IBM Tivoli Netcool/System Service Monitors
Version 4.0.1
for AIX, HP-UX, Linux, Solaris, and Windows

Patch Installation Guide

IBM

Contents

Tables

About this guide

This guide describes how to install patches for Netcool/SSM and the Netcool/ASM suite of products.

Who should read this guide

This guide is intended for network administrators and engineers who install and use Netcool/SSM to monitor networks and hosts. It provides detailed, cross-platform information about the tools, functions, and capabilities of Netcool/SSM. Use this guide to assist you in designing and configuring your network management and monitoring environment.

To use Netcool/SSM effectively, and to understand the information in this guide, you should already be familiar with network technologies, network management practices, and the Simple Network Management Protocol (SNMP).

Publications

This section lists publications in the Netcool/SSM library. It also describes how to access Tivoli publications online and how to order them.

Documentation library

The following documents are available in the Netcool/SSM library:

* *Netcool/SSM Administration Guide*

  Provides information about installing and using Netcool/SSM.

* *Netcool/SSM Reference Guide*

  Provides detailed reference material covering the subagents and MIB modules included in Netcool/SSM.

* *Netcool/SSM Patch Installation Guide*

  Provides instructions on installing patches to Netcool/SSM.

* *Netcool/SSM Release Notes*

  Provides the latest information about Netcool/SSM.

Accessing terminology online

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

The IBM Terminology Web site consolidates the terminology from IBM product libraries in one convenient location. You can access the Terminology Web site at the following Web address:

http://www.ibm.com/ibm/terminology

Accessing publications online

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 Product Documents Alphabetical listing window, click **M** to access all IBM Tivoli Monitoring product manuals.

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 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, contact your software account representative to order Tivoli publications. To locate the telephone number of your local representative, perform the following steps:

1. Go to http://www.ibm.com/planetwide/
2. Select the letter that your country starts with and click the name of your country. A list of numbers for your local representatives is displayed.

Tivoli technical training

For information about Tivoli technical training, 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 a number of 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.

Conventions used in this guide

This guide uses several conventions for operating system-dependent commands and paths, special terms, actions , and user interface controls.

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 considerations

All command line formats and examples are provided for both the standard UNIX shell and the Windows command-line. UNIX is case-sensitive. You must type commands in the case shown in the book.

Patch installer

Use the Netcool/SSM patch installer to patch an existing Netcool/SSM installation, list the patches already installed on Netcool/SSM, or remove an installed patch.

Patch files

Netcool/SSM patches are distributed as single executable files that contain all the components required to patch a Netcool/SSM installation.

Patch files are easy to identify by their filename. The filename itself indicates the product for which the patch is intended, the purpose of the patch and the target platform.

On Windows systems, the patch filenames have the format:

*product_name-patch_name-*win32.exe

For example, `ssm400-cpupatch-win32.exe` is the Windows CPU patch for Netcool/SSM version 4.0.0.

On UNIX systems, the patch filenames have the format:

product_name-patch_name-platform.run

For example, `ssm321-cpupatch-solaris.run` is the Solaris CPU patch for Netcool/SSM version 3.2.1.

Listing patch contents

You can use the patch installer to list the contents of a patch.

The patch installer provides the following information about each component contained in a patch:

- Component name
- Component version
- Prerequisites for the component
- Files contained in the component

Note: This facility is only available on patches for Netcool/SSM version 3.1 and later.

To obtain a list of components on Windows systems, use the command:

*product_name-patch_name-*win32.exe `listcomponents`

To obtain a list of components on UNIX systems, use the command:

product_name-patch_name-platform.run `listcomponents`

Installing a patch

To install a patch, run the patch installer from a command line.

About this task

On Windows systems, the command for running the patch installer has the general format:

product_name-patch_name-win32.exe [*parameter=value* ...]

On UNIX systems, the command for running the patch installer has the general format:

product_name-patch_name-platform.run [*parameter=value* ...]

The patch installer supports a number of command-line parameters, as listed in Table 1.

Table 1. Patch installer command-line parameters

Parameter	Value	Description
installdir	string	Specifies the installation directory of the product that you wish to patch. If the directory or filename contains space characters, enclose the entire string in double-quote characters ("). If you do not specify this parameter, the patch installer attempts to detect the installation automatically.
force	y | n	Selects whether to force the patch onto the installation: y - Forces patch installation. No version verification is performed. n - Does not force patch installation. Version verification is performed before installing the patch. Default - n **Note:** Using this parameter is not recommended unless you have been advised by IBM support to do so.
silent	y | n	Selects silent patch mode: y - Installs the patch in silent mode. The installer does not display any output during patch installation; however, it still provides a return code (0 indicates success). n - Installs the patch in interactive mode, prompting you for any required installation parameters not supplied in the command-line, and displaying output to the console. Default - n
backup	y | n	Selects whether a backup of the existing components is performed before installing the patch: y - Backs up existing components prior to installing the patch. This enables the patch to be removed at a later date. n - No backup is made. Using this option prevents you from removing the patch later but it saves disk space. Default - y

Table 1. Patch installer command-line parameters   (continued)

Parameter	Value	Description
listcomponents	n/a	Instructs the installer to list details about each component in the patch. Running the installer with this parameter does not install the patch.
-l	string	Specifies the location and name of the log file in which the patch installer logs details about the installation. If the directory or filename contains space characters, enclose the entire string in double-quote characters ("). If you do not specify this parameter, the patch installer logs the details to the file `patch.log`, located in the `log` directory of the installation.

For example, the following command installs a patch to the Netcool/SSM installation located in the directory `c:\Program Files\netcool` on a Windows system. It uses silent mode, backs up the installed components, and logs details about the installation process in the file `c:\temp\patch_ssm.log`:

```
ssm400-cpupatch-win32.exe installdir="c:\Program Files\netcool" silent=y backup=y
-l"c:\temp\patch_ssm.log"
```

Note: If the target installation is running when you install a patch, the patch installer stops the installation then restarts it again when patch installation is complete.

Listing installed patches

You can obtain a list of the patches currently applied to a Netcool/SSM installation.

About this task

Using the patch manager, `patchman`, which is installed in the product's `bin` directory as part of any patch, you can list all patches that have been applied.

The command for listing patches is `patchman -l`.

Removing a patch

You can remove patches from a Netcool/SSM installation.

About this task

Using the patch manager, `patchman`, which is installed as part of any patch, you can uninstall any patch previously applied to the product.

The command for removing a patch from a installation has the general format:

```
patchman -r "name"
```

Note: It is not possible to remove a patch that was installed without a backup.

Note: If the target Netcool/SSM installation is running when you remove a patch, the patch manager stops the installation then restarts it again when patch removal is complete.

Procedure

To identify and remove a particular patch:

1. Execute the command `patchman -l`.

   The patch manager displays a list of installed patches.
2. Identify the name of the patch you wish to remove and execute the command `patchman -r "`*name*`"` where *name* represents the name of the patch you wish to remove.

Example

For example, to remove the patch `Solaris CPU Patch 1` from a Netcool/SSM installation running on a Solaris system, use the following command:

```
patchman -r "Solaris CPU Patch 1"
```

Patch manager

The patch manager, `patchman`, is installed as part of any patch.

Patch manager commands have the general format:

```
patchman [{parameter [value]} ...]
```

The patch manager supports a number of command-line parameters, as listed in Table 2.

Table 2. patchman command-line parameters

Parameter	Value	Description
`-r`	string	Removes the named patch. If the name of the patch contains space characters, enclose it in double-quote characters ("), for example `"Service Pack 1"`. Patch names are case-sensitive.
`-l`	string	Lists all installed patches whose names match the string. Omitting the string lists all installed patches. String matching is case-sensitive and supports substring matching, for example, `Ser` matches the patch name `Service Pack 1`. If the string contains space characters, enclose it in double-quote characters ("), for example `"Service Pack 1"`.
`-m`	string	Specifies the path and filename of the patch manifest file. This parameter is only required if the patch manager returns the message `Failed to detect manifest location` when executing. This parameter is not required during normal use.
`-h`	n/a	Displays command-line help.
`-p`	string	Specifies the product name (for example, `Netcool/SSM`). This parameter is not required during normal use.

Notices and trademarks

This information was developed for products and services offered in the U.S.A.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not grant you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785 U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing
Legal and Intellectual Property Law
IBM Japan, Ltd.
19-21, Nihonbashi-Hakozakicho, Chuo-ku
Tokyo 103-8510, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation
958/NH04
IBM Centre, St Leonards
601 Pacific Hwy
St Leonards, NSW, 2069
Australia

IBM Corporation
896471/H128B
76 Upper Ground
London SE1 9PZ
United Kingdom

IBM Corporation
2Z4A/101
11400 Burnet Road
Austin, TX 78758   U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this document and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the

names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both:

IBM, the IBM logo, and ibm.com are trademarks or registered trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at http://www.ibm.com/legal/copytrade.shtml.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

 Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

Linux is a trademark of Linus Torvalds in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Other company, product, or service names may be trademarks or service marks of others.

IBM.

Printed in USA