



Release Notes for the Solaris 8 Environment Packages

March 12, 2009

Contents

- [Introduction, page 2](#)
- [Determining Which Solaris Release Version is Loaded on Your System, page 2](#)
- [Log and Spool File Systems Patch, page 3](#)
- [System Security Patch, page 4](#)
- [Hardware Test Package, page 5](#)
- [Solaris 8 Patch Cluster, page 5](#)
- [Solaris 8 DiskSuite Install/Uninstall Scripts, page 6](#)
- [Solaris 8 Return Codes, page 6](#)
- [Installation, page 8](#)
- [Patch Installation, page 8](#)
- [New Features, page 10](#)
- [Known Issues and Operational Recommendations, page 11](#)
- [Solaris Patch CSCOh005 Modification History, page 13](#)
- [Solaris Patch CSCOh013 Modification History, page 14](#)
- [Solaris Patch CSCOh014 Modification History, page 14](#)
- [Solaris Patch CSCOh015 Modification History, page 15](#)
- [Solaris Patch CSCOh016 Modification History, page 16](#)
- [Obtaining Documentation and Submitting a Service Request, page 17](#)



Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

© 2009 Cisco Systems, Inc. All rights reserved.

Introduction

This document describes the Solaris 8 environment patches for the Cisco Media Gateway Controller (MGC) software. These packages might be required as a part of the installation procedures for the following products running on the Solaris 8 platform.


Note

For information on application and installation of the Sun Solaris patches, refer to the *Cisco Media Gateway Controller Software Release 9 Installation and Configuration Guide*.

The currently deployed Solaris patch set is release 2.0(x).


Caution

To maintain tested configurations, do not download packages directly from the Sun website. Although Sun's website may contain later patch versions, you should only apply patches that are provided by Cisco via CD or CCO.

Solaris 8 patches can be downloaded from the following url:

<http://www.cisco.com/cgi-bin/tablebuild.pl/mgc-sol8>

Determining Which Solaris Release Version is Loaded on Your System

To determine the Solaris release version of a package that is installed on your system, use the following command:

pkginfo -l <package instance>

The following shows an example of the **pkginfo** command.

```
hostname% pkginfo -l CSCOh015
  PKGINST: CSCOh015
    NAME: Media Gateway Controller Solaris 8 patch cluster
  CATEGORY: utilities
    ARCH: sparc
  VERSION: 2.0(1)
  BASEDIR: /opt/sun_install
  VENDOR: Cisco System, Inc.
  PSTAMP: 2002/01/07 22:10 GMT (embassy)
  INSTDATE: Jan 07 2002 17:12
    EMAIL: sctac@cisco.com
  STATUS: completely installed
  FILES:   14 installed pathnames
          1 shared pathnames
          2 directories
          4 executables
        135624 blocks used (approx)
```

To determine the Solaris release version of a patch that is not installed on your system, use the following command:

pkginfo -l -d <package instance>.pkg

The following shows an example using the **-d** option with the **pkginfo** command.

```
hostname% pkginfo -l -d CSCOh013.pkg
  PKGINST: CSCOh013
    NAME: Media Gateway Controller Security package compatible with Solaris 2.6 and
  Solaris 8
```

```

CATEGORY: utilities
ARCH: sparc
VERSION: 2.0(1)
BASEDIR: /opt/sun_install
VENDOR: Cisco System, Inc.
PSTAMP: 2001/07/20 17:48 GMT (embassy)
EMAIL: sctac@cisco.com
STATUS: spooled
FILES:    9 spooled pathnames
          2 directories
          2 executables
          5 package information files
          57 blocks used (approx)

```

**Note**

You should always check to ensure that you have the latest required patch version released by Cisco on your system, CD, or file system (if downloaded previously from CCO).

Solaris 8 Environment Packages

The following patches are available:

**Note**

The latest version of a patch is always required. Refer to CCO to determine the latest patch version available.

Log and Spool File Systems Patch

**Note**

This package is not preinstalled. It can be optionally installed.

**Note**

CSCOh005 must not be installed if Disk Suite is installed.

The log and spool file system package provides the scripts needed to configure the /opt/CiscoMGC/var/log and /opt/CiscoMGC/var/spool directories on a secondary disk. It allows a MGC to use the primary disk for the MGC application while allowing billing, alarms, and measurement information to be stored on a secondary disk. This configuration is appropriate for MGC systems with small (4M) disk drives; this configuration cannot be used if you use Disk Suite for disk mirroring.

Table 1 *Solaris Log and Spool File System Package*

| Package | Description |
|----------|--|
| CSCOh005 | Log and spool file system configuration scripts (optional) |

**Note**

Package CSCOh005 should not be installed on systems using BAMS.

System Security Patch

The system security patch installs the Cisco security script. This script is used to reduce the number of known system security vulnerabilities.

Table 2 Solaris 8 System Security Package

| Package | Description |
|----------|-----------------------------------|
| CSCOh013 | Solaris 8 system security package |

The system security script disables the following:

- printer services
- standard UNIX mail
- NFS functionality
- the keyboard break key
- PPP dialup
- auto mount services



Note

The `restore_lp.sh` script (included in CSCOh013) allows you to reinstall the line printer daemon. This script should not be run on an MGC machine but can be used for BAMS boxes that have line printers attached. For more information on the `restore_lp.sh` script, refer to the *Cisco Media Gateway Controller Software Release 9 Installation and Configuration Guide*.



Note

All failed login attempts are logged in syslog.

The following users do not have direct FTP access:

- root
- daemon
- bin
- sys
- adm
- nobody
- noaccess
- nobody4



Note

Only telnet, FTP, and ping network services are enabled.



Note

Not allowing root direct FTP access prevents a root user from overwriting system files. To use the root account, you must use the `su` command from a nonprivileged account.

**Note**

After installation of CSCOh013 version 2.0(x), FTP access should be restricted to the mgcusr login ID as part of the mgcgrp.

**Note**

To minimize MGC access issues after installation of CSCOh013 version 2.0(x), adjunct systems such as BAMS, VSPT, and CMNM should use the mgcusr login ID to access the MGC for information.

Hardware Test Package

**Note**

This package is not preinstalled. It can be optionally installed for use when hardware issues are suspected but because of space requirements should be uninstalled after use.

The hardware test package provides an optional script needed to test the Cisco MGC hardware platforms with Sun verification test suite (VTS). This optional script is preconfigured to provide adequate testing of the hardware.

Table 3 *Hardware Test Package*

| Package | Description |
|----------|----------------------------------|
| CSCOh014 | Hardware test scripts (optional) |

Solaris 8 Patch Cluster

The Solaris 8 patch cluster package provides the required operational and security patches provided by Sun. These patches have been regression tested with the product and are supported by Cisco. Patches downloaded from Sun are not supported until they are officially tested and released by Cisco.

CSCOh013 also provides additional security patches that are recommended by the Cisco products but are not a part of the recommended security patches provided by Sun.

**Note**

CSCOh015 is required to ensure MGC functionality.

Table 4 *Solaris 8 Patch Cluster Package*

| Package | Description |
|----------|--|
| CSCOh015 | Cisco Solaris 8 patch cluster (Required) |

**Note**

During installation of package CSCOh015, errors with a return code of 2 and 8 may display. These return codes are a part of normal installation and can be disregarded.

**Note**

Removing the Solaris 8 Patch Cluster (CSCO015) does not remove the Solaris patches that were installed when the /opt/sun_install/installPatches8 script was executed during a previous patch installation. For more information refer to the *Cisco Media Gateway Controller Software Release 9 Installation and Configuration Guide* (Sun Solaris 8 Operating System Installation > Installing the Solaris 8 Patch Cluster (CSCO015)).

Solaris 8 DiskSuite Install/Uninstall Scripts

DiskSuite allows disk mirroring in systems that have two or more disks. Disk mirroring enables file system backup and recovery on a secondary disk if the primary disk fails or needs to be replaced.

**Note**

Solaris 8 systems use DiskSuite instead of Veritas.

The Solaris 8 DiskSuite installation and uninstallation scripts provide the specific steps needed to install Solstice DiskSuite on the Cisco PSTN Gateway 2200 (PGW 2200).

**Note**

18-, 36-, and 73GB disk drives are supported.

**Note**

The installation procedure takes approximately 2 hours to complete.

Table 5 *Solaris 8 DiskSuite Install/Uninstall Scripts Package*

| Package | Description |
|---------|--|
| CSCO016 | Solaris 8 DiskSuite Install/Uninstall Scripts (Required) |

**Caution**

The order in which packages are installed on the system is important. In particular, DiskSuite must be installed before installing the CiscoMGC application (PGW). If the PGW application is already installed, the DiskSuite script will fail to run. Similarly, you must remove the PGW application **before** removing CSCO016.

For information on using the Solaris 8 DiskSuite install/uninstall scripts, refer to the *Cisco Media Gateway Controller Software Release 9 Installation and Configuration Guide*.

Solaris 8 Return Codes

When a patch cluster is installed, some individual patches might fail to install because they are already installed on the machine (as part of the Solaris 8 installation or as part of an earlier application of the patch cluster) or because the individual patch applies to an application which we do not install. For example, there are security patches for UUCP, but since we do not install UUCP on the machine, these patches fail to install. This is not considered an error as far as the installation process is concerned.

When an individual patch fails to install, a return code displays to indicate the reason the patch did not install. [Table 6](#) lists the return codes for Solaris 8:

Table 6 *Solaris 8 Return Codes*

| Return Code | Description |
|-------------|---|
| 0 | No error. |
| 1 | Usage error. |
| 2 | Attempt to apply a patch that's already been applied. |
| 3 | Effective UID is not root. |
| 4 | Attempt to save original files failed. |
| 5 | Pkgadd failed. |
| 6 | Patch is obsoleted. |
| 7 | Invalid package directory. |
| 8 | Attempting to patch a package that is not installed. |
| 9 | Cannot access /usr/sbin/pkgadd (client problem). |
| 10 | Package validation errors |
| 11 | Error adding patch to root template. |
| 12 | Patch script terminated due to signal. |
| 13 | Symbolic link included in patch. |
| 14 | Not used. |
| 15 | The prepatch script had a return code other than 0. |
| 16 | The postpatch script had a return code other than 0. |
| 17 | Mismatch of the -d option between a previous patch install and the current one. |
| 18 | Not enough space in the file systems that are targets of the patch. |
| 19 | \$\$SOFTINFO/INST_RELEASE file not found. |
| 20 | A direct instance patch was required but not found. |
| 21 | The required patches have not been installed on the manager. |
| 22 | A progressive instance patch was required but not found. |
| 23 | A restricted patch is already applied to the package. |
| 24 | An incompatible patch is applied. |
| 25 | A required patch is not applied. |
| 26 | The user specified backout data can't be found. |
| 27 | The relative directory supplied can't be found |
| 28 | A pkginfo file is corrupt or missing. |
| 29 | Bad patch ID format. |
| 30 | Dry run failure(s). |
| 31 | Path given for -C option is invalid. |
| 32 | Must be running Solaris 2.6 or greater. |
| 33 | Bad formatted patch file or patch file not found. |

Table 6 Solaris 8 Return Codes (continued)

| Return Code | Description |
|-------------|---|
| 34 | Incorrect patch spool directory. |
| 35 | Later revision already installed. |
| 36 | Cannot create safe temporary directory. |
| 37 | Illegal backout directory specified. |

Installation

For new installations please refer to the installation procedures provided in the *Cisco Media Gateway Controller Software Release 9 Installation and Configuration Guide*.

Patch Installation

This section provides information to use when installing Solaris packages when the MGC software has already been installed.

CSCOh016 Install and Update



Caution

The CSCOh016.pkg installation procedures are significantly different than those of other CSCO packages. See the *Installing the Solstice DiskSuite* section of the *Cisco Media Gateway Controller Software Release 9 Installation and Configuration Guide* (http://www.cisco.com/en/US/docs/voice_ip_comm/pgw/9/installation/software/SW2/swin8_os.html#wp1278392) for important installation instructions regarding the CSCOh016.pkg.

CSCOh015 Install and Update

Use the following procedures to install package CSCOh015:



Warning

CSCOh013 must be uninstalled before CSCOh015 is installed and reinstalled after CSCOh015 is installed.

- Step 1** pkgadd -d <package directory>/CSCOh015.pkg
- Step 2** run /opt/sun_install/installPatches8
- Step 3** Reboot

**Note**

If you are installing multiple packages, you can wait until installation of your final package before rebooting.

Use the following packages to upgrade package CSCOh015:

-
- Step 1** `pkgrm CSCOh015`
 - Step 2** `pkgadd -d <package directory>/CSCOh015.pkg`
 - Step 3** `run /opt/sun_install/installPatches8`
 - Step 4** Reboot
-

CSCOh014 Install and Update

Use the following procedures to install package CSCOh014:

-
- Step 1** `pkgadd -d <package directory>/CSCOh014.pkg`
 - Step 2** `run /opt/sun_install/installVTS.sh`
 - Step 3** Reboot
-

**Note**

If you are installing multiple packages, you can wait until installation of your final package before rebooting.

Use the following packages to upgrade package CSCOh014:

-
- Step 1** `pkgrm CSCOh014`
 - Step 2** `pkgadd -d <package directory>/CSCOh014.pkg`
 - Step 3** `run /opt/sun_install/installVTS.sh`
 - Step 4** Reboot
-

CSCOh013 Install and Update

Use the following procedures to install package CSCOh013:

**Warning**

CSCOh013 must be uninstalled before CSCOh015 is installed and reinstalled after CSCOh015 is installed.

**Caution**

If the MGC software needs to be updated, package CSCOh013 must be uninstalled before the MGC software is updated, and reinstalled after reinstallation of the MGC software.

Step 1 `pkgadd -d <package directory>/CSCOh013.pkg`

Step 2 Reboot

**Note**

If you are installing multiple packages, you can wait until installation of your final package before rebooting.

Use the following packages to upgrade package CSCOh013:

Step 1 `pkgrm CSCOh013`

Step 2 `pkgadd -d <package directory>/CSCOh013.pkg`

Step 3 Reboot

New Features

36 GB Disk Drive Upgrade

**Note**

This patch should only be installed if you want to use a 36 GB disk drive.

This featurette (CSCdv89970) enables you to upgrade your system from a 18 GB to a 36 GB disk drive. The CSCOh005 and CSCOh006 packages have been modified to support this featurette.

**Note**

This featurette can be used for existing and new system installations.

For more information on this featurette, refer to the *Cisco Media Gateway Controller Software Release 9 Installation and Configuration Guide*.

HSI Mirrored Disk Support

This featurette (CSCea34031) adds HSI mirrored disk support.

Known Issues and Operational Recommendations

113679 Fails To Install On N240 On CSCOh015 Version 2.0(12)

Solaris patch 113679 is incompatible with 116098 on a N240 platform only; it installs correctly on other platforms.


Note

The `chk_inv` command fails on a PGW with a N240 after patch CSCOh015 version 2.0(12) has been installed.

For more information, see CDETS ticket number CSCsb17242.

SUN Patch 110896-03 Overwritten

When upgrading from Cisco SUN Solaris patches 2.0(11) to patches 2.0(13), installing PGW Solaris patch CSCOh015 version 2.0(12) or 2.0(13) with PGW security patch CSCOh013 installed replaces the secure `inetd.conf` file with an unsecure version; CSCOh013 `inetd.conf` changes are lost.

Workaround:

If CSCOh015 version 2.0(12) or 2.0(13) has been installed, uninstall and reinstall CSCOh013.

If installing version 2.0(13) from CCO:

-
- Step 1** Uninstall package CSCOh013.
 - Step 2** Install package CSCOh015.
 - Step 3** Reinstall package CSCOh013.
-

For more information, see CDETS ticket number CSCsb70585.

Validation Rules of Cisco Solaris Packages is Incomplete (mgcrestore/mgcbbackup)

The `mgcrestore` script validates the version of the installed Solaris packages but does not ensure that the install script was executed. If there is a mismatch between when the backup file was created and the time of the restore, the restore is not allowed. For example, if the security package was not installed when the backup was created, but is installed when the restore is attempted, then the restore is not allowed.

Because the script does not validate whether the script was executed, the restore validation rules might pass, yet the restore could cause system problems.

Workaround: When Cisco Packages are added and removed, ensure the install and uninstall scripts are executed.


Note

For more information, refer to DDTS ticket CSCdx78398.

Reboot Failed After Disabling Disk Mirroring and Installing log_pool

Because Disk Suite is installed when the security patch is applied, the security patch saves the `/etc/system` file with Disk Suite. When Disk Suite and the security patch are removed, the old `/etc/system` with Disk Suite is restored; the changes that Disk Suite made to the `/etc/system` file are removed. The system attempts to boot the first disk, but the `/etc/system` file tells it to change the root device to a Disk Suite device that is no longer present. To correct this problem, you must remove the security patch prior to removing Disk Suite.



Caution

You must remove the security patch prior to removing Disk Suite.

For more information on this issue refer to CSCdx66605.

Installing Solaris Environment Patch Release 2.0(4) or Later on a Platform With Release 9.2 or 9.3 MGC Software

Before installing Solaris environment patch release 2.0(4) or later on a platform with release 9.3 MGC software ensure that the appropriate MGC fix is loaded:

Table 7 *Fixes Needed When Installing Solaris Patch Release 2.0(4) or Later With Release 9.3*

| Release | Fix That Is Needed |
|---------|--|
| 9.2(2) | No fix required. |
| 9.3(1)T | CSCdy06579—Statically linked MDL programs fail with most recent <code>libc.so</code> (available in MGC 9.3(1)T patch CSC0gs003). |



Note

Installing Solaris environment patch release 2.0(4) or later without the appropriate MGC fix causes the MGC application to fail.

After installing Solaris environment patch 2.0(4) on a platform running either a 9.2 or 9.3 release of the MGC software, the Software Inventory Control feature reports failure unless the following MGC fix is loaded:

Table 8 *Fixes Needed to Use the Software Inventory Control Feature with Solaris Patch Release 2.0(4) or Later*

| Release | Fix That Is Needed |
|---------|---|
| 9.2(2) | CSCdy12454—Software Inventory Control does not handle Solaris patches properly (available in MGC 9.2(2) patch CSC0gs018). |
| 9.3(1)T | CSCdy14388—Software Inventory Control does not handle Solaris patches properly (available in MGC 9.2(2) patch CSC0gs004). |

The Software Inventory Control feature is run on operator demand. It detects incompatible software versions residing on test systems in the various Cisco testing facilities. The Software Inventory Control utility generates checksums on the production system then compares those checksums with the values in the installation master file. A discrepancy indicates that the software on the box does not match the software that was originally installed.

This feature does not identify the source of a problem or the correct software to install. It does indicate if a problem exists prior to the testing of incompatible software. Results of the Software Inventory Check are nonfatal to the basic MGC application.

Solaris OS Installation for Language and Locale

When completing your Solaris OS installation, only the USA and English locales are supported.

Solaris Patch CSC0h005 Modification History

Table 9 Modifications for Solaris Patch CSC0h005

| Date | Solaris Patch Release | Solaris Version | Modification |
|-------------|------------------------------|------------------------|---|
| 02/15/07 | 2.0(17) | 8 | Repackaged to constitute complete package set. |
| 03/06/06 | 2.0(16) | 8 | Repackaged to constitute complete package set. |
| 11/15/05 | 2.0(15) | 8 | Repackaged to constitute complete package set. |
| 09/01/05 | 2.0(14) | 8 | Repackaged to constitute complete package set. |
| 08/02/05 | 2.0(13) | 8 | Repackaged to constitute complete package set. |
| 05/24/05 | 2.0(12) | 8 | Repackaged to constitute complete package set. |
| 07/13/04 | 2.0(11) | 8 | Repackaged to constitute complete package set. |
| 03/17/04 | 2.0(10) | 8 | Repackaged to constitute complete package set. |
| 11/07/03 | 2.0(9) | 8 | Repackaged to incorporate changes for CSCeb09741, CSCeb10174, CSCeb39800, CSCeb39802, and CSCed29298. |
| 06/20/03 | 2.0(8) | 8 | Repackaged to constitute complete package set. |
| 04/28/03 | 2.0(7) | 8 | Repackaged to incorporate changes for CSCdx77737 and CSCea85623. |
| 11/14/02 | 2.0(6) | 8 | Repackaged to constitute complete package set. |
| 09/23/02 | 2.0(5) | 8 | Repackaged to constitute complete package set. |
| 07/22/02 | 2.0(4) | 8 | Repackaged to incorporate changes for CSCdx78347. |
| 06/14/02 | 2.0(3) | 8 | Repackaged to incorporate changes for CSCdv89970 and CSCdx58485. |
| 04/26/02 | 2.0(2) | 8 | Repackaged to constitute complete package set. |
| 02/26/02 | 2.0(1) | 8 | Initial release. |

Solaris Patch CSC0h013 Modification History

Table 10 Modifications for Solaris Patch CSC0h013

| Date | Solaris Patch Release | Solaris Version | Modification |
|----------|-----------------------|-----------------|---|
| 02/15/07 | 2.0(17) | 8 | Repackaged to incorporate changes for CSCse87877 |
| 03/06/06 | 2.0(16) | 8 | Repackaged to constitute complete package set. |
| 11/15/05 | 2.0(15) | 8 | Repackaged to constitute complete package set. |
| 09/01/05 | 2.0(14) | 8 | Repackaged to incorporate changes for CSCsb71268. |
| 08/02/05 | 2.0(13) | 8 | Repackaged to constitute complete package set. |
| 05/24/05 | 2.0(12) | 8 | Repackaged to constitute complete package set. |
| 07/13/04 | 2.0(11) | 8 | Repackaged to constitute complete package set. |
| 03/17/04 | 2.0(10) | 8 | Repackaged to incorporate changes for CSCed16018. |
| 11/07/03 | 2.0(9) | 8 | Repackaged to incorporate changes for CSCeb10002, CSCeb10045, CSCeb10163, CSCed05861. |
| 06/20/03 | 2.0(8) | 8 | Repackaged to constitute complete package set. |
| 04/28/03 | 2.0(7) | 8 | Repackaged to incorporate changes for CSCea08725, CSCea84275, and CSCeb04615. |
| 11/14/02 | 2.0(6) | 8 | Repackaged to constitute complete package set. |
| 09/23/02 | 2.0(5) | 8 | Repackaged to constitute complete package set. |
| 07/22/02 | 2.0(4) | 8 | Repackaged to constitute complete package set. |
| 06/14/02 | 2.0(3) | 8 | Repackaged to incorporate changes for CSCdx58485. |
| 04/26/02 | 2.0(2) | 8 | Repackaged to incorporate changes for CSCdx06321, CSCdx12060, CSCdx21402, CSCdx21411, and CSCdx21423. |
| 02/26/02 | 2.0(1) | 8 | Initial release. |

Solaris Patch CSC0h014 Modification History

Table 11 Modifications for Solaris Patch CSC0h014

| Date | Solaris Patch Release | Solaris Version | Modification |
|----------|-----------------------|-----------------|--|
| 02/15/07 | 2.0(17) | 8 | Repackaged to incorporate changes for CSCse04679 and CSCse68935. |
| 03/06/06 | 2.0(16) | 8 | Repackaged to constitute complete package set. |
| 11/15/05 | 2.0(15) | 8 | Repackaged to constitute complete package set. |
| 09/01/05 | 2.0(14) | 8 | Repackaged to constitute complete package set. |

Table 11 *Modifications for Solaris Patch CSC0h014 (continued)*

| Date | Solaris Patch Release | Solaris Version | Modification |
|-------------|------------------------------|------------------------|---|
| 08/02/05 | 2.0(13) | 8 | Repackaged to constitute complete package set. |
| 05/24/05 | 2.0(12) | 8 | Repackaged to incorporate changes for CSCeg17052. |
| 07/13/04 | 2.0(11) | 8 | Repackaged to incorporate changes for CSCee85245. |
| 03/17/04 | 2.0(10) | 8 | Repackaged to constitute complete package set. |
| 11/07/03 | 2.0(9) | 8 | Repackaged to incorporate changes for CSCec80237. |
| 06/20/03 | 2.0(8) | 8 | Repackaged to constitute complete package set. |
| 04/28/03 | 2.0(7) | 8 | Repackaged to incorporate changes for CSCea70879 and CSCea85717. |
| 11/14/02 | 2.0(6) | 8 | Repackaged to constitute complete package set. |
| 09/23/02 | 2.0(5) | 8 | Repackaged to incorporate changes for CSCdy45022. |
| 07/22/02 | 2.0(4) | 8 | Repackaged to constitute complete package set. |
| 06/14/02 | 2.0(3) | 8 | Repackaged to incorporate changes for CSCdv89970 and CSCdx58485. |
| 04/26/02 | 2.0(2) | 8 | Repackaged to incorporate changes for CSCdx20236, CSCdx22228, and CSCdx30990. |
| 02/26/02 | 2.0(1) | 8 | Initial release. |

Solaris Patch CSC0h015 Modification History

Table 12 *Modifications for Solaris Patch CSC0h015*

| Date | Solaris Patch Release | Solaris Version | Modification |
|-------------|------------------------------|------------------------|---|
| 11/20/08 | 2.0(18) | 8 | Repackaged to incorporate changes for CSCsv85191. |
| 02/15/07 | 2.0(17) | 8 | Repackaged to incorporate changes for CSCsh37721 and CSCsh72460. |
| 03/06/06 | 2.0(16) | 8 | Repackaged to incorporate changes for CSCsd32505. |
| 11/15/05 | 2.0(15) | 8 | Repackaged to incorporate changes for CSCsc30742. |
| 09/01/05 | 2.0(14) | 8 | Repackaged to incorporate changes for CSCsb70585. |
| 08/02/05 | 2.0(13) | 8 | Repackaged to constitute complete package set. |
| 05/24/05 | 2.0(12) | 8 | Repackaged to incorporate changes for CSCeg43010, CSCef34186, CSCeg83003, CSCsa60728, and CSCeg38143. |
| 07/13/04 | 2.0(11) | 8 | Repackaged to incorporate changes for CSCee85245, CSCef20675, and CSCef32993. |
| 03/17/04 | 2.0(10) | 8 | Repackaged to incorporate changes for CSCee00984. |
| 11/07/03 | 2.0(9) | 8 | Repackaged to incorporate changes for CSCeb21713. |

Table 12 *Modifications for Solaris Patch CSCOh015 (continued)*

| Date | Solaris Patch Release | Solaris Version | Modification |
|-------------|------------------------------|------------------------|---|
| 06/20/03 | 2.0(8) | 8 | Repackaged to incorporate changes for CSCeb42435. |
| 04/28/03 | 2.0(7) | 8 | Repackaged to incorporate changes for CSCea11834, CSC66877, CSCea85049, and CSCea89064. |
| 11/14/02 | 2.0(6) | 8 | Repackaged to incorporate changes for CSCdz30304. |
| 09/23/02 | 2.0(5) | 8 | Repackaged to constitute complete package set. |
| 07/22/02 | 2.0(4) | 8 | Repackaged to incorporate changes for CSCdx33343, CSCdy06582, and CSCdx34330. Note Platforms running release 9.3(1)T require patch CSCOGs003. For more information refer to Installing Solaris Environment Patch Release 2.0(4) or Later on a Platform With Release 9.2 or 9.3 MGC Software, page 12. |
| 06/14/02 | 2.0(3) | 8 | Repackaged to incorporate changes for CSCdx58485 and CSCdx62029. |
| 04/26/02 | 2.0(2) | 8 | Repackaged to incorporate changes for CSCdx21268, CSCdx33343, and CSCdx33359. |
| 02/26/02 | 2.0(1) | 8 | Initial release. |

Solaris Patch CSCOh016 Modification History

Table 13 *Modifications for Solaris Patch CSCOh016*

| Date | Solaris Patch Release | Solaris Version | Modification |
|-------------|------------------------------|------------------------|---|
| 02/15/07 | 2.0(17) | 8 | Repackaged to constitute complete package set. |
| 03/06/06 | 2.0(16) | 8 | Repackaged to constitute complete package set. |
| 08/02/05 | 2.0(15) | 8 | Repackaged to constitute complete package set. |
| 09/01/05 | 2.0(14) | 8 | Repackaged to incorporate changes for CSCsb50780. |
| 11/15/05 | 2.0(13) | 8 | Repackaged to incorporate changes for CSCsb34932. |
| 05/24/05 | 2.0(12) | 8 | Repackaged to incorporate changes for CSCef31471 and CSCef34825. |
| 07/13/04 | 2.0(11) | 8 | Repackaged to constitute complete package set. |
| 03/17/04 | 2.0(10) | 8 | Repackaged to constitute complete package set. |
| 11/07/03 | 2.0(9) | 8 | Repackaged to constitute complete package set. |
| 06/20/03 | 2.0(8) | 8 | Repackaged to constitute complete package set. |
| 04/28/03 | 2.0(7) | 8 | Repackaged to incorporate changes for CSCea34031, CSCea48853, CSCea88494, CSCeb04615, and CSCea85571. |

Table 13 *Modifications for Solaris Patch CSCOh016 (continued)*

| Date | Solaris Patch Release | Solaris Version | Modification |
|-------------|------------------------------|------------------------|--|
| 11/14/02 | 2.0(6) | 8 | Repackaged to constitute complete package set. |
| 09/23/02 | 2.0(5) | 8 | Initial release. Incorporates enhancements for CSCdx67026. |

| Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.

CCDE, CCENT, Cisco Eos, Cisco HealthPresence, the Cisco logo, Cisco Lumin, Cisco Nexus, Cisco StadiumVision, Cisco TelePresence, Cisco WebEx, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn and Cisco Store are service marks; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MeetingPlace Chime Sound, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0812R)

