

Bulk Loading the RetrievalWare Library

As the final step, you will initialize the RetrievalWare library by bulk loading data into the library. The Windchill PDM Bulk Index Tool enables you to build indexes of existing Windchill PDM data. The utility sends objects to the RetrievalWare search engine to be indexed according to the indexing policy rules defined in Windchill PDM.

Complete the Bulk Indexing Tool instructions in the *Windchill PDM System Administrator's Guide* in the Administering Convera Libraries chapter to initialize your RetrievalWare library.

Configuration is Complete

At this time your RetrievalWare and Windchill PDM configuration is complete.

Configuring Windchill for Use with RetrievalWare

If you installed RetrievalWare and Windchill PDM for the first time, insert the Windchill Services CD to custom configure RetrievalWare so it can use RetrievalWare.

Perform the following instructions to configure RetrievalWare for a remote install:

1. Insert the Windchill Services CD.
2. Open the folder that corresponds to your operating system.
3. Execute Setup. {exe|bin}.
4. Choose your language and click **OK**.
5. Read *Before You Begin* and click **Next**.
6. Select **Custom** and click **Next**.
7. Select the box, **Configure Windchill Services for RetrievalWare**.
8. Deselect all other boxes and click *Next*.
9. Provide the following information for the custom installation:
 - **Windchill Info*Engine Installation Directory**
Browse to where Windchill Info*Engine is located.
10. Click **Next**.
11. Select **Local** if you are installing RetrievalWare on the same machine as Windchill PDM or **Remote** if you are installing RetrievalWare on a machine without Windchill PDM.

Enter the RetrievalWare port number. If you selected **Remote**, also enter the **Web Application Context Root**.
12. Click **Next**.

Bulk Loading the RetrievalWare Database

You can bulk load the index database. An index loader utility is available for this purpose. For instructions on how to execute the index loader utility, see section, Bulk Loading a Collection, in the *Windchill PDM Administrator's Guide*.

Performing a Search Test

To verify your configuration does not contain any broken links, you will perform a search test. If the test is unsuccessful, then review the configurations from your previous installation and apply any necessary corrections.

This test involves performing two searches, one RetrievalWare search and one Windchill PDM search. Each search criteria will use the same document. In this example, you will retrieve a document that is included in the Windchill PDM demo data package.

Testing RetrievalWare

1. Open a Web browser session.
2. Enter the following URL to open the RetrievalWare search:

```
http://<RetrievalWare hostname>/rware/smartsearch_home.html
```
3. The **SmartSearch Login** window opens.
4. Accept the default user value, **guest**, for Username.
5. Enter "**password**" in the password text box.
6. Click **Login**.
7. The **Databases** window opens.
8. Select the libraries

If the name of your Convera RetrievalWare library appears, RetrievalWare has been installed correctly.

Testing Windchill PDM and RetrievalWare

1. Select **Query**.
2. Run a query. If no error messages appear, the test is successful.

Setting PATH Environment Variable for the Toolkit Libraries

Refer to the instructions that are appropriate for your type of installation. There are instructions for remote and local installations.

Remote Installations

The Windchill PDM integrated search uses the RetrievalWare JSP Toolkit features. The PATH environment variable is set to include a reference to the Toolkit libraries so that remote calls will be able to locate the library files.

- Use the RetrievalWare server installer for your platform to copy CD_RWR\jnilib*. * to *<codebase>*\WEB-INF\jnilib

Note: If you are installing RetrievalWare on a remote machine (a machine other than the one with your Windchill PDM system), then copy these files to the Windchill PDM machine.

- Complete one of the following instructions to set the PATH environment variable:

Windows

- Append the following directory path to the PATH variable:

```
%WT_HOME%\codebase\WEB-INF\jnilib
```

Solaris

- Append the following directory path to the LD_LIBRARY_PATH variable:

```
$WT_HOME/codebase/WEB-INF/jnilib
```

HPUX

- Append the following directory path to the SHLIB_PATH variable:

```
$WT_HOME/codebase/WEB-INF/jnilib
```

- Reboot your computer after setting the PATH variables.

Local Installations

Set the following PATH environment variables for the following operating systems:

Solaris

```
setenv EXEC_INET_PORT <RWARE_PORT>
setenv LD_LIBRARY_PATH /rware/inso:/rware/lib
setenv SHLIB_PATH /rware/inso:/rware/lib
```

HPUX

```
setenv EXEC_INET_PORT <RWARE_PORT>
setenv LD_LIBRARY_PATH /rware/inso:/rware/lib
setenv SHLIB_PATH /rware/inso:/rware/lib
```

Reboot your computer after setting the PATH variables.

Configuration is Complete

At this time your RetrievalWare and Windchill PDM configuration is complete.

Setting Up the RetrievalWare Servers as a Windows Service

You can set up the RetrievalWare servers as a Windows service so that you do not have to manually start them each time the machine is rebooted. Additional information on how to do this is available in section, Preparing the NT Services Console and Login Proxy Program, in the *RetrievalWare Installation Guide*.

Usage Notes for RetrievalWare 7.0

The following items are useful to note when using RetrievalWare 7.0:

- RetrievalWare 6.8 used the en-dash (-) as a wildcard character to return many results. RetrievalWare 7.0 uses the underscore (_) as a wildcard. Using the en-dash (-) as a wildcard will not produce accurate results in RetrievalWare 7.0
- If RetrievalWare is installed on your system, using the following characters in the Keyword field can give unexpected results:
 - Wild card characters: @, #, _, *, \, ?, [], ^
 - Separators: ()
 - Characters used in dates: ., -, /

If your site uses these characters in object names or numbers, and you want to search for the exact object name or number, use the Name or Number field rather than the Keyword field for your search.

For example, if you are searching for an object named cad_document.prt in the Keyword field, RetrievalWare treats that name as three separate strings: "cad", "document", and "prt". The search results will not return the object you are searching for. To successfully find the object, search from the Name field, or use a partial name and wildcards in the Keyword field. For example, in the Keyword field, searching for "cad*", "*document*", or "*prt" would return results which include cad_document.prt.

- Varying results occur when using the Boolean search parameter "NOT" with RetrievalWare installed. For example, searching for "not word1" or "^ word1"

excludes objects from the search results that contain *word1* in their attributes, but does not exclude objects which contain word1 in their content.

- When the System Utility for RetrievalWare 7.0 is running, the TextPad editor does not work for files used by RetrievalWare 7.0. When the System Utility for RetrievalWare 7.0 is running, use a different editor.
- The Convera W4W filter that was used with previous releases is no longer supported.

A

About the windchill Command

This chapter contains information about the windchill command and how to use the windchill shell.

Topic	Page
About the windchill Command	A-2
About the windchill shell	A-4

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 insure 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.

Arguments (optional)	Description
-w, --wthome=DIR	Sets the Windchill home directory. Default is the parent directory containing the windchill script.
--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 install version.

Action	Description
properties <resource>[,...][?key[&key2]...]	Displays the properties as seen by Windchill for the given resource with substitution, etc. executed. It can be limited to a given set of keys. For example: windchill properties wt.properties — lists all wt.properties windchill properties wt.properties?wt.server.codebase — lists server codebase windchill properties wt.properties?wt.env.* — lists all the environment variables use by windchill shell windchill properties — with no arguments generates the help report
CLASS [CLASS_ARGS]	Run a Windchill class with optional class arguments. For example: windchill wt.load.Developer -UAOps

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.

B

About the xconfmanager Utility

This chapter contains information about the xconfmanager utility.

Topic	Page
About the xconfmanager Utility.....	B-2

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. In addition to the xconfmanager functioning as an editing tool, xconfmanager also manages the property files. Consequently, do not manually edit the Windchill property files. Additionally, 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

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 for more information about the windchill shell.

The syntax of xconfmanager command is as follows:

```
xconfmanager {-FhuwvV} {-r <product_root>} {-s <property_pair>
{-t <property_file>}} {--reset <property_names>}
{--undefine <property_names>} {-d <property_names>} {-p}
```

For the purposes of modifying Windchill properties, you will primarily use the set (-s), targetFile (-t), and propagate (-p) parameters.

- The set (-s) parameter is used 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.
- The targetFile (-t) property is used 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.

- The propagate (-p) property is used to propagate the changes made to the XCONF files into the property file being modified in order to keep the XCONF and the property files in synch with one another.
- help is used to view the help for xconfmanager.

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>
```

- To change a property value, execute the following command from the windchill shell:

```
xconfmanager -s <property_pair>=<property_value>  
-t <property_file> -p
```

Tip: Use the fully qualified name of the property file to ensure an accurate reference.

Formatting Property Value Guidelines

The property values you set must conform to the specification for `java.util.Properties`. The following guidelines will help ensure that you set properties correctly:

- Use forward slashes (/) in file paths so that the platform designation is not an issue.
- 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.

For example, on a Windows system you can include spaces in a value by enclosing the argument with double quotes. For example, use the following:

```
-s "wt.inf.container.SiteOrganization.name=ACME Corporation"
```

- On a UNIX system, you can use double quotes or you can escape the space character with a backslash. For example, use the following:

```
-s wt.inf.container.SiteOrganization.name=ACME\ Corporation"
```

- 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.

Index

A

About This Guide, 1-ix

B

Bulk Loading the RetrievalWare Database, 2-16

Bulk Loading the RetrievalWare Library, 2-15

C

Change Record, 2-vii

D

Directory

RetrievalWare CDs, 2-3

Documentation

Convera RetrievalWare, 2-11

Documentation conventions, x

E

Enabling Windchill_Indexes Working Directory, 2-11

F

File Paths

Setting File Paths Over Forty Characters, 2-15

I

Index, 2-2

Index Search, 2-2

InstallAnywhere

JRE for installs, 1-4

log files, 1-10

troubleshooting, 1-11

InstallAnywhere install

language settings, 1-2

InstallAnywhere utility

installing Windchill products, 1-2

installing

setting language for InstallAnywhere, 1-2

Installing and Configuring

Language Filters, 2-9

RetrievalWare Components, 2-9

RetrievalWare Server, 2-3

Installing RetrievalWare Remotely, 2-16

Installing Windchill products

InstallAnywhere utility, 1-2

Integrated Search, 2-2

J

JRE for installs

InstallAnywhere, 1-4

L

LANG environment variable

setting on install, 1-2

Language Filters

Installing and Configuring, 2-9

language support

InstallAnywhere install, 1-2

P

PATH Environment Variable

Setting, 2-17

R

RetrievalWare

bulk loading a database, 2-16

CD Directory, 2-3

RetrievalWare Components

Installing and Configuring, 2-9

RetrievalWare Database

Bulk Loading, 2-16

RetrievalWare Library

Bulk Loading, 2-15

RetrievalWare Server

Installing and Configuring, 2-3

S

Search

- Integrated, 2-2
- Performing a Search Test, 2-17
- Setting File Paths Over Forty Characters, 2-15
- system administration information, 1-1

T

Technical support, ix

Test

- Performing a Search Test, 2-17
- troubleshooting
 - InstallAnywhere, 1-11

U

Uninstalling RetrievalWare, 2-5

UNIX

- loading and mounting the CD-ROM, 1-6

W

Windchill_Indexes Working Directory

- Enabling, 2-11

X

- xconfmanager, B-2