Tivoli® IBM Tivoli Configuration Manager

version 4.3.1

# Release Notes

GI11-0926-07

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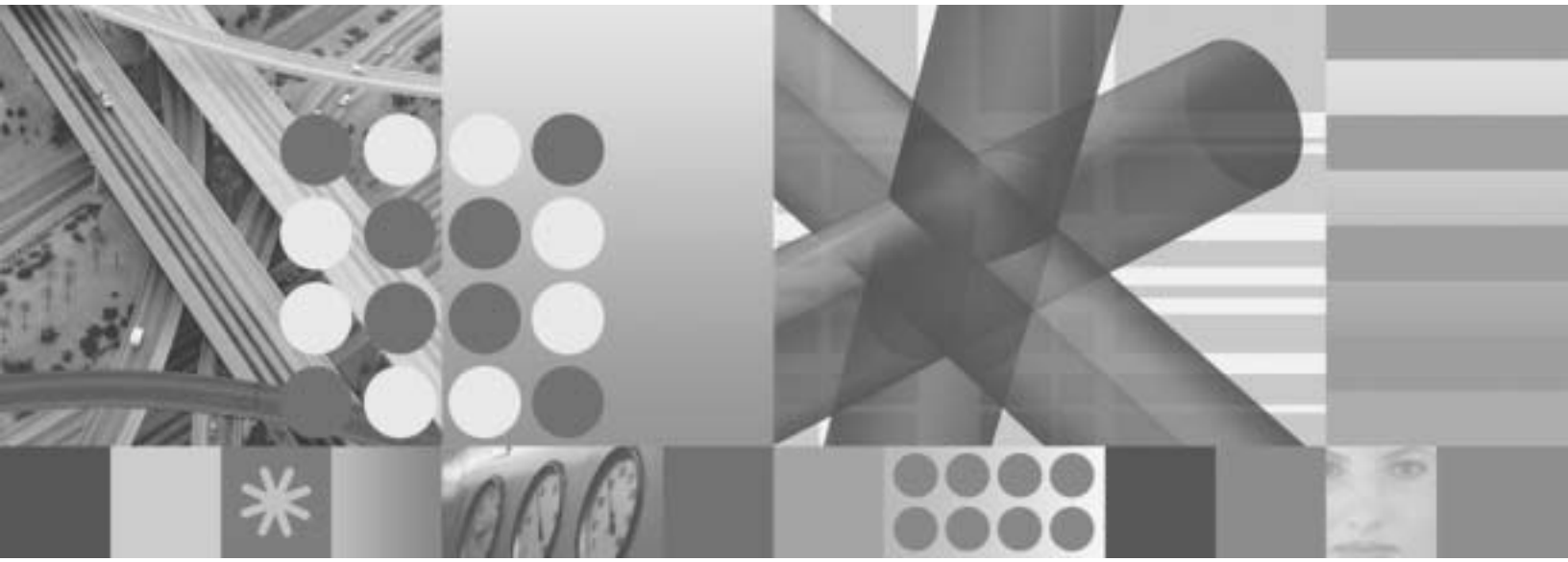
version 4.3.1



# Release Notes

GI11-0926-07

**Note**

Before using this information and the product it supports, read the information in “Notices” on page 51.

This edition applies to version 4 release 3 modification level 1 of IBM Tivoli Configuration Manager (program number 5724-C06) and to all subsequent releases and modifications until otherwise indicated in new editions.

This edition replaces GI11-0926-06.

# Contents

# About this guide

IBM® Tivoli® Configuration Manager, version 4.3.1 provides remote system management facilities for your enterprise. These release notes are the most current information for the product. Review these notes thoroughly before installing or using this product.

## Who should read this guide

The target audience for this guide is senior system administrators who intend to improve or customize Software Distribution functionality. You should have knowledge of the UNIX® operating system; concepts such as directories, files, and symbolic links; and the PC operating systems running on the systems to which you will distribute software. In addition, you should be familiar with Software Distribution and have used its advanced features.

## Publications

This section lists publications in the IBM Tivoli Configuration Manager library and related documents. It also describes how to access Tivoli publications online and how to order Tivoli publications.

### IBM Tivoli Configuration Manager Library

The following documents are available in the IBM Tivoli Configuration Manager library:

- *IBM Tivoli Configuration Manager: Introducing IBM Tivoli Configuration Manager*, GC23-4703

  Provides an overview of IBM Tivoli Configuration Manager and its components, as well as providing user scenarios to highlight various processes.
- *IBM Tivoli Configuration Manager: Planning and Installation Guide*, GC23-4702

  Explains how to install, upgrade, and uninstall the product and its components in a Tivoli environment.
- *IBM Tivoli Configuration Manager: User's Guide for Software Distribution*, SC23-4711

  Explains the concepts and procedures necessary for you to effectively use the Software Distribution component to distribute software over local area networks (LANs) and wide area networks (WANs).
- *IBM Tivoli Configuration Manager: Reference Manual for Software Distribution*, SC23-4712

  Explains advanced features and concepts needed to use and tailor the Software Distribution component.
- *IBM Tivoli Configuration Manager: User's Guide for Deployment Services*, SC23-4710

  Provides information about the Deployment Services of the product.
- *IBM Tivoli Configuration Manager: User's Guide for Inventory*, SC23-4713

  Describes the Inventory component and the management tasks that you can perform.
- *IBM Tivoli Configuration Manager: Database Schema Reference*, SC23-4783

  Provides information about the IBM Tivoli Configuration Manager repository.
- *IBM Tivoli Configuration Manager: Messages and Codes*, SC23-4706

Details all the error, warning messages and error codes issued by all the components and services of the product.

- *IBM Tivoli Configuration Manager: Patch Management Guide*, SC23-5263

  Describes a solution that covers the distribution and management of security patches and software updates in a Tivoli environment.

- *IBM Tivoli Configuration Manager: Guide for Active Directory Integration*, SC32-2285

  Describes the integration of Microsoft® Active Directory with your Tivoli environment.

- *IBM Tivoli Configuration Manager: License Management Extension*, SC32-2260

  Describes the license management facilities provided in your Configuration Manager environment.

- *IBM Tivoli Configuration Manager: User's Guide for Operating System Deployment Solution*, SC32-2578

  Describes how you can implement an operating system deployment solution delivered with Configuration Manager.

## Related publications

The following documents also provide useful information:

- *Tivoli Management Framework: Planning for Deployment Guide*, GC32-0803

  Explains how to plan for deploying your Tivoli environment. It also describes Tivoli Management Framework and its services.

- *Tivoli Management Framework: User's Guide*, GC32-0805

  Describes the concepts and procedures for using Tivoli Management Framework services. It provides instructions for performing tasks from the Tivoli desktop and from the command line.

- *Tivoli Management Framework: Reference Manual*, GC32-0806

  Provides detailed information about Tivoli Management Framework commands and documents Tivoli-provided policy scripts.

- *Tivoli Management Framework: Maintenance and Troubleshooting Guide*, GC32-0807

  Provides help and guidance for solving problems with Tivoli Management Framework.

- *Tivoli Enterprise Installation Guide*, GC32-0804

  Describes how to install and upgrade Tivoli Enterprise software.

- *IBM Tivoli Configuration Manager Warehouse Enablement Pack: Implementation Guide*

  Describes how to install and configure the warehouse enablement pack for the IBM Tivoli Configuration Manager product and describes the data flow and structures that are used by the warehouse pack.

The *Tivoli Software Glossary* includes definitions for many of the technical terms related to Tivoli software. The*Tivoli Software Glossary* is available at the following Tivoli software library Web site:

http://publib.boulder.ibm.com/tividd/glossary/tivoliglossarymst.htm

## Accessing publications online

The documentation CD contains the publications that are in the product library. The format of the publications is PDF, HTML, or both. Refer to the readme file on the CD for instructions on how to access the documentation.

The product CD contains the publications that are in the product library. The format of the publications is PDF, HTML, or both. To access the publications using a Web browser, open the infocenter.html file. The file is in the appropriate publications directory on the product CD.

IBM posts publications for this and all other Tivoli products, as they become available and whenever they are updated, to the Tivoli software information center Web site. Access the Tivoli software information center by first going to the Tivoli software library at the following Web address:

http://www.ibm.com/software/tivoli/library/

Scroll down and click the **Product manuals** link. In the Tivoli Technical Product Documents Alphabetical Listing window, click the **IBM Tivoli Configuration Manager** link to access the product library at the Tivoli software information center.

**Note:** If you print PDF documents on other than letter-sized paper, set the option in the **File → Print** window that allows Adobe® Reader to print letter-sized pages on your local paper.

### Ordering publications

You can order many Tivoli publications online at the following Web site:

http://www.elink.ibmlink.ibm.com/public/applications/ publications/cgibin/pbi.cgi

You can also order by telephone by calling one of these numbers:

- In the United States: 800-879-2755
- In Canada: 800-426-4968

In other countries, see the following Web site for a list of telephone numbers:

http://www.ibm.com/software/tivoli/order-lit/

## Accessibility

Accessibility features help users with a physical disability, such as restricted mobility or limited vision, to use software products successfully. With this product, you can use assistive technologies to hear and navigate the interface. You can also use the keyboard instead of the mouse to operate all features of the graphical user interface.

## Tivoli technical training

For Tivoli technical training information, refer to the following IBM Tivoli Education Web site:

http://www.ibm.com/software/tivoli/education

## Support information

If you have a problem with your IBM software, you want to resolve it quickly. IBM provides the following ways for you to obtain the support you need:

- Searching knowledge bases: You can search across a large collection of known problems and workarounds, Technotes, and other information.
- Obtaining fixes: You can locate the latest fixes that are already available for your product.
- Contacting IBM Software Support: If you still cannot solve your problem, and you need to work with someone from IBM, you can use a variety of ways to contact IBM Software Support.

For more information about these three ways of resolving problems, see "Support information," on page 47.

## Conventions used in this guide

This guide uses several conventions for special terms and actions, operating system-dependent commands and paths, and margin graphics.

### Typeface conventions

This guide uses the following typeface conventions:

**Bold**

- Lowercase commands and mixed case commands that are otherwise difficult to distinguish from surrounding text
- Interface controls (check boxes, push buttons, radio buttons, spin buttons, fields, folders, icons, list boxes, items inside list boxes, multicolumn lists, containers, menu choices, menu names, tabs, property sheets), labels (such as **Tip:**, and **Operating system considerations**:)
- Keywords and parameters in text

*Italic*

- Words defined in text
- Emphasis of words (words as words)
- New terms in text (except in a definition list)
- Variables and values you must provide

`Monospace`

- Examples and code examples
- File names, programming keywords, and other elements that are difficult to distinguish from surrounding text
- Message text and prompts addressed to the user
- Text that the user must type
- Values for arguments or command options

### Operating system-dependent variables and paths

This guide uses the UNIX convention for specifying environment variables and for directory notation.

When using the Windows® command line, replace **$***variable* with **%***variable***%** for environment variables and replace each forward slash (/) with a backslash (\) in directory paths. The names of environment variables are not always the same in Windows and UNIX. For example, %TEMP% in Windows is equivalent to $tmp in UNIX.

**Note:** If you are using the bash shell on a Windows system, you can use the UNIX conventions.

# Chapter 1. About this release

This chapter describes this release of IBM Tivoli Configuration Manager, version 4.3.1. It includes the following sections:

- New features
- Support of Windows 64-bit platforms
- Fixed defects
- Compatibility and interoperability
- Reporting Browser-based UI

## New features

This section describes the new features for IBM Tivoli Configuration Manager, version 4.3.1.

**Support of new platforms**

The following new platforms are supported by IBM Tivoli Configuration Manager, version 4.3.1:

- AIX® 6.1 (on servers)
- Microsoft Windows 2008 (on servers)
- Microsoft Windows Vista, Business and Enterprise versions (on endpoints)
- SuSE Linux® Enterprise Server, version 10 and Red Hat Enterprise Server Linux, version 5 (on servers)
- Linux on iSeries / pSeries (on servers)
- Sun Solaris Operating Environment x86-64, version 10 (on servers)

For more information on supported operating systems, see "Supported operating systems" on page 11.

**Upgrade of the Java™ Runtime Environment (JRE)**

Tivoli Management Framework distributes the Java Runtime Environment (JRE), version 1.4.2.

**Installation of new components**

When installing IBM Tivoli Configuration Manager, version 4.3.1 the following new components are provided:

**Query Directory for Microsoft Active Directory**

This component must be deployed on a Windows managed node. This component provides the following facilities:

- An engine that replicates the Microsoft Active Directory and Tivoli endpoint manager information into a relational database.
- A command line you use to perform Microsoft Active Directory integration commands.

**Query Directory for Microsoft Active Directory - Command line interface**

This component runs on Windows and UNIX platforms. This command-line interface is also contained in the Query Directory for Microsoft Active Directory component. You use it to perform the following tasks:

- Define domain controllers
- Set replications parameters
- Run replications

For more information on Query Directory for Microsoft Active Directory and Query Directory for Microsoft Active Directory - Command line interface, see *IBM Tivoli Configuration Manager: Guide for Active Directory Integration*, SC32-2285.

**CM Extension for Tivoli License Manager**

This component provides the following facilities:

- Common extended signature catalog
- Significant cost savings
- Signature management
- Increased productivity
- IBM WebSphere® integration
- Thin-client architecture
- Extensive license model support

**CM Endpoint Extension**

Is the endpoint component for the CM Extension for Tivoli License Manager. It handles the data from the Configuration Manager endpoints and the License Compliance Manager agents and transfers the data to the gateway collector.

For more information on the CM Extension for Tivoli License Manager, see *IBM Tivoli Configuration Manager: License Management Extension*, SC32-2260.

**Tivoli Provisioning Manager for Operating System Deployment integration**

With this solution you can manage workstation images containing operating systems and a software stack of applications, in a more consistent, automated, and controlled way, providing a set of well-defined steps you perform to easily build and maintain a workstation image whenever needed. For more information on Tivoli Provisioning Manager for Operating System Deployment integration, see *IBM Tivoli Configuration Manager: User's Guide for Operating System Deployment Solution*, SC32-2578.

**TCM 7.1 Discovery Library Adapter (DLA) support**

This Discovery Library Adapter (DLA) collects data from Tivoli Configuration Manager and creates Discovery Library books containing information about the resource instances and their relationships known to the system. The Discovery Library books can be imported into CCMDB or into a data store for which a Discovery Library Reader™ exists.

This DLA package is located on the IBM Tivoli Configuration Manager CD 5 under the **/DLA** directory.

For more details about the DLA package, refer to the *Readme* contained in the zip file named **TCM_DLA.zip** stored on the IBM Tivoli Configuration Manager CD 5 under the **/DLA** directory. You can also find the readme in IBM Tivoli Open Process Automation Library (OPAL): http://www-01.ibm.com/software/brandcatalog/portal/opal

**Discovery Library Integration Framework Plug-in for Tivoli Configuration Manager**

The Discovery Library Integration Framework provides a set of reusable software components which work together to perform discoveries of Configuration Items (CIs) that are to be maintained by CCMDB. The plug-in for Tivoli Configuration Manager is responsible for discovering the CIs specific to the Tivoli Configuration Manager product.

This DLA package is located on the IBM Tivoli Configuration Manager CD 5 under the **/DII** directory.

For more details about the plug-in, refer to the *User's Guide* contained in the zip file named **TDI_CCMDB_TCM_plugin1.2.zip**. The file name for the User's Guide is **TDI_CCMDB_TCM_plugin_UserGuide.pdf**. You can also find the manual in IBM Tivoli Open Process Automation Library (OPAL): http://www-01.ibm.com/software/brandcatalog/portal/opal

**Discovery Library Integration Framework Plug-in for Tivoli Configuration Manager**

The Discovery Library Integration Framework Plug-in for Tivoli Configuration Manager files have been modified in order to be compiled on Solaris2 workstations.

**Targets resolved by APM Executer and no longer by APM Handler**

To fully use this enhancement, activity plans must be submitted with target resolution at plan submission and not at activity execution.

To enable this feature, add the following entry to the `apm.ini` file:

```
resolve_targets_in_executer=yes
```

in the [ENGINE_TUNING] section of the file.

Enabling this feature, the Activity Planner Handler can now handle other activity plan actions, while the targets are being resolved by the Activity Planner Executer.

**Add scripts as arguments in sp_val_operation for data moving operations**

Add the pre- and post-scripts to the arguments that the data moving operation passes to the **sp_val_operation** validation policy script. For more details about the **sp_val_operation** validation policy, refer to the *IBM Tivoli Configuration Manager: Reference Manual for Software Distribution*. With this feature the arguments that the data moving operation passes to the **sp_val_operation** validation policy script are the following:

For the **Delete** operation:

```
 $1 --> DataMovingRequests.1
 $2 --> delete
 $3 --> <target_path>
 $4 --> <file>
 $5 --> SCRIPT_LIST
 <stdin> --> <target endpoint list>
```

For the **Send** operation:

```
$1 --> DataMovingRequests.1
$2 --> send
$3 --> <source_path>
$4 --> <target_path>
$5 --> <file>
$6 --> <source_host>
$7 --> SCRIPT_LIST
<stdin> --> <target endpoint list>
```

For the **Retrieve** operation:

```
$1 --> DataMovingRequests.1
$2 --> retrieve
$3 --> <source_path>
$4 --> <target_path>
$5 --> <file>
$6 --> <source_host>
$7 --> SCRIPT_LIST
<stdin> --> <target endpoint list>
```

For the **Endpoint to Endpoint** operation:

```
$1 --> DataMovingRequests.1
$2 --> retrieveE2E
$3 --> <source_path>
$4 --> <target_path>
$5 --> <file>
$6 --> <source_endpoint>
$7 --> SCRIPT_LIST
<stdin> --> <target endpoint list>
```

where: **SCRIPT_LIST** is a single argument which contains the following four lines:

```
spre:<spre_script>
spost:<spost_script>
tpre:<tpre_script>
tpost:<tpost_script>
```

separated by the \r character.

On UNIX platforms, a direct ″echo″ of the entire SCRIPT_LIST causes the following behavior: every line is written above the previous one, because \r represents the carriage return. For this reason you can only see the last line of the script.

You must create a validation script to extract the four lines contained in the SCRIPT_LIST argument. For example, for a **Retrieve** operation on Solaris platforms, a simple way to do this is as follows:

```
echo $7 | awk -F"^M" '{print $1"\n"$2"\n"$3"\n"$4}' | while read a
do
 <use $a variable that contains a single line>
done
```

where:

**^M** Does not represent the characters ^ and **M**. It represents the sequence of the **ctrl-v** and **ctrl-m** key combinations.

Another example of how to create the validation script is the following:

```
echo $7 | awk '{n=split($0, v, "\r"); print v[1]"\n"v[2]"\n"v[3]"\n"v[4]}'
 | while read a
do
 <use $a variable that contains a single line>
done
```

**Ignore option extended to targets not scanned**

The **ignore** option for the remove operation has been extended to targets which have not been scanned and do not have an entry in the COMPUTER table. If a remove operation is performed on mixed targets (some have an entry in the COMPUTER table while others do not) by the Activity Planner using the **ignore** option (**-I**), the targets that do not have an entry in the COMPUTER table are skipped, and the remove operation proceeds with

the targets that have been scanned. In the software package log file, the following error message is displayed for the targets that do not have an entry in the COMPUTER table:

```
DISSE0072E List of targets on which the requested operation cannot be
submitted:
endpoint_name  DISSE0407E Failed cm_status check.
```

You must take remediation actions on these targets by either running a scan on them, or by sending a dummy software package before performing a remove operation on them. If the remove operation is performed by the Activity Planner, a target on which the validation fails shows the ″success″ state. If you want a validation failure to be considered as a failure, also by the Activity Planner, you must set the **FailOnValidationFailure** option using the Activity Planner, in addition to the **ignore** option. In case of mixed targets, scanned and not scanned, the DISSE0329E error message keeps displaying if you do not use the **ignore** option. The text of the error message has been changed as follows:

```
DISSE0329E Mixed targets (with an entry in COMPUTER table and without
an entry) are not allowed in the remove operation if the force option
is not set. Use the ignore option to skip the not scanned targets or
submit two different requests or perform a scan for all targets.
```

Also, the text of the DISSE0330E error message has been changed as follows

```
DISSE0330E Remove operation for targets having a different package state
in the Inventory database is not allowed if the force option is not set.
You can use the ignore option to skip the not installed targets if you
disable the remove_not_installed by running
wswdcfg -s disable_remove_not_installed=y.
```

to indicate the possibility of using the **ignore** option to skip the non-installed targets, if you disable the **remove_not_installed** option by running the following command:

```
wswdcfg -s disable_remove_not_installed=y
```

Using this setting, you do not receive the DISSE0330E error message in case of mixed targets, installed and not installed.

**Add the use_cached_targets_threshold key in APM.ini**

This key has been added to the APM.ini file to use the global cache only when the targets are more than the defined value. When the number of the targets is bigger than the use_cached_targets_threshold value, the global cache is used, if enabled, to resolve these targets. When the number of the targets is smaller or equal than the use_cached_targets_threshold value, the global cache is not used, if enabled, to resolve these targets. The default value of use_cached_targets_threshold is 0. This means that by default the global cache is always used when enabled.

## Support of Windows 64-bit platforms

Some functions of applications based on Tivoli Management Framework (TMF) running on Windows 64-bit platforms are not supported. This is because some operations performed on a 32-bit system, such as accessing Windows Registers or file systems, might not be available on a 64-bit system, due to the redirection mechanism.

Depending on the requirements of the application, different products have implemented different workarounds to solve this issue:

**Tivoli Management Framework**
Provides a run64 wrapper with the managed node and the endpoint. This wrapper provides the ability to run binaries located in directories which would otherwise not be accessible to 32-bit processes.

**Software Distribution**
Uses a run64 wrapper to avoid redirection in scripting.

**Common Inventory Technology 2.1.1**
Available with Configuration Manager 4.2.3 Fix Pack 2, it can disable the 32 to 64 redirection.

**IBM Tivoli Monitoring 5.x**
Requires SP1 for Windows 64-bit support. It does not have monitors that require 64-bit registry values. If you create your own 64-bit monitors, you must convert the 64-bit values to 32-bit values.

**IBM Tivoli Monitoring 6.2**
Releases a native 64-bit agent.

**Inventory**
The Inventory ″before scan″ and ″after scan″ script sections use the run64 wrapper, if necessary, to avoid redirection.

The described wrappers are: `wrun-AMD64.exe` and `wrun-IA64.exe` and are located under the following directory:

`lcf_bundle.43100\bin\w32-ix86\tools`

# Fixed defects

This section contains the fixed defects for IBM Tivoli Configuration Manager, version 4.3.1.

## Inventory

The following are fixed defects for the Inventory component:

- **APAR IZ25175**: When setting the Inventory profile timeout to a value higher than 1800 seconds, which represents the default value, by using the **wsetinvglobal -e** command, the new value is not used by the **wscanfs** processing.
- **APAR IZ25610**: The **wtransfer** cores when the managed node name does not match with the one registered or when an iom failure exception is detected.
- **APAR IZ26386**: Incorrect value stored into the STORAGE_CLASS column of the table STORAGE_DEV for hard disks.
- **APAR IZ26896**: The InventoryConfig profile distribution to a non-existing target is not marked as failed.
- **APAR IZ27556**: The `*inv_*_schema_423_FP05.sql` scripts should contain the ″422_423 start:″ comment to avoid the creation of INST_MOUNT_POINT related tables and views twice if you have already run the *inv_schema*422_FP05.sql scripts.
- **APAR IZ27826**: When running the **wsetinvpcsw -d Y** command and then sending the InventoryConfig profile to a Unix endpoint, the Windows catalog files are left in the *$DBDIR/inventory/INVxxx* directory, and are not removed after the Inventory distribution completes.
- **APAR IZ28499**: The option Fast CRC check does not work with 4.2.3 Fix Pack 6.
- **APAR IZ28875**: The TLM enabled Inventory scan triggers an Inventory notice if the *TIVOLI/LCF/INV/SPB* directory does not exist.

- **APAR IZ31243**: Signatures scan fails due to an incorrect catalog.
- **APAR IZ31863**: Information is missing when scanning LPAR systems.
- **APAR IZ11136**: When performing the native software scan on workstations which return strings containing double-byte characters, the collected data is not inserted into the Inventory database due to a failure.
- **APAR IZ12162**: The `inv_config_ep_meths` process shows 100% CPU usage on the target workstation and it hangs. This issue occurs when the **wcancelscan** command is run while the `inv_config_ep_meths` process is reading the MDist segment containing the signatures.
- **APAR IZ12656**: The endpoint label changes in COMPUTER table.
- **APAR IZ12695**: An error occurs when updating the local signature catalog during an endpoint inventory scan.
- **APAR IZ13300**: If you are interested in the code changes implemented for the Common Inventory Technology (CIT) APAR IZ04274, before running an Inventory scan on your endpoints, set the environment variable named `ASSUMEAUTOFSREMOTE` to `YES`, or create a file named `ASSUMEAUTOFSREMOTE` under the *inv/SCAN* directory.
- **APAR IZ14763**: In the Inventory repository the ″FS Free Size″ value is bigger than the ″FS Total Size″ value, while in the MIF file the reported values are correct.
- **APAR IZ15108**: After running **wscansw** and **wscanfs** commands, *cache_data* is filled up with files.
- **APAR IZ15654**: Large DFS file systems on Solaris and UNIX workstations. When running an Inventory scan on these workstations, the scan hangs. The exclude mechanism is not working. Therefore, even when trying to exclude the DFS file systems, the scan still hangs.
- **APAR IZ16462**: Configuration Manager 423 Fix Pack 2 will delete the `inst_nativ_sware` table.
- **APAR IZ17802**: Cannot create signature package from the Inventory GUI.
- **APAR IZ18016**: Wweb publish of an inventory profile does not populate the Inventory query.
- **APAR IZ18220**: The `sys_ser_num` column of the computer table is truncated.
- **APAR IZ18595**: When scanning from signatures default settings need addition of `*SYS`.
- **APAR IZ18911**: The `physical_processor` and `physical_processor_view` information is missing.
- **APAR IZ20187**: The endpoint tries to launch `wscanner.exe`, instead of `wscansw.exe`, during the first signature scan if there is no `catalogwindows.txt` file on the endpoint.
- **APAR IZ20882**: When distributing an Inventory scan with the SWD-INV integration enabled and with some software packages installed matching the specified software signatures, a `register_packages` failure might occur on the endpoint during the scan.
- **APAR IZ21327**: Custom table from AIX, Linux, and UNIX endpoints is not working.
- **APAR IZ22316**: A scan of an Inventory profile using a basic file scan with ″update with diffs″ option will produce a large .DAT file on Windows workstations.
- **APAR IZ22436**: Using an Oracle repository, during a software scan, the information is not inserted into the Inventory repository due to the `ORA-00001: unique constraint (INVTIV.FILEDESC_PK) violated` failure.

- **APAR IZ23708**: Access violation for INV_SWDIST_METHS.EXE.
- **APAR IZ24718**: Integer attribute of custom MIF files are not transferred.
- **APAR IZ24727**: The FILE_SIZE column shows a negative value in the INS_FILE_VIEW when the size is bigger than the maximum value allowed by the 32−bit Integer.
- **APAR IZ08711**: The CollMgr_prog1 collector manager log file collects memory and keeps growing when it is not able to calculate the route to an endpoint.
- **APAR IZ08774**: The Inventory Data Handler might hung or become sluggish.
- **APAR IZ09113**: Tracepoint error in cll mcollect.log during Data Handler rejecting causes confusion, as it is not a real error.
- **APAR IZ09238**: The Inventory Data Handler crashes and ctocs in input queue are hanging with status QUEUED_OUTPUT.

## Software Distribution

The following are fixed defects for the Software Distribution component:

- **APAR IZ23407**: The **wspmvdata** retrieve operation to SOLARIS2-IX86 interpreter endpoint fails due to -2 group setting returned on RTRVFILE.DM file.
- **APAR IZ26094**: Missing Autopack function for Software Package Editor on Solaris2-ix86 platforms.
- **APAR IZ26960**: Incorrect version of RUN_PATCH.CMD released by 423 Fix Pack 6.
- **APAR IZ28310**: In the ″Distribution Settings″ dialog, the ″Timeout Setting″ does not allow to set the ″Deadline″ date later than 2010 Dec 31.
- **APAR IZ29272**: Unable to modify registry value in HKCU environments using the Software Package Editor.
- **APAR IZ29594**: Software package status remains unchanged and set to IC--C even after a reboot and subsequent synchronization are performed.
- **APAR IZ29922**: Within the Software Package Editor, a software package block can be created that sets the root file system permissions on a target endpoint to 000.
- **APAR IZ30705**: Missing ADD_DIRECTORY element in the .SPD file causes an error and an hang.
- **APAR IZ31940**: The **wldsp** command has performance issues during the submit when the target list has 1800 managed nodes.
- **APAR IZ31961**: Use the **wldsp** command to load 1800 depots. When the mdist2_result methods start coming back they pile up due to contention for the name registry. This causes a severe performance degradation when you have a large number of targets.
- **APAR IZ32895**: The **wspmvdata** command to retrieve files from multiple endpoints does not move them as expected. Not all the files coming from all endpoints are processed and received.
- **APAR IZ31831**: When using the success_reboot_after exit_codes option, the system is rebooted and after the reboot you get a cm_status check error.
- **APAR IZ13885**: Configuration Manager is unable to perform any software distribution installation on iSeries endpoints.
- **APAR IZ14710**: When issuing the **wimpspo** command and specifying to build a software package block, the export will not show the specified **unix_owner** from the software package definition, but it will reflect the values defined on the file system.

- **APAR IZ16243**: Distributing a software package with a mandatory date, when the mandatory date expires, the defer check is disabled but still checked, and the accept does not work.
- **APAR IZ18097**: When CM_STATUS is enabled and at remove time a target is not found in the COMPUTER table, an exception is returned, and the operation stops for all targets. The Ignore option should be extended to the case of ″mixed targets″.
- **APAR IZ18130**: Scripts should be added in sp_val_operation for data moving operations.
- **APAR IZ18099**: The behavior of the pre_eval_condition option should be improved.
- **APAR IZ19318**: The global cache usage should be disabled.
- **APAR IZ20435**: If a software distribution fails but the software distribution log reports an error message such as DISSE0155I, DISSE0029I, DISSE0003W, or DISSE0341W, then no error message is reported into the MDist2 GUI.
- **APAR IZ22078**: Report manager needs to be built out of software distribution.
- **APAR IZ22456**: At submission time when targets are passed by TARGET_LIST, and they are not separated by ″,″ but for example by ″;″ the plan immediately fails.
- **APAR IZ22822**: Software Distribution wrongly allows the distribution of a parent software package without issuing an error when a nested package has been deleted, if the installation is done with or without the from_fileserver install option.
- **APAR IZ24267**: Software Distribution Manager is very slow processing MDist2 results.

## Activity Planner

The following are fixed defects for the Activity Planner component:

- **APAR IZ26625**: Activity Planner traces show a Java NullPointerException when the plan, that has the targets defined by the variable TARGET_LIST, is submitted without the **-t** option and with the **-w** option.
- **APAR IZ09864**: In the APM editor the list of software packages is not displayed in alphabetical order.
- **APAR IZ16692**: Activity Planner loops in case of unmatched reports.
- **APAR IZ18922**: The global_cache_refresh_timeout option is not honored.
- **APAR IZ22394**: In the Activity Plan Editor and Activity Plan Monitor GUI, the information displayed by the Help ->About Fixpack menu is not updated with the latest fix pack installed.

## Change Manager

The following are fixed defects for the Change Manager component:

- **APAR IZ27821**: The routine that analyzes the elements might return the wrong results depending on the order of the elements in the memory.

## Web Gateway

The following are fixed defects for the Web Gateway component:

- **APAR IZ13733**: When installing Tivoli Configuration Manager on the Tivoli Web Gateway component, the Windows 2003 operating system is not recognized as a valid platform.

### CM Extension for Tivoli License Manager

The following are fixed defects for the CM Extension for Tivoli License Manager component:

- **APAR IZ26684**: It is not possible to run a **wtlminfoget** command that includes the **-l hidden=y** option.

## Compatibility and interoperability

This section contains information about the compatibility and interoperability of IBM Tivoli Configuration Manager. The terms compatibility and interoperability are defined as follows:

**Compatibility**
Whether different versions of a Tivoli product can communicate with different versions of Tivoli Management Framework.

**Interoperability**
Whether different versions of the same Tivoli product can communicate with each other.

### Compatibility with Tivoli Management Framework

You can install IBM Tivoli Configuration Manager, version 4.3.1 only on Tivoli Management Framework, version 4.3.1.

You can use the Automated Patch Management solution with endpoints with Tivoli Management Framework, version 4.3.1 installed. To install the Patch Management component from scratch, obtain the prerequisite Automation Server, version 2.1 from the IBM Tivoli Configuration Manager, version 4.2.3 CD images.

### Interoperability of Software Distribution and Inventory

Tivoli Software Distribution, version 3.6.x and 4.x.x, and Tivoli Inventory, version 3.7.x can coexist with IBM Tivoli Configuration Manager, version 4.3.1. If you are using Tivoli Software Distribution, version 3.7.x and Tivoli Inventory, version 3.7.x and you want to use IBM Tivoli Configuration Manager, version 4.3.1, perform the following steps:

1. Upgrade to Tivoli Management Framework, version 4.3.1.
2. Install IBM Tivoli Configuration Manager, version 4.3.1.
3. Use the **wfptosp** command to migrate file packages to software packages.

A Tivoli Desktop version 4.3.1 can only connect to a Tivoli server with IBM Tivoli Configuration Manager, version 4.3.1 installed.

## Reporting Browser-based UI

To ease the administrator's tasks in keeping control of the overall patch deployment, along with the reporting command line (**wsecrpt**), a sample html file is provided to display in a visual format the information about vulnerabilities, installed patches, or classification of patches. You can customize this tool depending on the level of information you need to display. You can find details on installation, customization, and programming of this tool by searching for `TCM 4.3.1` and `Reporting browser-based UI` in the Knowledge database.

# Chapter 2. Installation and upgrade notes

This chapter contains installation and upgrade information for IBM Tivoli Configuration Manager, version 4.3.1

## Supported operating systems

This section contains information about the supported operating systems for IBM Tivoli Configuration Manager, version 4.3.1.

Table 1 on page 12 lists which Tivoli Configuration Manager components are supported on which operating system by server, managed node, and gateway.

The list of Tivoli Configuration Manager components is as follows:

- Activity Planner
- Change Manager
- CM Extension for Tivoli License Manager
- CM Endpoint Extension
- Enterprise Directory Query Facility
- Inventory (Server and gateway)
- Patch Management
- Pristine Manager (Server and gateway)
- Query Directory
- Resource Manager (Server and gateway)
- Scalable Collection Services
- Software Distribution (Server and gateway)
- Software Package Editor
- Tivoli Provisioning Manager for Operating System Deployment integration
- Query Directory for Microsoft Active Directory CLI
- Web Infrastructure

**Note:** Query Directory for Microsoft Active Directory is also a Tivoli Configuration Manager component, but is listed in Table 1 on page 12 in a separate column because it is supported only on Microsoft Windows systems.

## Supported operating systems

*Table 1. Supported operating systems by server, managed node, and gateway*

| Operating System | Server / Managed Node / Gateway | | |
|---|---|---|---|
| | **Tivoli Configuration Manager components** | **Automation Server, version 2.1** | **Query Directory for Microsoft Active Directory** |
| **AIX** | | | |
| IBM AIX, version 5.1 | X | | |
| IBM AIX, version 5.2 | X | | |
| IBM AIX, version 5.3 | X | | |
| IBM AIX, version 6.1 | X | | |
| **Sun Solaris Operating Environment on Sun SPARC** | | | |
| Sun Solaris Operating Environment Version 9[1] | X | | |
| Sun Solaris Operating Environment Version 10[1] | X | | |
| **Sun Solaris Operating Environment on x86-64** | | | |
| Sun Solaris Operating Environment Version 10 [1] | X | | |
| **HP-UX on PA-RISC** | | | |
| HP-UX, version 11i v2 | X | | |
| HP-UX, version 11i v3 | X | | |
| **Microsoft Windows on x86-32** | | | |
| Microsoft Windows Server 2003, Standard Edition | X | X | X |
| Microsoft Windows Server 2003, Enterprise Edition | X | | X |
| Microsoft Windows Server 2003, Datacenter Edition | X | | X |
| Microsoft Windows Server 2008, Standard Edition | X | | X |
| Microsoft Windows Server 2008, Enterprise Edition | X | | X |
| Microsoft Windows Server 2008, Datacenter Edition | X | | X |
| **Microsoft Windows on x86-64** | | | |
| Microsoft Windows Server 2003, Standard Edition | X | | X |
| Microsoft Windows Server 2003, Enterprise Edition | X | | X |
| Microsoft Windows Server 2003, Datacenter Edition | X | | X |
| Microsoft Windows Server 2008 , Standard Edition | X | | X |
| Microsoft Windows Server 2008, Enterprise Edition | X | | X |

*Table 1. Supported operating systems by server, managed node, and gateway (continued)*

| Operating System | Server / Managed Node / Gateway | | |
|---|---|---|---|
| | **Tivoli Configuration Manager components** | **Automation Server, version 2.1** | **Query Directory for Microsoft Active Directory** |
| Microsoft Windows Server 2008, Datacenter Edition | X | | X |
| **Linux on x86-32, x86-64, zSeries®, iSeries/pSeries** | | | |
| Red Hat Linux Enterprise Server, version 4.0 [2] | X | | |
| Red Hat Linux Enterprise Server, version 5.0 | X | | |
| SuSE Linux Enterprise Server, version 9 | X | | |
| SuSE Linux Enterprise Server, version 10 | X | | |

[1] Supported only for the Entire Solaris Software Group install type.
[2] On iSeries/pSeries with kernel 2.6.9-22 and bash bash-3.0-19.6, run the following command before performing any Tivoli Management Framework or Tivoli Configuration Manager operation:

```
ln -s ksh /bin/sh
```

Table 2 on page 14 lists which components are supported on which operating systems by administrative interfaces and endpoint. The different operating systems support different Tivoli resources. Therefore, different installation images associated with the components and services of IBM Tivoli Configuration Manager can be installed on the different Tivoli resources.

## Supported operating systems

*Table 2. Supported operating systems by administrative interfaces and endpoint*

| Operating System | Administrative Interfaces | Endpoint | | | |
|---|---|---|---|---|---|
| | • **Change Manager GUI**<br>• **Activity Planner GUIs**<br>• **Inventory GUI**<br>• **Distribution Status Console** | • **Software Distribution**<br>• **Inventory scan** | • **Software Package Editor** | • **Tivoli Web Gateway, version 4.2.3**<br>• **Web User Interface, version 4.2.3** | • **Pristine Manager**[3] |
| **AIX** | | | | | |
| IBM AIX, version 5.1 | | X | X | X | |
| IBM AIX, version 5.2 | | X | X | X | |
| IBM AIX, version 5.3 | | X | X | X | |
| IBM AIX, version 6.1 | | X | X | | |
| **Sun Solaris Operating Environment on Sun SPARC** | | | | | |
| Sun Solaris Operating Environment, version 9[1] | | X | X | X | |
| Sun Solaris Operating Environment, version 10[1] | | X | X | | |
| **Sun Solaris Operating Environment on x86-64** | | | | | |
| Solaris 10 Sun: Solaris Local Zones [4] | | X | X | | |
| Sun Solaris Operating Environment, version 10 | | X | X | | |
| **HP-UX on PA-RISC** | | | | | |
| HP-UX, version 11i v2 | | X | X | X | |
| HP-UX, version 11i v3 | | X | X | | |
| **Microsoft Windows on x86-32** | | | | | |
| Microsoft Windows Server 2003, Standard Edition | X | X | X | X | X |
| Microsoft Windows Server 2003, Enterprise Edition | X | X | X | X | X |
| Microsoft Windows Server 2003, Datacenter Edition | X | X | X | | |
| Microsoft Windows Server 2008, Standard Edition | X | X | X | | |
| Microsoft Windows Server 2008, Enterprise Edition | X | X | X | | |

*Table 2. Supported operating systems by administrative interfaces and endpoint (continued)*

| Operating System | Administrative Interfaces | Endpoint | | | |
|---|---|---|---|---|---|
| | • **Change Manager GUI**<br>• **Activity Planner GUIs**<br>• **Inventory GUI**<br>• **Distribution Status Console** | • **Software Distribution**<br>• **Inventory scan** | • **Software Package Editor** | • **Tivoli Web Gateway, version 4.2.3**<br>• **Web User Interface, version 4.2.3** | • **Pristine Manager**[3] |
| Microsoft Windows Server 2008, Datacenter Edition | X | X | X | | |
| Microsoft Windows XP Professional | X | X | X | | X |
| Microsoft Windows Vista, Business Edition | X | X | X | | |
| Microsoft Windows Vista Enterprise Edition | X | X | X | | |
| Microsoft Windows Vista Ultimate Edition | X | X | X | | |
| **Microsoft Windows on x86-64** | | | | | |
| Microsoft Windows Server 2003 Standard Edition | X | X | X | | |
| Microsoft Windows Server 2003 Enterprise Edition | X | X | X | | |
| Microsoft Windows Server 2003 on IA64[4] | X | X | X | | |
| Microsoft Windows Server 2003, Datacenter Edition | X | X | X | | |
| Microsoft Windows Server 2008, Standard Edition | X | X | X | | |
| Microsoft Windows Server 2008 Enterprise Edition | X | X | X | | |
| Microsoft Windows Server 2008, Datacenter Edition | X | X | X | | |
| Microsoft Windows XP Professional | X | X | X | | |
| Microsoft Windows Vista, Business Edition | X | X | X | | |
| Microsoft Windows Vista Enterprise Edition | X | X | X | | |
| Microsoft Windows Vista Ultimate Edition | X | X | X | | |

## Supported operating systems

*Table 2. Supported operating systems by administrative interfaces and endpoint (continued)*

| Operating System | Administrative Interfaces | Endpoint | | | |
|---|---|---|---|---|---|
| | • **Change Manager GUI**<br>• **Activity Planner GUIs**<br>• **Inventory GUI**<br>• **Distribution Status Console** | • **Software Distribution**<br>• **Inventory scan** | • **Software Package Editor** | • **Tivoli Web Gateway, version 4.2.3**<br>• **Web User Interface, version 4.2.3** | • **Pristine Manager**[3] |
| **Linux on x86-32** | | | | | |
| Red Hat Linux Enterprise Server, version 4.0 | | X | X | X | |
| Red Hat Linux Enterprise Server, version 5.0 | | X | X | | |
| SuSE Linux Enterprise Server, version 9 | | X | X | X | |
| SuSE Linux Enterprise Server, version 10 | | X | X | | |
| **Linux on x86-64, zSeries, iSeries/pSeries** | | | | | |
| Red Hat Linux Enterprise Server, version 4 | | X | X | | |
| Red Hat Linux Enterprise Server, version 5 | | X | X | | |
| SuSE Linux Enterprise Server, version 9 | | X | X | | |
| SuSE Linux Enterprise Server, version 10 | | X | X | | |
| **i5/OS** | | | | | |
| i5/OS, version 5 Release 3 | | X | X | | |
| i5/OS, version 5 Release 4 | | X | X | | |
| i5/OS, version 6 Release 1 | | X | X | | |

[1] Supported only for the Entire Solaris Software Group install type.
[2]Requires a Microsoft Windows machine with a TCP/IP connection to the i5/OS® machine.
[3]Applies to Tivoli endpoint installed on pristine machine by Pristine Manager.
[4]Supported only for the Inventory GUI.

For a detailed list of software requirements for the supported version of these operating systems, see *Tivoli Management Framework Release Notes*®.

Table 3 on page 17 lists the operating systems that Pristine Manager installs on pristine machines.

*Table 3. Operating systems installed on pristine machines by Pristine Manager*

| Pristine Server Type | Operating System |
|---|---|
| ADS | Microsoft Windows 2000 Advanced Server |
| ADS | Microsoft Windows 2000 Server |
| ADS | Microsoft Windows 2003 .NET Enterprise Edition |
| ADS | Microsoft Windows 2003 .NET Server |
| ADS | Microsoft Windows 2003 .NET Web Server |
| RIS | Microsoft Windows 2000 Professional |
| RIS | Microsoft Windows XP Professional |

## Supported databases

This section contains information about the supported databases for IBM Tivoli Configuration Manager, version 4.3.1

*Table 4. Database specifications*

| Operating System | Supported Database Servers |
|---|---|
| AIX | • DB2® UDB version 8 (8.1, 8.2), DB2 9 for Linux, UNIX, and Windows (versions 9.1, 9.5)<br>• IBM Informix® Dynamic Server 9.4<br>• Oracle Database 10g, 11g<br>• Sybase Adaptive Server Enterprise 12.5.4 |
| HP-UX | • DB2 UDB version 8 (8.1, 8.2), DB2 9 for Linux, UNIX, and Windows (versions 9.1, 9.5)<br>• IBM Informix Dynamic Server 9.4<br>• Oracle Database 10g, 11g<br>• Sybase Adaptive Server Enterprise 12.5.4 |
| Linux on x86-32, x86-64 | • DB2 UDB version 8 (8.1, 8.2), DB2 9 for Linux, UNIX, and Windows (versions 9.1, 9.5)<br>• IBM Informix Dynamic Server 9.4<br>• Oracle Database 10g, 11g<br>• Sybase Adaptive Server Enterprise 12.5.4 |
| Linux on iSeries / pSeries | • DB2 UDB version 8 (8.1, 8.2), DB2 9 for Linux, UNIX, and Windows (versions 9.1, 9.5)<br>• Oracle Database 10g |
| Linux on zSeries | DB2 UDB Version 8.1 |
| Sun Solaris Operating Environment on Sun SPARC | • DB2 UDB version 8 (8.1, 8.2), DB2 9 for Linux, UNIX, and Windows (versions 9.1, 9.5)<br>• IBM Informix Dynamic Server 9.4<br>• Oracle Database 10g, 11g<br>• Sybase Adaptive Server Enterprise 12.5.4 |
| Sun Solaris Operating Environment on x86-32, x86-64 | Oracle Database 10g |

*Table 4. Database specifications (continued)*

| Operating System | Supported Database Servers |
|---|---|
| Microsoft Windows | • DB2 UDB version 8 (8.1, 8.2), DB2 9 for Linux, UNIX, and Windows (versions 9.1, 9.5)<br>• IBM Informix Dynamic Server 9.4<br>• Microsoft SQL Server 2000 Service Pack 4, 2005 SP1<br>• Oracle Database 10g, 11g<br>• Sybase Adaptive Server Enterprise 12.5.4 |

**Note:** Tivoli Web Gateway requires DB2 8.2.2 or DB2 UDB ESE 9.1.

The "temporary tables" feature does not apply to Sybase and Informix, because these two RDBMS databases do not clean up the contents of a temporary table after the commit operation, but only after releasing the session to the database. You can therefore receive the following error message, which might cause a performance decrease:

```
Sybase Server Error: Msgno 3621 Level 10 State 0
Command has been aborted.
```

# Application Prerequisites

This section contains information about the products running with IBM Tivoli Configuration Manager, version 4.3.1

- IBM WebSphere Application Server, version 5.1 or 6.0
- Tivoli Management Framework, version 4.3.1
- IBM Tivoli Access Manager, version 5.1. Installation of this product is optional. If you use IBM WebSphere® Application Server, version 5.0.2.3, fix pack 6 is required.
- IBM Tivoli Access Manager for e-business, version 5.1
- WebSphere Everyplace® Connection Manager 5.1.0.1 (with APAR IY64400)
- IBM Tivoli Enterprise Data Warehouse, version 1.1 or later, which includes IBM DB2, version 9.5
- compat-libstdc++-33-3.2.3-47.3.i386.rpm must be installed on Red Hat Linux Enterprise Server Version 4.0

  **Notes:**

  1. On all supported Red Hat Linux Enterprise Server, version 4.0 operating systems, the following compatibility pack is required:
     – compat-libstdc++-33
  2. On Red Hat Linux Enterprise Server, version 4.0 64-bit operating systems, the following 32-bit compatibility packs are required:
     a. libgcc-3.4.3-9
     b. compat-libstdc++-33

     Install the compatibility packs in the specified order.
  3. Notice that the 32-bit compatibility package is required on a 64-bit workstation because Common Inventory Technology and Tivoli Configuration Manager are built in 32-bit mode and are not able to load the related 64-bit library.

- Red Hat Linux Enterprise Server, version 5 requires the libstdc++.so.5 compatibility pack.

Tivoli Configuration Manager can also integrate with IBM Tivoli Configuration Manager for Automatic Teller Machines. For more information on this product see: http://www.ibm.com/software/tivoli/library/.

Before you install this product, ensure that Inventory and Software Distribution are installed.

## Installation program requirements

IBM Tivoli Configuration Manager, version 4.3.1, provides the following installation programs:

- "Server installation program" on page 20
- "Desktop installation program" on page 21
- "Automation server installation program" on page 21
- "Software Installation Service" on page 22

These installation programs install and configure the components and services of IBM Tivoli Configuration Manager on the workstation where the installation program is run.

To prevent having to change CDs during the installation processes, copy the images from the IBM Tivoli Configuration Manager and Tivoli Management Framework CDs to a shared location. When prompted for the first time to locate an installation image, navigate to the directory where you copied the CDs.

For detailed information about these installation programs, see *IBM Tivoli Configuration Manager: Planning and Installation Guide*.

### General prerequisites for installation programs

Running the installation programs requires 120 megabytes (MB) of available disk space in the /temp directory.

The following Java requirements, by operating system, must be met before running the installation program:

**For AIX operating systems**

For AIX 5.1, maintenance level 5100-01.

**Note:** Before installing maintenance level 5100-01, apply and commit APAR IY19375 by using the AIX System Management Interface Tool (SMIT). This fix includes the following file sets:
- bos.mp 64 5.1.0.1
- bos.mp 5.1.0.1
- bos.up 5.1.0.1

After installing these file sets, reboot the system, install maintenance level 5100-01, and reboot the system again.

These maintenance levels and fixes can be downloaded from the following site:

http://techsupport.services.ibm.com/rs6000/fixes

**For HP-UX operating systems on PA-RISC systems**

For HP-UX 11i, Quality Pack GOLDQPK11i.

For HP-UX 11i, Quality Pack QPK1100.

The quality pack bundles can be downloaded from the following site:

http://www.software.hp.com/SUPPORT_PLUS/qpk.html

To download Java support, use the following site:

http://www.hp.com/products1/unix/java/infolibrary/patches.html

**For Sun Solaris operating environment on Sun SPARC systems**

For Solaris 8, Patch Clusters with a date of January 2002 or later.

Information about downloading patches is available from the following site:

http://sunsolve.sun.com/pub-cgi/show.pl?target=patches/patch-access

Information about Java support is available from the following site:

http://java.sun.com/j2se/1.3/install-solaris-patches.html

**For SuSE Linux Enterprise Server, version 9 on zSeries**

If you want to install IBM Tivoli Configuration Manager on SuSE Linux Enterprise Server, version 9 for zSeries using the InstallShield installation, you must have Java Runtime Environment, version 1.4.2 on your workstation. (The IBM Tivoli Configuration Manager CDs provide Java Runtime Environment, version 1.4.2). After you have downloaded the Java Runtime Environment, you can run the following command to launch the ISMP installation:

```
$JAVA_HOME/bin/java -cp $TCM/cmserv.jar -Dis.media.home=$TCM/cmserv
-Dis.external.home=$TCM run
```

where *$JAVA_HOME* is the directory where the correct JRE is available, and *$TCM* is the IBM Tivoli Configuration Manager installation CD.

**For Windows operating systems on x86-64, x86-32**

For any Windows operating system, Java Runtime Environment 1.4.2 is required. Additional information about downloading patches is available from the following site:

http://java.sun.com/j2se/1.3/jre

## Server installation program

The Server installation program is in the root directory of the IBM Tivoli Configuration Manager installation CD. For the Server installation program, there are two primary choices:

- Typical
- Custom

During a Typical installation, the following processes occur:

- Tivoli Management Framework is installed to create the Tivoli server.
- On Windows systems, Tivoli Desktop for Windows is installed.
- A gateway is created with the label *hostname*-gw and uses port 9494 for communication.

- All Tivoli server and gateway images for IBM Tivoli Configuration Manager, including the required Java packages, are installed.
- The default tablespaces are optionally created using the database administrator's user name and password. You must know this user name and password.

  DB2 requires that the `cm_db` database exists in the RDBMS.
- The schema scripts are run using the RIM user name and password. DB2 requires that the user is defined in the RDBMS.
- The LDAP access is installed, but not configured.
- The Administrator `tivapm` is created with the password `tivapm`.
- Language support is installed for the locale in which the ISMP installation is running.

During a Custom installation, you select which Configuration Management components to install, and the following processes occur:

- Tivoli Management Framework is installed to create the Tivoli server.
- On Windows systems, Tivoli Desktop for Windows is installed.
- A gateway is created with the label *hostname*-gw and uses port 9494 for communication.
- The specified Tivoli server and gateway images for IBM Tivoli Configuration Manager are installed.
- The default tablespaces are optionally created. To create the tablespaces, you must know the user name and password for the database administrator.
- Although you might not be creating the tablespaces, because they might already exists or you do not have the database administrator user name and password, you might want to run only the schema scripts.
- Optionally, the LDAP access is installed and configured.
- The Activity Planner administrator is created with the specified user name and password.
- Language support is installed for the specified locales.

## Desktop installation program

The Desktop installation program is on the IBM Tivoli Configuration Manager Desktop CD.

During the installation, the following processes occur:

- Tivoli Desktop for Windows is installed.
- The required Java packages are installed.
- The administrative interfaces for IBM Tivoli Configuration Manager are installed.
- If a Tivoli endpoint is detected, you can choose to install Software Package Editor.

## Automation server installation program

The Automation server installation program is on the IBM Tivoli Configuration Manager Automation Server CD.

The prerequisites are on the IBM Tivoli Configuration Manager Prerequisite Software Installer for Automation Server CDs. You can obtain the Automation Server, version 2.1 from the IBM Tivoli Configuration Manager, version 4.2.3 CD images.

For information about system requirements and software prerequisites, see IBM Tivoli Configuration Manager *IBM Tivoli Configuration Manager: Release Notes*, GI11-0926, version 4.2.3.

During the installation, the following processes occur:

- The installer begins to install using the options contained in a response file.
- The system automatically reboots twice.
- The Automation Server is installed.

### Software Installation Service

Tivoli Software Installation Service is deprecated and should not be used in association with Tivoli Management Framework, version 4.3.1. You can use Tivoli Software Installation Service only if you are upgrading from Tivoli Management Framework, version 4.1.1.

In both cases, patch 4.1.1-SIS-0003 is required.

## Component installation requirements

The following sections contain requirements and considerations for individually installing the components and services of IBM Tivoli Configuration Manager using Tivoli Management Framework, Tivoli Software Installation Service, or software packages.

For a detailed list of components available on each supported operating system, see Table 1 on page 12 and Table 2 on page 14.

**Note:** The disk space requirement tables only show the disk space required to install the components. The numbers do not include the space needed to run the components.

### General prerequisites for component installations

Before installing any component or service of IBM Tivoli Configuration Manager, you must install Tivoli Management Framework, version 4.3.1, and all required Java components.

### Inventory component

Table 5 lists the disk space requirements, in megabytes, used by Inventory.

Inventory on all platforms, requires the installation of Scalable Collection Service (SCS).

*Table 5. Disk space requirements, in megabytes, for Inventory*

| Operating system | Inventory on Tivoli server | Inventory on managed node | Inventory Gateway | Scalable Collection Service | Scanning agent on endpoint |
|---|---|---|---|---|---|
| AIX | 42.7 | 42.7 | 127.3 | 4 | 56.2 |
| HP-UX | 36 | 36 | 189.1 | 3 | 47 |

*Table 5. Disk space requirements, in megabytes, for Inventory (continued)*

| Operating system | Inventory on Tivoli server | Inventory on managed node | Inventory Gateway | Scalable Collection Service | Scanning agent on endpoint |
|---|---|---|---|---|---|
| Linux on x86-32, x86-64 | 40.8 | 40.8 | 186.9 | 4 | 40 |
| Linux on zSeries | 44.8 | 44.8 | 186 | 4 | 42 |
| Linux on iSeries / pSeries | 39 | 39 | 189 | 5 | 32 |
| Sun Solaris on Sun SPARC | 41.7 | 41.7 | 186.5 | 2.5 | 40 |
| Sun Solaris on x86-64 | 37 | 37 | 193 | 4 | 40 |
| Microsoft Windows | 20 | 20 | 140 | 3 | 42.5 |

**Notes:**

1. When Inventory scans an endpoint, it can store the **sdist.nfo** file, the **sd_scan.nfo** file, or both files on this system. These files contain the same information as a MIF file generated by a hardware scan.
2. Inventory does not support the scanning of multiple endpoints on one system. If you have multiple endpoints, consistently scan only one of the endpoints.

In addition to the scanning agent requirements that are listed in Table 5 on page 22, consider the following factors when determining the memory and disk space requirements for endpoints:

- Each endpoint must have available disk space for the MIF files created by the scan. Depending on the type of scan and the size of the system being scanned, the MIF files can vary from a few kilobytes to several megabytes.
- Large MIF files can cause memory errors. When a MIF file is read, its contents are stored in memory. If the MIF file is very large, it can exceed the memory limits of a system. To avoid this problem, use multiple smaller MIF files instead of one large MIF file, or add memory to your system. For more information about creating MIF files, see IBM Tivoli Configuration Manager *User's Guide for Inventory*.
- Signature scans send the signature file to the scanned system. The default size of this signature file is approximately 800 kilobytes. When you add custom signatures, this file is larger.
- Filter scans for basic information send the filter file. The size of this file varies according to the number of filter entries that you create.

## Software Distribution component

Table 6 on page 24 lists the disk space requirements, in megabytes, used by Software Distribution.

*Table 6. Disk space requirements, in megabytes, for Software Distribution*

| Operating system | Software Distribution on Tivoli server | Software Distribution on managed node | Software Distribution Gateway | Software Distribution Software Package Editor on Tivoli server | Software Distribution Software Package Editor on managed node | Software Distribution Software Package Editor on endpoint | Pristine Tool |
|---|---|---|---|---|---|---|---|
| AIX | 31.6 | 24 | 82 | 9 | 9 | 34[3] | * |
| HP-UX | 29.7 | 24 | 80 | 8.2 | 8.6 | 54[3] | * |
| Linux on x86-64, x86-32 | 22 | 17 | 79 | 9 | 9 | 35[3] | * |
| Linux on zSeries | 30 | 18 | 85 | * | * | 27.5[1,3] | * |
| Linux on iSeries / pSeries | 31 | 31 | 132 | 12 | 12 | 101[1] | * |
| i5 / OS | * | * | * | * | * | 12.3[2] | * |
| Sun Solaris on Sun SPARC | 25 | 20 | 82 | 8.3 | 8.6 | 39[3] | * |
| Sun Solaris on x86-64 | 31 | 31 | 78 | 12 | 12 | 28[3] | * |
| Microsoft Windows | 25 | 13 | 83 | 8.6 | 8.5 | 23.7 | 6 |

* The installation image is not supported and cannot be installed.

[1] Command line interface only.

[2] Preparation site only.

[3] The indicated disk space requirements include the installation of the Java component also.

Table 7 lists the memory (RAM) requirements, in megabytes, for the pristine tool.

*Table 7. Memory requirements, in megabytes, for pristine tool*

| Operating System | Pristine tool |
|---|---|
| Microsoft Windows | 26 |

## Resource Manager service

Table 8 lists the disk space requirements, in megabytes, used by Resource Manager.

*Table 8. Disk space requirements, in megabytes, for Resource Manager*

| Operating system | Resource Manager on Tivoli server | Resource Manager on gateway |
|---|---|---|
| AIX | 5.6 | 1.6 |
| HP-UX | 10 | 1.1 |
| Linux on Intel® | 4 | 1.5 |
| Linux on zSeries | 11 | 1.5 |
| Linux on iSeries / pSeries | 4 | 2 |
| Sun Solaris on Sun SPARC | 5.6 | 1.5 |

*Table 8. Disk space requirements, in megabytes, for Resource Manager (continued)*

| Operating system | Resource Manager on Tivoli server | Resource Manager on gateway |
|---|---|---|
| Sun Solaris on x86-64 | 4 | 2 |
| Microsoft Windows | 16 | 1 |

***** The installation image is not supported and cannot be installed.

## Enterprise Directory Query Facility service

Table 9 lists the disk space requirements, in megabytes, for Enterprise Directory Query Facility.

*Table 9. Disk space requirements, in megabytes, for Enterprise Directory Query Facility*

| Operating system | Enterprise Directory Query Facility on Tivoli server |
|---|---|
| AIX | 2.5 |
| HP-UX | 8 |
| Linux on x86-32, x86-64 | 4 |
| Linux on zSeries | 8 |
| Linux on iSeries / pSeries | 7 |
| Sun Solaris on Sun SPARC | 8.5 |
| Sun Solaris on x86-64 | 7 |
| Microsoft Windows | 11 |

The following Lightweight Directory Access Protocol (LDAP) directory servers are supported by Enterprise Directory Query Facility:

- IBM SecureWay® Directory Server, version 4.1
- Active Directory for Windows 2000
- Active Directory for Windows 2003
- Novell Directory Server for NetWare, version 6

## Activity Planner service

Table 10 lists the disk space requirements, in megabytes, required for Activity Planner.

*Table 10. Disk space requirements, in megabytes, for Activity Planner*

| Operating system | Activity Planner on Tivoli server | Activity Planner on managed node |
|---|---|---|
| AIX | 8.0 | 8.0 |
| HP-UX | 7.4 | 5.0 |
| Linux on x86-32, x86-64 | 6.0 | 5.5 |
| Linux on zSeries | 2.5 | 4.0 |
| Linux on iSeries / pSeries | 10 | 10 |
| Sun Solaris on Sun SPARC | 9.2 | 5.6 |
| Sun Solaris on x86-64 | 11 | 11 |
| Microsoft Windows | 8.3 | 5.3 |

Table 11 lists the memory (RAM) requirements, in megabytes, required for Activity Planner.

*Table 11. Memory requirements, in megabytes, for Activity Planner*

| Operating system | Activity Plan Editor on Tivoli server | Activity Plan Monitor on Tivoli server | Activity Plan Editor on managed node | Activity Plan Monitor on managed node | Activity Plan Editor on endpoint | Activity Plan Monitor on endpoint |
|---|---|---|---|---|---|---|
| AIX | 48 | 41.5 | 47 | 41 | [1] | [1] |
| HP-UX | 14 | 17 | 14 | 10 | [1] | [1] |
| Linux on x86-32, x86-64 | 27 | 31 | 21 | 30 | [1] | [1] |
| Linux on zSeries | 48 | 46 | [1] | [1] | [1] | [1] |
| Sun Solaris | 12 | | 12 | | [1] | [1] |
| Microsoft Windows | 34 | 40 | 33 | 37 | 34 | 40 |

[1] The installation image is not supported and cannot be installed.

## Change Manager service

Table 12 lists the disk space requirements, in megabytes, required for Change Manager.

*Table 12. Disk space requirements, in megabytes, for Change Manager*

| Operating system | Change Manager on Tivoli server | Change Manager on managed node | Change Manager GUI |
|---|---|---|---|
| AIX | 3.7 | 4.0 | [1] |
| HP-UX | 4.2 | 5.0 | [1] |
| Linux on x86-32, x86-64 | 5.0 | 3.7 | [1] |
| Linux on zSeries | 5.0 | 3.5 | [1] |
| Linux on iSeries / pSeries | 5 | 5 | [1] |
| Sun Solaris on Sun SPARC | 8.0 | 3.7 | [1] |
| Sun Solaris on x86-64 | 5 | 5 | [1] |
| Microsoft Windows | 6.0 | 4.0 | 8.7 |

**1** The installation image is not supported and cannot be installed.

Table 13 on page 27 lists the memory (RAM) requirements, in megabytes, required for Change Manager.

*Table 13. Memory requirements, in megabytes, for Change Manager*

| Operating system | Change Manager on Tivoli server | Change Manager on managed node | Change Manager GUI |
|---|---|---|---|
| AIX | 50 | 50 | [1] |
| HP-UX | 10 | 10 | [1] |
| Linux on x86-32, x86-64 | 83 | 30 | [1] |
| Linux on zSeries | 60 | [1] | [1] |
| Sun Solaris | 7.2 | 7 | [1] |
| Microsoft Windows | 37 | 37 | 37 |

[1] The installation image is not supported and cannot be installed.

## Pristine Manager

Table 14 lists the disk space requirements, in megabytes, required for Pristine Manager.

*Table 14. Disk space requirements, in megabytes, for Pristine Manager*

| Operating system | Pristine Manager on Tivoli server | Pristine Manager on gateway |
|---|---|---|
| IBM AIX | 11 | 2 |
| HP-UX | 11 | 2 |
| Linux on x86-32, x86-64 | 11 | 2 |
| Linux on zSeries | 12 | 2 |
| Linux on iSeries / pSeries | 9 | 3 |
| Sun Solaris on Sun SPARC | 10 | 2 |
| Sun Solaris on x86-64 | 5 | 3 |
| Microsoft Windows | 8 | 2 |

The memory (RAM) requirements, in megabytes, required for all of the Pristine Manager components on all platforms is 10 MB.

## Administrative Interfaces

Table 15 lists the disk space requirements, in megabytes, required for Administrative Interfaces.

*Table 15. Memory requirements, in megabytes, for Administrative Interfaces*

| Operating system | Software Package Editor on endpoint | Activity Planner GUI | Change Manager GUI | Inventory GUI |
|---|---|---|---|---|
| Microsoft Windows | 23.7 | 13 | 37 | 6.2 |

## Patch Management

Table 16 on page 28 lists the disk space requirements, in megabytes, required for Patch Management.

*Table 16. Disk space requirements, in megabytes, for Patch Management*

| Operating system | Patch Management on Tivoli server | Patch Management on managed node |
|---|---|---|
| IBM AIX | 2 | 2 |
| HP-UX | 2 | 2 |
| Linux on x86-32, x86-64 | 5 | 5 |
| Linux on zSeries | 5 | 5 |
| Linux on iSeries / pSeries | 5 | 5 |
| Sun Solaris on Sun SPARC | 2 | 2 |
| Sun Solaris on x86-64 | 2 | 2 |
| Microsoft Windows | 2 | 2 |

The memory (RAM) requirements, in megabytes, required for the Patch Management component on all platforms is 10 MB.

## CM Endpoint Extension

Table 17 lists the disk space requirements, in megabytes, required for CM Endpoint Extension.

*Table 17. Disk space requirements, in megabytes, for CM Endpoint Extension*

| Operating system | CM Endpoint Extension on Tivoli server | CM Endpoint Extension on gateway |
|---|---|---|
| IBM AIX | 5 | 4 |
| HP-UX | 5 | 8 |
| Linux on x86-32, x86-64 | 5 | 4 |
| Linux on zSeries | 5 | 4 |
| Linux on iSeries / pSeries | 5 | 4 |
| Sun Solaris on Sun SPARC | 5 | 4 |
| Sun Solaris on x86-64 | 5 | 4 |
| Microsoft Windows | 13 | 25 |

## Query Directory for Microsoft Active Directory

Table 18 lists the disk space requirements, in megabytes, required for Query Directory for Microsoft Active Directory.

*Table 18. Disk space requirements, in megabytes, for Query Directory for Microsoft Active Directory*

| Operating system | Query Directory for Microsoft Active Directory on Tivoli server | Query Directory for Microsoft Active Directory on gateway |
|---|---|---|
| IBM AIX | N / A | 7 |
| HP-UX | N / A | 6 |
| Linux on x86-32, x86-64 | N / A | 4 |
| Linux on zSeries | N / A | 5 |

*Table 18. Disk space requirements, in megabytes, for Query Directory for Microsoft Active Directory (continued)*

| Operating system | Query Directory for Microsoft Active Directory on Tivoli server | Query Directory for Microsoft Active Directory on gateway |
|---|---|---|
| Linux on iSeries / pSeries | N / A | 3 |
| Sun Solaris on Sun SPARC | N / A | 4 |
| Sun Solaris on x86-64 | N / A | 4 |
| Microsoft Windows | 4 | 9 |

## Query Directory for Microsoft Active Directory - Command line integration

Table 19 lists the disk space requirements, in megabytes, required for Query Directory for Microsoft Active Directory - Command line integration,

*Table 19. Disk space requirements, in megabytes, for Query Directory for Microsoft Active Directory Command line integration*

| Operating system | Query Directory for Microsoft Active Directory CLI on Tivoli server |
|---|---|
| IBM AIX | 7 |
| HP-UX | 6 |
| Linux on x86-32, x86-64 | 5 |
| Linux on zSeries | 5 |
| Linux on iSeries / pSeries | 3 |
| Sun Solaris on Sun SPARC | 4 |
| Sun Solaris on x86-64 | 4 |
| Microsoft Windows | 9 |

## Tivoli Provisioning Manager for Operating System Deployment integration

Table 20 lists the disk space requirements, in megabytes, required for Tivoli Provisioning Manager for Operating System Deployment integration.

*Table 20. Disk space requirements, in megabytes, for Tivoli Provisioning Manager for Operating System Deployment integration*

| Operating system | Tivoli Provisioning Manager for Operating System Deployment integration on Tivoli server |
|---|---|
| IBM AIX | 2 |
| HP-UX | 3 |
| Linux on x86-32, x86-64 | 3 |
| Linux on zSeries | 2 |
| Linux on iSeries / pSeries | 2 |
| Sun Solaris on Sun SPARC | 2 |

*Table 20. Disk space requirements, in megabytes, for Tivoli Provisioning Manager for Operating System Deployment integration (continued)*

| Operating system | Tivoli Provisioning Manager for Operating System Deployment integration on Tivoli server |
|---|---|
| Sun Solaris on x86-64 | 2 |
| Microsoft Windows | 2 |

## Upgrading to IBM Tivoli Configuration Manager, version 4.3.1

If you have Tivoli Configuration Manager, version 4.2.2 or version 4.2.3 installed, you can upgrade directly to version 4.3.1.

For more details, refer to *IBM Tivoli Configuration Manager: Planning and Installation Guide*.

# Chapter 3. Software limitations, problems, and workarounds

This chapter contains software limitations, problems, and workarounds for the components of IBM Tivoli Configuration Manager, version 4.3.1.

## Software limitations

This section contains subsections for general IBM Tivoli Configuration Manager, version 4.3.1 software limitations grouped according to the following categories:



### Graphical interfaces

The following are software limitations that affect different IBM Tivoli Configuration Manager components and services:

- Use of shortcut keys on Java-based GUIs on UNIX systems.

  In a UNIX operating system, use the Windows shortcut keys to perform any function on all the Java-based GUIs. For example, to perform the copy function, use the Ctrl+c shortcut combination, to perform the paste function use the Ctrl+v shortcut combination.
- If the system TrueType fonts are installed in a location other than the default path (/usr/openwin/lib/locale/$LANG/X11/fonts/TrueType), the FONTPATH variable in inv_gui.sh should be modified to reflect this location.
- If fonts do not display properly on an HP-UX system, set the JAVA_FONTS variable to point to the location of the fonts on your system. For example, if the fonts are located in the /usr/lib/X11/fonts/ms.st/typefaces directory, set the JAVA_FONTS variable as follows:

  ```
  export JAVA_FONTS=/usr/lib/X11/fonts/ms.st/typefaces
  ```
- HP-UX systems do not provide a TrueType font. To run the Java GUI on an HP-UX system, you must install a TrueType font on the machine.
- Defect 59806: A patch installation might fail with exit code 1641. The workstation is automatically rebooted, and the patch installation is completed when the workstation restarts. If the patch installation was performed using an activity plan, also the activity plan fails. Use the **wsecrprt** command to verify the patch installation.
- Defect 59828: An activity plan for installing Microsoft service packs might fail. In the Software Distribution log file, one or more patches, contained in the service pack, fail with exit code 1642. This exit code does not mean that the service pack installation has failed, it means that the specific patch is not needed as the specific software module you are trying to upgrade is not present.

- Defect 59811: The "2007 Microsoft Office Suite Service Pack 1" installation fails. If you perform a query in Patch Management using the **wsecrprt** command, the patch is missing. Despite this error, in most cases the patch has been installed correctly. Verify the patch installation from the **Add or Remove Programs** list of the Windows operating system. A ticket has been opened to Microsoft for this software limitation.
- Defect 184765: In an environment where Hub and Spoke Rim hosts refer to the same RDBMS and where Spoke regions are upgraded before the Hub region, in the period between upgrade of the Spokes and upgrade of the Hub signature matching signature scans can only be requested from the Hub region.

### Inventory

This section contains the Inventory component graphical interface limitations.

- Defect 167386: In the Software Scan Configuration window of the Inventory GUI, if you add a file or directory in the **Files** section by clicking the **Create** buttons, the add files or add directories window may remain open even after you close the Software Scan Configuration window.
- Defect 142672.1: In the Activity Plan Editor, the following link in the Inventory Scan online help is broken:
  - The **Add from file** link in the Inventory Scan Mobile Settings dialog box.
- Defect 181204: When you distribute a hardware scan profile to a Windows 2003 with an AMD Opteron processor, the processor being detected is incorrect. It results in ″Pentium® M″ instead of ″AMD Opteron Family″ because of a Microsoft problem.

### Activity Planner

This section contains the Activity Planner component graphical interface limitations.

- The Activity Planner pie chart might not return the correct percentage after a refresh operation.
- Defect 45755: You cannot use the multiple selection function when selecting activities or plans in Activity Plan Monitor.
- On Windows machines, the Activity Planner login panel is displayed in background. This is due to a Java defect.
- Defect 58827: Message sent to the Activity Plan Monitor and stored in the activity plan database are truncated if their length is greater than the length defined in the schema. All the messages, except for Tivoli Provisioning Manager for Operating System Deployment messages, are truncated at the end. The Tivoli Provisioning Manager for Operating System Deployment messages are truncated at the beginning since they start with the copyright information that is not useful for the error explanation.

### Enterprise Directory Query

This section contains the Enterprise Directory Query component graphical interface limitations.

- APAR IY88658: The SSL connection is not supported for the Enterprise Directory Query component.

## Installation

The following are the limitations that apply to the installation of IBM Tivoli Configuration Manager components:

- Problems upgrading a Linux Tivoli server when opening the desktop using KDE Windows Manager, Version 2.2.1

When you upgrade a Linux Tivoli server to IBM Tivoli Configuration Manager, Version 4.2.3, launching the installation program through a desktop that uses KDE Windows Manager, Version 2.2.1 and earlier the following elements are displayed:
- Semi-blank dialog boxes
- Decorations around pop-up menus
- Missing buttons on dialog boxes

The same problem can occur on other platforms, and using other Windows Managers because Windows Manager is not compatible with all the versions of Java.

The problem does not occur using KDE Windows Manager, Version 2.2.2 or later.

- On Windows 2000, when you launch the Integrated Server Installation process, the InstallShield dialog box appears in background.
- You must restart the Pristine Manager daemon if you perform any of the following operations after you have installed the Pristine Manager:
  - Reinstall Activity Planner
  - Change the RIM (or some of its parameters)
  - Change the Tivoli Enterprise Console® Event Server
  - Change any pdaemon configuration details (for example enabling Tivoli Enterprise Console notification or lowering the trace level)

  Use the **wpristine restart** command to restart the Pristine Manager daemon.
- Defect 27379: When installing the Enterprise Directory Query Facility, the installation fails if you include blanks in the options that you specify, for example, in the Distinguished_Name field, specify:

  ```
  cn=Administrator,cn=User,dc=swd,dc=com
  ```

## Inventory

The following are the limitations that apply to Inventory.

- When scanning some Linux endpoints, the ADAPTER_TYPE column for network cards may not contain the correct information.
- The **winvmgr** command cannot set the default settings for a new policy region at the same time the new region is being created. The default settings are based on each region.
- Defect 139081: Log files are not returned for endpoint failures.

  If a failure occurs during a scan and the inv_ep_debug attribute is set to create a log file, the log file is not returned to the inventory callback method and is not written to the data handler directory.
- Resource Manager creates a unique identifier, TRM_RESOURCES.ADDR, as part of managing a device. This identifier corresponds to the COMPUTER_SYS_ID column in the configuration repository. The maximum size of COMPUTER_SYS_ID is 64 characters. However, TRM_RESOURCES.ADDR can be longer than 64 characters, and Inventory truncates any identifier longer than 64 characters. To ensure compatibility between Resource Manager and Inventory, do not use a TRM_RESOURCES.ADDR identifier that exceeds 64 characters.
- The software scanner for PC systems excludes directories that begin with $NTSERVICEPACKUNINSTALL or $NTUNINSTALL.
- Inventory cannot distinguish between multiple identical devices on a single system, such as two identical CD-ROM drives on one workstation. Therefore, if you remove one of the devices, the history table shows a delete record for one of the devices, but does not specify which device was removed.

- In general, Tivoli does not support virtual disk drive software when recognizing either hardware devices, logical drives, or scanning for software.

## Software Distribution

The following are the limitations that apply to Software Distribution:

- APAR IY63710: The trace files tmesdis*n*.trc

  where

  *n* Is the file number

  generated when you issue a command line command, can be written to only by the user who was logged in when the command was issued. If another user logs in and issues a command line command, the trace file content is printed to the standard output.

  WORKAROUND: Disable the tracing function, unless it is necessary. The tracing function is intended for debugging purposes. If enabled for extended periods of time, tracing can decrease performance and slow the processing of the product considerably. Alternatively, you can delete the trace files created by the previous user.
- If you set the report_output_to_server = y attribute in the install_solaris_patch command stanza, the following message is written in the software package log file when the undo operation of the patch is performed:

  ```
  "pkgadd: ERROR: checkinstall script did not complete successfully"
  ```

  This is a known and documented problem related to the fact that the patchadd, the patchrm, and the pkgadd commands sometimes use the CHECKINSTALL script to complete the operation and this scripts runs as NOBODY on the target system.

  The following suggestion can be found in the Solaris Operating Environment Frequently Asked Questions section at the (http://www.sun.com/bigadmin/content/misc/solaris2faq.html) Web site:

  ```
  You can workaround this in two ways, one is to make sure that the user
  "nobody" can read all patch files and execute a "pwd" in the patch directory
  or add an account "install" to /etc/passwd:
  install:x:0:1:installpatch braindamage:/:/bin/true
  Installpatch and patchadd use "nobody" as a fallback if it cannot find \
  the "install" user.
  ```
- Software Package Editor does not launch using a standard VGA adapter

  On Windows 2000, and Windows XP platforms, the Software Package Editor GUI installed on an endpoint cannot be launched if only the default VGA graphics driver is installed.
- In an OS/400® environment, the wildcard character (*) is supported only if it is used by itself. For example, you can specify to retrieve all files in a directory using just the (*) wildcard character, but you cannot specify to retrieve files that match the following pattern: data.*.sh.
- The data moving send operation from endpoint to endpoint is not supported if the file to be sent originates from an OS/400 native file system.
- On Linux platforms, the DSL GUI dialog boxes appear too big.

  Set a screen resolution of 1024 x 768 pixels.
- The number of parameters that can be used in before and after programs can vary depending on the number of parameters allowed by the command line interpreter of the operating system.

- The results of the dev_cmstatus_query query for packages containing more than one device action might not be consistent with the package actual state.

  Workaround: Create packages containing only one device action.
- On Terminal Server, the administrative GUIs cannot be launched.
- In the Software Package Editor, the WPAPreSharedKey key of the MO_WLAN Nokia managed object does not work correctly.

## Activity Planner

The following limitations apply to Activity Planner:

- In the Activity Plan Editor, when specifying target names for activities or plans, the string length must not exceed 250 characters for all target types, except for the List of Target Names, which has no character limitation.
- Activity Planner might not start on HP-UX 11. This is due to a limitation of the HP-UX platform.

  WORKAROUND: Set the JAVA_COMPILER variable to NONE in the Tivoli environment variables. This setting disables the Java compiler. As a result, the Activity Planner performance might slow down. For more information on modifying Tivoli environment variables, refer to *Tivoli Management Framework: Reference Manual*.
- If you create an activity plan with conditioned activities to be distributed to devices, each software package in the activity plan must contain only one device action. If the package contains more than one device action, the status of the plan might be inconsistent with the package actual status.

## Change Manager

The following limitations apply to Change Manager:

- If you create a reference model to be distributed to devices, each software distribution element in the reference model must contain only one device action.
- Change Manager is not able to detect dependencies between installed software packages when performing a full synchronization. Change Manager lacks any conditioning for the actions it creates in these instances, and synchronization is likely to produce a list of actions against Software Distribution elements that do not account for these undetected dependencies. This occurs because the queries against the SD_INST table in the Inventory database that Change Manager uses cannot detect dependency relationships between installed software packages. This presents a problem in instances such as implementing a remove action for a software package. Removing a software package requires that the package has no dependencies on it. If another package depends on the package you want to remove, the remove action will fail. For example, if software package B depends on software package A, you cannot remove software package A without first removing software package B.

  Workaround: You must import the activity plan into the Activity Plan Editor and manually insert the required conditioning between the associated Software Distribution activities. This requires that you know the exact relationships between software packages in order to correctly add the conditions. Once you have introduced this conditioning, you can submit the activity plan for execution.

## Pristine Manager

The following limitations apply to Pristine Manager:

- When you resize or hide columns of tables in GUI windows, for example, the Server Manager window, you cannot go back to the original columns. This is due to a Java limitation. To fix the problem, resize the whole window and the columns reappear.

## Resource Manager

The following limitations apply to Resource Manager:

- If two interconnected regions contain two resource groups with the same name, any changes performed on one resource group are also applied to the other.
- In environments with interconnected Tivoli regions and a shared Inventory database, you must register the endpoint where the Tivoli Web Gateway is installed with all Tivoli regions to maintain data consistent between Tivoli Resource Manager GUI and CLI.

## Automated Patch Management

The following limitation applies to Automated Patch Management:

- APAR IZ01088: If you are using Tivoli Configuration Manager version 4.2.3 fix pack 4 or later, the Windows Server Update Services (WSUS) server version 3.0 is not supported. Use the WSUS server version 2.1.
- Defect 178955: Performance of historical data queries are strictly related to the size of the historical table. This size can affect the response time, so stored historical data needs to be maintained by the database administrator to have a tuned and optimal usage of the reporting command line. In particular, Sybase performance is more affected than DB/2 and Oracle when dealing with historical data queries. This is due to the internal database architecture in managing temporary space, which is heavily used when building output for complex queries. Therefore, on Sybase try to limit the use of the reporting command line to get historical information or it might not complete successfully.
- Defect 54429: The WebSphere admin console installed with the Automated Patch Management component does not work.
- Defect 54950: The **wsecrprt** command with the **-t** and **-T** options does not work correctly on Informix databases.
- Defect 54957: Automation Server unable to parse Qnumber in ApprovedItems.txt file for patch 814079, and therefore cannot resolve patch_id. For any vulnerability where the string reported in the ApprovedItems.txt file generated by SUS does not contain the Qnumber, then the Automation Server is unable to resolve the value of the related patch_id and reports a value of ??? in the Automation Server database.
- Defect 55005: The workflow might return a timeout error during the creation of a high number of activity plans, especially if you specified that a plan must be created for each patch id. Despite the error returned by the workflow, the plan creation might complete successfully after the timeout has expired. Check the Configuration Manager Automation Server console for the workflow in **failed** status, as described in *IBM Tivoli Configuration Manager: Patch Management Guide*. If you configured the **email_notification_address** key with the **wseccfg** command, the following error messages are contained in the mail delivered to the Administrator:

  ```
  Failure occurred during patch preparation. Error message:
  COPDEX040E An unexpected deployment engine exception.
  COPCOM116E The operation timed out. occurred.
  ```

  The plan list contained in the mail might not be complete. To verify whether all required plans have been created, use the **wlstpln** command or the Activity

Planner GUIs and check the date and time in the plan names. For more information on the Activity Planner commands and GUIs, refer to *IBM Tivoli Configuration Manager: User's Guide for Deployment Services.*

## Software problems and workarounds

This section contains subsections for general IBM Tivoli Configuration Manager, version 4.3.1 software problems and workarounds grouped according to the following general categories:



### General

The following are software problems and workarounds that affect several IBM Tivoli Configuration Manager components and services:

- If you are running a database with multiple instances that requires the login to specify @instance_name, you should run the **wrimtest** command following a custom install. You can resolve any user ID or password connection errors with the **wsetrim** command.
- Pristine tool for Windows XP Professional platform

  The response file supplied by Microsoft that is used to install the Windows XP Professional platform using the pristine tool does not function correctly. An incident report (SRZ020819000580) is open with Microsoft Corporation.
- Defect 51414: On Microsoft platforms, if the Configuration Manager images are located on a remote directory that is not shared and you run the ISMP installation, the Java Virtual Machine fails to initialize.

  WORKAROUND: Map the directory where the Configuration Manager images are located.

### Installation

The following are software problems and workarounds that apply to the installation of IBM Tivoli Configuration Manager components:

- Defect 61184: ISMP installation problem on Windows 2003 platforms

  When the InstallShield MultiPlatform (ISMP) installation on Windows 2003 platforms completes the Tivoli Management Framework installation, you are prompted to restart the computer. After restarting the computer, the following problem might occur: the installation wizard GUI is automatically launched but the Step List window does not display any information.

  Workaround: Close the installation panel, launch again the setup.exe, and select the ″Resume installation″ option.
- Defect 228340: Inventory Server component installation

After installing the Inventory Server component, the default policy region, which is typically the region with the Tivoli server hostname, is enabled for the integration with Tivoli License Manager. Verify that the integration has been enabled by running the command:

```
winvmgr -p <PolicyRegion_name> -d
```

Where:

*PolicyRegion_name*
Represents the name of the default policy region.

and ensure that the `inv_tlm_enabled` key is set to TRUE.

Workaround: If this key was set to TRUE, run the following command to avoid possible issues in your Tivoli environment:

```
winvmgr -p <PolicyRegion_name> -c inv_tlm_enabled=n
```

Where:

*PolicyRegion_name*
Represents the name of the default policy region.

- HP-UX CD mounting options

  When installing IBM Tivoli Configuration Manager on HP-UX platforms, the installation fails and displays the following error:

  ```
  License files are not located.
  ```

  Workaround: When installing IBM Tivoli Configuration Manager on HP-UX platforms, you must use the **mount** command to mount the product installation CDs as follows:

  ```
  mount -F cdfs /dev/dsk/cXtYdZ /cddisk
  ```

  Where:

  *cddisk* Represents the temporary directory created to save the contents of each product CD.

  *cXtYdZ*
  Must be replaced with the real values obtained by running the **ioscan -funC disk** command, before installing IBM Tivoli Configuration Manager.

## CM Extension for Tivoli License Manager

The following are software problems and workarounds that apply to the CM Extension for Tivoli License Manager component:

- Defect 228333: If you plan to use the CM Extension for Tivoli License Manager on Solaris and HP endpoints, notice that the default Tivoli Management Framework`lcfd cache_limit` on these endpoints is not high enough to contain all the binaries and libraries which are downloaded when using the CM Extension for Tivoli License Manager component.

  Workaround: Enlarge the `lcf cache_limit` by setting a value equal or greater than 100480000 bytes. For details about how to enlarge the `lcf cache_limit`, see the Tivoli Management Framework documentation.

## Inventory

This section describes known defects in the Inventory component. Note that this might not be a complete list of defects. Current® defects and workarounds include the following:

- If you upgrade to Tivoli Configuration Manager, version 4.3.1 from a Tivoli Configuration Manager version older than 4.2.3, Fix Pack 2, the first scan on endpoints fails due to a number of mismatches in the mif file attribute, because the .mif file structure changed since 4.2.3, Fix Pack 2. To work around this problem, delete the previous *.bk* and *.mif from the inv/SCAN directory before running a new scan. You can perform this operation by inserting the delete statements (for example, "rm *.bk*" or "del *.bk*") in the before scan script section of the InventoryConfig profile.
- Defect 132262: Some control options do not work for Activity Plan Manager

  The Inventory Activity Plan Manager plug-in cannot cancel a scan.

  Use the **wcancelscan** command instead of the Inventory Activity Plan Manager plug-in to cancel a scan.
- Defect 142457: Scalable Collection Service commands should give better error messages for connected Tivoli regions.

  If you are working in a Tivoli management region where the InvDataHandler objects have been exchanged, you must qualify the object name of the inventory data handler for the **wcollect** and **wcstat** commands, as in the following example:

  ```
  wcollect @InvDataHandler:inv_data_handler#lab80104-region
  ```
- If the Inventory GUI does not start and the DEBUG3 log file contains the message `Abnormal program termination`, the system may not have enough memory for the default memory setting of the Inventory GUI. Perform the following steps:

  1. Edit the **$BINDIR/TME/INVENTORY/inv_gui.sh** file.
  2. Change the MEM parameter on line 126 from `MEM=256m` to `MEM=128m`.
  3. Restart the Inventory GUI.

  If the Inventory GUI still does not start, change the MEM parameter to `MEM=64m`.
- DROP tables in the schema .sql scripts can cause warning messages when you run the scripts. Ignore these warning messages.
- In UserLink, if the UserLink for TME 10™ link does not work, delete the plus (+) sign at the end of the URL.
- APAR IY86960: When running an Inventory scan on an HP-UX 11.11 endpoint having PA_RISC 1.1 architecture, the `wscanner -d all -l high` command causes the following error message:

  ```
  Executable file incompatible with hardware. This is a Tivoli Common
  Inventory Technology (CIT), as CIT is compiled using
  the PA_RISC 2.0 architecture.
  ```
- **APAR IY82474**:
  - When you run the `inv_db2_mvs_custom_421_FP03.sql` script the `alter table NATIV_SWARE alter column PACKAGE_NAME set data type varchar(128)` instruction might not alter the `NATIV_SWARE` table. To avoid this problem you must perform the following steps:

    1. Backup the `NATIV_SWARE` table and the related views.
    2. Delete the `NATIV_SWARE` table and the related views.
    3. Recreate `NATIV_SWARE` table and the related views.
    4. Restore the data into the `NATIV_SWARE` table.
  - If the table `LAST_SIG_UPDATE` is not updated with the SQL statement: `insert into LAST_SIG_UPDATE (UPDATE_TABLE, LAST_UPDATE) values ('5', 6)`, the Inventory software scan may not insert data into the DB2 database on MVS.

## Software Package Editor

This section describes known defects in the Software Package Editor component. Note that this might not be a complete list of defects. Current defects and workarounds include the following:

- Defect IY71166: Software Package Editor GUI does not start on a Terminal Server Windows 2003.

  Workaround: Open Software Package Editor using the Tivoli desktop.

## Change Manager

This section describes known defects in the Change Manager component. Note that this might not be a complete list of defects. Current defects and workarounds include the following:

- Defect IY70318: If you are using Change Manager based on Microsoft SQL Server and the primary language is not set to English, you might have some problems with the date format (for example month is taken instead of day).

  Workaround: Change the collate to SQL_Latin1_General_CP1_CI_AS and the primary language of the user owning the Change Manager tables to English.

## Patch Management

This section describes known defects in the Patch Management component. Note that this might not be a complete list of defects. Current defects and workarounds include the following:

- **Defect 58552**: When running an activity plan to install a patch on a Windows 2000 Advanced Server, the patch installation might fail with exit code 1. The problem is generated by the way parameters are parsed by the operating system.

  As a workaround to successfully install the patch, you must modify the `inhibit_parsing` key. Inhibit parsing prevents the standard parsing of the values passed to the patch installation script. To modify the value of the `inhibit_parsing` key, perform the following steps:

  1. In the Patch Management policy region locate the patch you are trying to install and unbuild it by converting the software package
  2. Launch the Software Package Editor and edit the Execute Program object named `$(temp_dir)\Hotfix\$(EXE)`
  3. Select **Advanced**
  4. Clear the **Inhibit Parsing** check box
  5. Save and close the modified software package
  6. Rebuild the software package by converting it
  7. Distribute the software package only to the endpoints on which the distribution failed previously.

  Refer to the *IBM Tivoli Configuration Manager: Reference Manual for Software Distribution* and *IBM Tivoli Configuration Manager: User's Guide for Software Distribution* for more information about the inhibit parsing option.
- Defect 53932: In case the Automation Server machine cannot connect to the Internet or a proxy server is located between Tivoli Configuration Manager Automation Server and the Windows Web site, use the following workaround.

  Workaround:

  1. Manually download the mssecure.cab file and move it to a workstation where an HTTP server is running.
  2. Save the mssecure.cab file granting unrestricted HTTP get access.

3. Modify the MSSecure_Server and mscab_url values in the Tivoli Configuration Manager Automation Server console to retrieve the mssecure.cab file. To modify the MSSecure_Server and mscab_url values, perform the following steps:
   a. Log on the Tivoli Configuration Manager Automation Server console as described in *IBM Tivoli Configuration Manager: Patch Management Guide*.
   b. From the **Data center assets and resources** tab, click **Inventory » Servers » MS-SUS** and select the existing MSSecure server name. This displays the MSSecure server page.
   c. On the MSSecure server page, click the **Management** menu on the top right and select **To Maintenance**. This brings the server offline and turns the maintenance mode on. The MSSecure server status changes from **available** to **in maintenance**.
   d. On the same page, click the **Edit** menu on the top right and select **Properties**. This allows you to enter the new MSSecure server name.
   e. Enter the new MSSecure server name and click **Save**.
   f. Click the **Management** menu again and select **Out of Maintenance**. This brings the server online again and turns the maintenance mode off.
   g. Select the **System configuration and workflow management** tab and click **Configuration**. This displays the Data Center Configuration page.
   h. From the Data Center Configuration page, click the **Variables** tab. This displays the User defined variables page.
   i. On the User defined variables page, find the MSSecure_Server key and click the pointer associated with that key.
   j. Enter the new MSSecure server name in the value field and click **Save**.
   k. On the MSSecure server page, click the **Variables** tab. This displays the User defined variables page.
   l. On the User defined variables page, locate the **mscab_url** key and click the pointer associated with that key.
   m. Enter the virtual path defined on the HTTP server where the mssecure.cab file is located. This path must start with a forward slash (/) and is obtained by removing the `http://`*`new_server_name`* section from the complete URL.
   n. Click **Save**.

- Defect 54272: The Tivoli Configuration Manager Automation Server installation might fail if ITDS keys in the `tpm_install.req` file are not correctly set.

  Workaround: Verify that the following keys are correctly set: `ITDS_DB_ADMIN_USER`, `ITDS_DB_NAME`, `DB2_ADMIN_USER`, `ITDS_DB_HOME`, and `ITDS_ADMIN_DN BASE_DN`.

- Defect 54548: Automated Patch Management cannot manage patches for Media Player with more than one entry on the SUS server for the same Qnumber that applies to different versions of the product for the same operating system. The problem occurs if you have to approve and distribute more than one patch with these characteristics.

  Workaround: To manage the Media Player patch for Qnumber 320920, perform the following steps:

  1. Disable the automatic removal of previous patches by entering the following command:

     ```
     wseccfg -s delete_packages=no
     ```

  2. Do not approve the patch on the SUS server.
  3. Manually download the patch from the SUS server or Microsoft Web site.

4. Transfer the patch files to the source host using the **wtransfer** command.
5. Manually create the software package for the patch using the **wsecgensp** command with the **-q 0** option because the related query must not be created. The name assigned to the package is not relevant.
6. Manually create the query that returns the list of targets to which the patch applies. The query should be similar to the following:

```
SELECT distinct cpt.TME_OBJECT_LABEL FROM PM_PATCH_INFO AS PAI,
                  PM_PRODUCT_INFO as PRI,
                  COMPUTER as CPT
                  WHERE pai.Qnum='320920'
                  AND pri.PRODUCT_CODE='MP'
                  AND pri.PROD_MAJOR_VER='6'
                  AND pri.PROD_MINOR_VER='4'
                  AND pri.PROD_LANG='ENUS'
                  AND pri.OS_BASE_NAME='winxp'
                  AND pri.OS_ARCHITECTURE='x86'
                  AND pri.OS_TYPE='wks'
                  AND pri.OS_SUBTYPE='pro'
                  AND (pai.Status='NOT Found' OR pai.Status='Note')
                  AND cpt.COMPUTER_SYS_ID = pai.COMPUTER_SYS_ID
                  AND pri.COMPUTER_SYS_ID = cpt.COMPUTER_SYS_ID
```

   **Note:** You can perform the same steps to manage this problem with patches for Internet Explorer.
7. Run the query to retrieve the list of eligible targets.
8. Distribute the software package created in step 5 to the eligible targets.

- Defect 54572: For machines in the Windows 2000 family, some patches available on the SUS server for Internet Explorer apply only to Internet Explorer Service Pack 1. Any endpoints in the environment where these patches are missing and with Internet Explorer 6.0 GOLD installed cannot be correctly addressed by Automated Patch Management. Automated Patch Management cannot discriminate between application service packs, therefore a software package containing the patch is created for all endpoints with Internet Explorer installed, regardless of the service pack level. The software packages are distributed to the eligible endpoints. The activity plan results and Software Distribution logs might indicate that the package was installed successfully.

  Workaround: Run the **wsecrprt** command after the activity plan has completed to verify whether the patch was correctly installed. For more information on this command, refer to *IBM Tivoli Configuration Manager: Patch Management Guide*.
- Defect 54903: For Windows XP Service Pack 2, patches with Qnumber 867282 and Qnumber 890923 are listed as Internet Explorer vulnerabilities on the SUS server and as operating system vulnerabilities in the mssecure.cab file dated April 12th 2005. Due to this misalignment, Automated Patch Management cannot correctly manage these patches.

  Workaround: To manually prepare the patches, perform the following steps:
  1. Disable the automatic removal of previous patches by entering the following command:

     ```
     wseccfg -s delete_packages=no
     ```
  2. Do not approve the patch on the SUS server.
  3. Manually download the patch from the SUS server or Microsoft Web site.
  4. Transfer the patch files to the source host using the **wtransfer** command.
  5. Manually create the software package for the patch using the **wsecgensp** command with the **-q 1** option to create the related query. Create the patches as operating system patches. The name assigned to the package is not relevant.

The patches are included in the list of patches to be installed when the related workflow runs and one or more activities in the generated activity plan are added for these patches. No further user intervention is necessary.

- Defect 54923: The usage of the `wsecrprt` command is incorrect because it is possible to specify multiple option qualifiers.

  Workaround: Use the `wsecrprt` command specifying all the option qualifiers needed. For example run the command `wsecrprt -sM -sF -sN -sW` in order to report successfully the patches discovered in missing state, in found state, with a note, and with a warning.

## Resource Manager

Defect 40002: The `mgmt.delete_ini_after_processing` keyword is missing in the *TWG_HOME*`/agents/wince/PocketPC/IBM_DeviceAgent.ini.sample` file. This is due to a Device Manager Server problem.

Workaround: Insert the `mgmt.delete_ini_after_processing` keyword in the *TWG_HOME*`/agents/wince/PocketPC/IBM_DeviceAgent.ini.sample` file manually. Set this keyword to no if you want to avoid the deletion of the `IBM_DeviceAgent.ini.sample` file after the agent installation.

## Integration with Tivoli Provisioning Manager for Software

The following are software limitations that affect the integration with Tivoli Provisioning Manager for Software:

- Defect 60898: Tivoli Provisioning Manager for Software, version 5.1.1.1 with IF00005 requires DB2, version 8.2 and later releases of the same version. To work around this problem, specify DB2version as 8.2 at TMF infrastructure mapping even if the real DB2 version is 9.5.
- Defect 60955: If you are running an Inventory report on an endpoint installed on Red Hat Enterprise Linux, the version of the operating system might be returned incorrectly.
- Defect 60956 : When using the Tivoli Provisioning Manager for Software Web Interface, the Subscription query in the Reports view, an SQL exception might be returned. However, the same procedure works correctly from the Tivoli Configuration Manager environment.
- Defect 60738: If you publish a software package to a number of depots and afterwards unpublish the software package from a single depot, the software package is not unpublished. As a workaround, unpublish the software package from all depots. In this case, the operation works correctly.

# Chapter 4. Documentation notes

This chapter contains information changes and corrections that apply to the documentation units for IBM Tivoli Configuration Manager, version 4.3.1.

## Documentation Problems and Corrections

These are the information changes and corrections that apply to the documentation units for IBM Tivoli Configuration Manager, version 4.3.1.

### User's Guide for Inventory

This section contains changed information for the User's Guide for Inventory:

- **Defect 61048**: In Chapter 5. Collecting custom information with Inventory, in section named "Using signatures" the current paragraph:

  These signatures are stored in the `$BINDIR/../generic/inv/SIGNATURES` directory in the IBM_SoftwareCatalog.xml file.

  should be replaced with the following text:

  These signatures are stored in the `/signatures` directory on the product CD 5 in the IBM_SoftwareCatalog.xml file.

- **Defect 61048**: In Chapter 5. Collecting custom information with Inventory, in section named "Using signatures" the current paragraph:

  To use these signatures, you must install them with the **winvsig** command as shown in the following example:

  ```
  winvsig -a -f $BINDIR/../generic/inv/SIGNATURES/IBM_SoftwareCatalog.xml
  ```

  should be replaced with the following text:

  To use these signatures, you must install them with the **winvsig** command as shown in the following example:

  ```
  winvsig -a -f signatures_path/IBM_SoftwareCatalog.xml
  ```

  Where:

  *signatures_path*
  : Represents the path where you saved the signature files copying them from CD 5.

### Planning and Installation Guide

This section contains changed information for the Planning and Installation Guide:

- **Defect 61132**: In Chapter 4. Working With Repositories and Queries, in section named "Upgrade and migration considerations" the current paragraph:

  The images of IBM Tivoli Configuration Manager Version 4.3.1 contain all the .SQL scripts released with any 4.2.2 and 4.2.3 fix pack, up to 4.2.2-TIV-TCM-FP0006. You must run a subset of these scripts depending on the database vendor and the starting IBM Tivoli Configuration Manager release or fix pack.

  should be replaced with the following text:

  The images of IBM Tivoli Configuration Manager Version 4.3.1 contain all the .SQL scripts released with any 4.2.2 and 4.2.3 fix pack, up to

4.2.2-TIV-TCM-FP0006. You must unzip and run a subset of these scripts depending on the database vendor and the starting IBM Tivoli Configuration Manager release or fix pack.

- **Defect 61132**: In Chapter 4. Working With Repositories and Queries, in section named "Upgrading From IBM Tivoli Configuration Manager version 4.2.2" before step 1 the following text should be added:

  Unzip all the migration scripts which are provided in a .TAR file.

- **Defect 61132**: In Chapter 4. Working With Repositories and Queries, in section named "Upgrading From IBM Tivoli Configuration Manager version 4.2.3" between step 1 and step 2 of the procedure the following text should be added:

  Unzip all the migration scripts which are provided in a .TAR file.

- **Defect 61132**: In Chapter 4. Working With Repositories and Queries, in section named "Running the Schema Scripts" the current paragraph:

  For an upgrade, the schema scripts are located on IBM Tivoli Configuration Manager Installation, version 4.3.1 in the */SQL/migr* directory.

  should be replaced with the following text:

  For an upgrade, the schema scripts are located on IBM Tivoli Configuration Manager Installation, version 4.3.1 in the */SQL/migr/migr_sql.tar* directory.

## License Management with License Compliance Manager Guide

This section contains changed information for the License Management with License Compliance Manager Guide:

- **Defect 23063**: In Chapter 4. Installing License Compliance Manager, in section named "Preparing the administration server database for the license management extension" the current note at the end of step 12 of the procedure:

  Note: If you choose the Activate the Configuration License Manager Extension feature, the License Compliance Manager server installation fails.

  should be replaced with the following text:

  Note: When installing the License Compliance Manager administration server database, the installation might fail during the ″Migrating Configuration Manager catalog" step. This problem is caused by the newest IBM Software Catalog releases. If this problem occurs, see the following technote:

  http://www-01.ibm.com/support/docview.wss?rs=0&q1=tech%20note%20tlcm&uid=swg21326244&loc=en_US&cs=utf-8&cc=us&lang=en

- **Defect 23063**: In Chapter 4. Installing License Compliance Manager, in section named "Preparing the administration server database for the license management extension" the current paragraph:

  **What to do next**

  You can now proceed to install the administration server and catalog manager. Refer to IBM Tivoli License Compliance Manager: Planning, Installation, and Configuration.

  should be replaced with the following text:

  **What to do next**

  You can now proceed to install the administration server and catalog manager. Before installing the administration server, ensure you have selected the option to activate the Configuration Manager license management extension, as described in step 4. Refer to IBM Tivoli License Compliance Manager: Planning, Installation, and Configuration.

# Appendix. Support information

This section describes the following options for obtaining support for IBM products:

- "Searching knowledge bases"
- "Obtaining fixes"
- "Contacting IBM Software Support" on page 48

## Searching knowledge bases

If you have a problem with your IBM software, you want it resolved quickly. Begin by searching the available knowledge bases to determine whether the resolution to your problem is already documented.

### Search the information center on your local system or network

IBM provides extensive documentation that can be installed on your local computer or on an intranet server. You can use the search function of this information center to query conceptual information, instructions for completing tasks, reference information, and support documents.

### Search the Internet

If you cannot find an answer to your question in the information center, search the Internet for the latest, most complete information that might help you resolve your problem. To search multiple Internet resources for your product, expand the product folder in the navigation frame to the left and select **Web search**. From this topic, you can search a variety of resources including:

- IBM technotes
- IBM downloads
- IBM Redbooks®
- IBM developerWorks®
- Forums and newsgroups
- Google

## Obtaining fixes

A product fix might be available to resolve your problem. You can determine what fixes are available for your IBM software product by checking the product support Web site:

1. Go to the IBM Software Support Web site (http://www.ibm.com/software/support).
2. Under **Products A - Z**, select your product name. This opens a product-specific support site.
3. Under **Self help**, follow the link to **All Updates**, where you will find a list of fixes, fix packs, and other service updates for your product. For tips on refining your search, click **Search tips**.
4. Click the name of a fix to read the description and optionally download the fix.

To receive weekly e-mail notifications about fixes and other news about IBM products, follow these steps:

1. From the support page for any IBM product, click **My support** in the upper-right corner of the page.
2. If you have already registered, skip to the next step. If you have not registered, click register in the upper-right corner of the support page to establish your user ID and password.
3. Sign in to **My support**.
4. On the My support page, click **Edit profiles** in the left navigation pane, and scroll to **Select Mail Preferences**. Select a product family and check the appropriate boxes for the type of information you want.
5. Click **Submit**.
6. For e-mail notification for other products, repeat Steps 4 and 5.

For more information about types of fixes, see the *Software Support Handbook* (http://techsupport.services.ibm.com/guides/handbook.html).

## Contacting IBM Software Support

IBM Software Support provides assistance with product defects.

Before contacting IBM Software Support, your company must have an active IBM software maintenance contract, and you must be authorized to submit problems to IBM. The type of software maintenance contract that you need depends on the type of product you have:

- For IBM distributed software products (including, but not limited to, Tivoli, Lotus®, and Rational® products, as well as DB2 and WebSphere products that run on Windows or UNIX operating systems), enroll in Passport Advantage® in one of the following ways:
  - **Online**: Go to the Passport Advantage Web page (http://www.lotus.com/services/passport.nsf/WebDocs/ Passport_Advantage_Home) and click **How to Enroll**
  - **By phone**: For the phone number to call in your country, go to the IBM Software Support Web site (http://techsupport.services.ibm.com/guides/contacts.html) and click the name of your geographic region.
- For IBM eServer™ software products (including, but not limited to, DB2 and WebSphere products that run in zSeries, pSeries®, and iSeries® environments), you can purchase a software maintenance agreement by working directly with an IBM sales representative or an IBM Business Partner. For more information about support for eServer software products, go to the IBM Technical Support Advantage Web page (http://www.ibm.com/servers/eserver/techsupport.html).

If you are not sure what type of software maintenance contract you need, call 1-800-IBMSERV (1-800-426-7378) in the United States or, from other countries, go to the contacts page of the IBM Software Support Handbook on the Web (http://techsupport.services.ibm.com/guides/contacts.html) and click the name of your geographic region for phone numbers of people who provide support for your location.

Follow the steps in this topic to contact IBM Software Support:

1. Determine the business impact of your problem.
2. Describe your problem and gather background information.
3. Submit your problem to IBM Software Support.

## Determine the business impact of your problem

When you report a problem to IBM, you are asked to supply a severity level. Therefore, you need to understand and assess the business impact of the problem you are reporting. Use the following criteria:

| | |
|---|---|
| **Severity 1** | **Critical** business impact: You are unable to use the program, resulting in a critical impact on operations. This condition requires an immediate solution. |
| **Severity 2** | **Significant** business impact: The program is usable but is severely limited. |
| **Severity 3** | **Some** business impact: The program is usable with less significant features (not critical to operations) unavailable. |
| **Severity 4** | **Minimal** business impact: The problem causes little impact on operations, or a reasonable circumvention to the problem has been implemented. |

## Describe your problem and gather background information

When explaining a problem to IBM, be as specific as possible. Include all relevant background information so that IBM Software Support specialists can help you solve the problem efficiently. To save time, know the answers to these questions:

- What software versions were you running when the problem occurred?
- Do you have logs, traces, and messages that are related to the problem symptoms? IBM Software Support is likely to ask for this information.
- Can the problem be re-created? If so, what steps led to the failure?
- Have any changes been made to the system? (For example, hardware, operating system, networking software, and so on.)
- Are you currently using a workaround for this problem? If so, please be prepared to explain it when you report the problem.

## Submit your problem to IBM Software Support

You can submit your problem in one of two ways:

- **Online**: Go to the ″Submit and track problems″ page on the IBM Software Support site (http://www.ibm.com/software/support/probsub.html). Enter your information into the appropriate problem submission tool.
- **By phone**: For the phone number to call in your country, go to the contacts page of the IBM Software Support Handbook on the Web (techsupport.services.ibm.com/guides/contacts.html) and click the name of your geographic region.

If the problem you submit is for a software defect or for missing or inaccurate documentation, IBM Software Support creates an Authorized Program Analysis Report (APAR). The APAR describes the problem in detail. Whenever possible, IBM Software Support provides a workaround for you to implement until the APAR is resolved and a fix is delivered. IBM publishes resolved APARs on the IBM product support Web pages daily, so that other users who experience the same problem can benefit from the same resolutions.

For more information about problem resolution, see Searching knowledge bases and Obtaining fixes.

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- ZLib
- Xerces
- Expat
- fedora AbstractCellEditor.java
- fedora AbstractTreeTableModel.java
- fedora JTreeTable.java
- fedoraTreeTableModel.java
- fedoraTreeTableModelAdapter.java

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- TreeTableModel.java
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