



## Performing Post-Upgrade Tasks

After you complete the upgrade, perform the appropriate tasks as described in [Table 4-1](#):

**Table 4-1** *Post-Upgrade Tasks*


	<b>Post-Upgrade Task</b>	<b>Related Information and Procedures</b>
<b>Step 1</b>	Enable all Cisco-verified and Cisco-provided coresident applications that you previously disabled on the server.	Refer to the following information: <ul style="list-style-type: none"> <li>• The documentation that accompanies your application</li> <li>• <a href="#">Enabling Cisco-Verified McAfee Antivirus Services, page 4-4</a></li> </ul>
<b>Step 2</b>	Verify that the subscriber servers pulled the copy of the database.	See the “ <a href="#">Verifying and Reinitializing Subscriber Connections</a> ” section on page 4-5.
<b>Step 3</b>	Verify that all of the appropriate services started. Verify that you can make internal calls. Verify that you can place and receive a call across gateways.	See the “ <a href="#">Verifying Services, Patches, and Hotfixes</a> ” section on page 4-5. See the “ <a href="#">Viewing the Component Versions That Are Installed on the Server</a> ” section on page 4-6.  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p> <b>Caution</b> If you have third-party software, such as CDR software, integrated with Cisco CallManager and the third-party software does not run as expected after the upgrade, verify that you entered the same SA password on all servers in the cluster.</p> </div>
<b>Step 4</b>	If you have CRS and Cisco CallManager installed on the same server, complete the upgrade by referring to the appropriate documentation.	See the “ <a href="#">How does a coresident upgrade work if I have CRS installed with Cisco CallManager?</a> ” section on page 1-4.

Table 4-1 Post-Upgrade Tasks (continued)

Post-Upgrade Task	Related Information and Procedures
<p><b>Step 5</b> After you complete the Cisco CallManager upgrade on every server in the cluster, reinstall all Cisco-verified applications and all plugins that were previously installed on the server except the Cisco CDR Analysis and Reporting plugin.</p> <p>For example, if you have integrated your enterprise directory with Cisco CallManager, you must reinstall the Cisco Customer Directory Configuration Plugin on all servers in the cluster after the upgrade, starting with the publisher database server. Reinstalling the plugin populates your enterprise directory with any additional schema extensions and data entries that Cisco CallManager needs.</p>	<p>Refer to the appropriate documentation that accompanies the applications.</p>
<p><b>Step 6</b> Upgrade Cisco TAPI, Cisco JTAPI, Cisco TSP (for the voice-messaging system), and the Cisco TSP for Cisco SoftPhone.</p>	<p>See the following sections for more information:</p> <ul style="list-style-type: none"> <li>• <a href="#">Upgrading TAPI, JTAPI, and Cisco Telephony Service Provider (TSP), page 4-7</a></li> <li>• <a href="#">Upgrading the Cisco TAPI/TSP for Cisco SoftPhone, page 4-7</a></li> </ul>
<p><b>Step 7</b> If you are using Cisco Unity as your voice-messaging system, configure the appropriate settings to ensure proper failover.</p>	<p>For more information, refer to the <i>Release Notes for Cisco CallManager</i>. To obtain the most recent version of this document, go to <a href="http://www.cisco.com/univercd/cc/td/doc/product/voice/c_c_allmg/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/voice/c_c_allmg/index.htm</a>.</p>
<p><b>Step 8</b> Verify that all Cisco IP telephony applications that are integrated with Cisco CallManager run properly. If you need to do so, upgrade the Cisco IP telephony applications that are integrated with your Cisco CallManager system.</p>	<p>Refer to the <i>Cisco CallManager Compatibility Matrix</i> by clicking the following URL:</p> <p><a href="http://www.cisco.com/univercd/cc/td/doc/product/voice/c_c_allmg/ccmcomp.htm">http://www.cisco.com/univercd/cc/td/doc/product/voice/c_c_allmg/ccmcomp.htm</a></p> <p>If the application is compatible with this version of Cisco CallManager, refer to the appropriate Cisco IP telephony application documentation.</p>
<p><b>Step 9</b> For your migrated version of Cisco CallManager Attendant Console to work, you must check the Call Park Retrieval Allowed check box for the ac user that you configured in the Global Directory. The attendant console does not initialize if you do not check this check box.</p>	<p>For more information on how to perform this task, refer to the <i>Cisco CallManager Administration Guide</i>.</p>
<p><b>Step 10</b> After you upgrade Cisco CallManager, the database name automatically increments; for example, from CCM0300 to CCM0301. Third-party CDR software may have SQL triggers that are hard coded to the original database name. The triggers may point to the previous database name and cause all CDR flat files to write to the BAD directory on the publisher database server.</p>	<p>If you need technical assistance with this issue, directly contact the third-party software vendor.</p>

Table 4-1 Post-Upgrade Tasks (continued)

Post-Upgrade Task	Related Information and Procedures
<b>Step 11</b> If you want to use Norton AntiVirus, install the application and perform post-installation tasks.	Refer to <i>Using Symantec/Norton AntiVirus with Cisco CallManager</i> .
<b>Step 12</b> The locale, English_United_States, installs automatically on the server. To upgrade existing locales or to add additional locales to the server, install the Cisco IP Telephony Locale Installer.	<p>You can obtain locale specific versions of the Cisco IP Telephony Network Locale installer for Cisco CallManager 4.0 when they become available at <a href="http://www.cisco.com/kobayashi/sw-center/telephony/callmgr/locale-installer.shtml">http://www.cisco.com/kobayashi/sw-center/telephony/callmgr/locale-installer.shtml</a>.</p> <p>Refer to the readme file that is posted next to the Cisco IP Telephony Locale Installer software for the complete list of supported languages and localized features. For more information on installing the locale installer, refer to <i>Using the Cisco IP Telephony Locale Installer</i>.</p> <p><b>Note</b> The locale installer has version-specific support for Cisco CallManager releases. Cisco IP Telephony Locale Installer, Version 4.0(1) supports Cisco CallManager Version 4.0(1) or later.</p>
<b>Step 13</b> You must configure the Network Interface Card (NIC) Speed and Duplex settings of the Cisco CallManager server to match the configuration of the LAN switch port to which the server is connected. Failure to match these settings between the server and switch may cause degraded network performance and unexpected errors to occur. Contact your network administrator or see the Cisco IOS configuration documentation to determine your current settings of the LAN switch port to which the Cisco CallManager NIC is connected.	<p>Some administrators have found that the 100/Full setting works well.</p>
<b>Step 14</b> Verify the version of hotfixes and service packs that are installed on the server.  Download the latest hotfixes, service packs, and Cisco CallManager service release that are available on the web.  This task requires a reboot of the server after you install the files.  <b>Tip</b> Perform this task on an ongoing basis to maintain your system.	<p><a href="#">Verifying Services, Patches, and Hotfixes, page 4-5</a>  <a href="#">Viewing the Component Versions That Are Installed on the Server, page 4-6</a></p> <p><b>Tip</b> The service releases may post to the web after the Cisco CallManager upgrade is available.</p>

Table 4-1 Post-Upgrade Tasks (continued)

Post-Upgrade Task	Related Information and Procedures
<b>Step 15</b> Back up the Cisco CallManager server. <b>Tip</b> Perform this task daily to ensure that you have a recent backup of your system.	Refer to <i>Cisco IP Telephony Backup and Restore System (BARS) Administration Guide, Version 4.0(1)</i> (or later). To obtain the most recent version of this document, go to <a href="http://www.cisco.com/univercd/cc/td/doc/product/voice/backup/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/voice/backup/index.htm</a> .
<b>Step 16</b> If you want to use CAR, install the CAR tool from Install Plugins.	If you were using a previous version of CAR, you must install Cisco CallManager Service Release 1 or later prior to installing CAR.  Refer to “CDR Analysis and Reporting,” <i>Cisco CallManager Serviceability Administration Guide, Release 4.0(1)</i> .

## Enabling Cisco-Verified McAfee Antivirus Services

To enable the Cisco-verified McAfee antivirus services, perform the following tasks:

### Procedure

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- Step 1** After you log in to the server, enable all Cisco-verified McAfee antivirus services through the Control Panel by completing the following procedure:
- a. Choose **Start > Settings > Control Panel > Administrative Tools > Services**.
  - b. From the Services window, right-click one of the antivirus services; for example, Network Associates Alert Manager, Network Associates McShield, or Network Associates Task Manager, and choose **Properties**.
  - c. Verify that the General tab displays in the Properties window.
  - d. From the Startup type drop-down list box, choose **Automatic**.
  - e. Click **OK**.
  - f. In the Services window, right-click the antivirus service and click **Start**.
- Step 2** Perform [Step 1](#) to enable all Cisco-approved McAfee antivirus services; for example, Network Associates Alert Manager, Network Associates McShield, and Network Associates Task Manager.
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# Verifying and Reinitializing Subscriber Connections

If the connections between the publisher database server and the subscribers within a cluster are broken for any reason, you cannot copy the database to the subscribers.

## Verifying the Status of the Subscription

To determine whether the connections between the publisher database server and the subscribers within a cluster are broken, wait 35 minutes after you have installed the last subscriber in the cluster. Then, open SQL Server Enterprise Manager. If a red X icon appears next to the subscription, the subscription is broken.

## Reinitializing the Subscription/Starting the Replication Snapshot Agent

If you determine that one or more subscription connections are broken, as indicated by the red X icon next to the subscriptions, reinitialize the subscriptions and start the replication snapshot agent on the publisher database server.

### Procedure

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- Step 1** Open SQL Server Enterprise Manager by choosing **Start > Programs > Microsoft SQL Server > Enterprise Manager**.
  - Step 2** In the following path, choose the name of the publisher database that you are configuring: Microsoft SQL Servers/SQL Server Group/<this server's hostname>/Databases/<the publisher database name>Publications.
  - Step 3** In the main window, right-click the subscription name and choose **Reinitialize all Subscriptions**. Click **Yes** to confirm.
  - Step 4** In the following path, choose the **Snapshot Agents** folder: Microsoft SQL Servers/SQL Server Group/<this server's hostname>/Replication Monitor/Agents.
  - Step 5** Right-click the publication name that matches the database name that you are configuring; then, click **Start**.
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In rare cases, the reinitialization of the subscriptions may not work. If you determine that the previous procedure did not work as expected, contact the team that provides technical assistance for this product; for example, your Cisco AVVID Partner or the Cisco Technical Assistance Center (TAC).

# Verifying Services, Patches, and Hotfixes

Perform the following tasks:

- Verify that the appropriate services run on each server in the cluster ([About Services, page 4-6](#))
- Verify that you have installed the latest Microsoft patches and hotfixes ([About Microsoft Patches and Hotfixes, page 4-6](#))
- Verify that you have installed the latest Cisco CallManager service release ([About Cisco CallManager Service Releases, page 4-6](#))

**About Services**

Open Cisco CallManager Serviceability and verify that all migrated services are running. To review service activation procedures and service recommendations, refer to the *Cisco CallManager Serviceability Administration Guide* and the *Cisco CallManager Serviceability System Guide*.

**Caution**

Do not start and stop services through the Microsoft Computer Management window. Starting and stopping services through the window causes problems with the Cisco CallManager database.

**About Microsoft Patches and Hotfixes**

Refer to the file-specific readme document, *Cisco IP Telephony Operating System, SQL Server, Security Updates*, and *Installing the Operating System on the Cisco IP Telephony Applications Server*. To obtain the most recent version of these documents, go to <http://www.cisco.com/kobayashi/sw-center/sw-voice.shtml>.

**About Cisco CallManager Service Releases**

After you install this version of Cisco CallManager on all servers in the cluster, Cisco strongly recommends that you install the latest Cisco CallManager service release on all servers in the cluster. These service releases provide bug fixes for your system.

Be aware that Cisco CallManager service releases are cumulative. Cisco rolls these bug fixes into the next Cisco CallManager release.

**Tip**

Make sure that you install the same version of the service release on every server in the cluster.

To obtain the latest Cisco CallManager service release, perform the following procedure:

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- Step 1** Click <http://www.cisco.com/kobayashi/sw-center/sw-voice.shtml>.
  - Step 2** Click **Cisco CallManager Version 4.0**.  
The Cisco CallManager 4.0 software page displays.
  - Step 3** Locate and download the readme file for the service release.  
The readme file provides procedures, caveats, and descriptive information for installing the files.
  - Step 4** Using the readme file as a reference, install the Cisco CallManager service release on every server in the cluster where Cisco CallManager is installed.
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## Viewing the Component Versions That Are Installed on the Server

The mcsver.exe program reports the current version of all installation components, including the operating system. Be aware that Cisco does not report the actual Cisco CallManager version through this program. Recognize that most of these components, which run from the installation disks during the initial installation, no longer exist on the system.

The version for OS Image equals your operating system disk version number. The version of OS Image will change only if you do a new installation with the Cisco IP Telephony Server Operating System Hardware Detection disk.

The version for stiOSUpd.exe equals the version of the operating system upgrade that you last ran either via disk or via the web. When Cisco updates and releases the Cisco IP Telephony Server Operating System OS/BIOS Upgrade disk (Disk 2), the version of stiOSUpd changes.

Perform the following procedure to view the component versions that are installed on the server:

#### Procedure

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- Step 1** Use Windows Explorer to browse to the following folder:  
**C:\utils\mcsver**
- Step 2** View the versions of the components that are running on your server.
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## Upgrading TAPI, JTAPI, and Cisco Telephony Service Provider (TSP)

You must upgrade the Telephony Application Programming Interface and Java Telephony Application Programming Interface (TAPI/JTAPI) client software on any application server or client workstation on which TAPI/JTAPI applications are installed. If you do not upgrade the TAPI/JTAPI client, your application will fail to initialize.

The following information applies if you have integrated a Cisco Unity system with Cisco CallManager. TSP makes the voice-mail ports available to Cisco Unity. To ensure that Cisco Unity integrates properly with Cisco CallManager, you may need to upgrade the TSP that is integrated with the voice-messaging system. To ensure that you upgrade to the appropriate TSP release, refer to the *Cisco CallManager Compatibility Matrix*.

## Upgrading the Cisco TAPI/TSP for Cisco SoftPhone

Perform the following procedure to upgrade the Cisco SoftPhone TAPI/TSP to the version that is stated in the *Cisco CallManager Compatibility Matrix*.

#### Procedure

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- Step 1** From each Cisco Softphone client, browse into server that is running Cisco CallManager Administration and log in with administrative privileges.



**Tip** To browse into the server, enter `http://<CM-server-name>/CCMAdmin/main.asp`, where <CM-server-name> equals the name of the server, in the Address bar in the web browser.

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- Step 2** From the Application menu, choose **Install Plugins**.
- Step 3** Click the **Cisco Telephony Service Provider** icon that is associated with the plugin.

- Step 4** To complete the upgrade, follow the prompts in the window.
- Step 5** Verify that a basic call works as expected for Cisco SoftPhone.
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## Using the Cisco CallManager Music On Hold Disk or Download

**Note**

This section applies if you have never downloaded the Cisco CallManager Music On Hold files from the web or used the Cisco CallManager Music On Hold disk.

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When you initially install Cisco CallManager on your server, a default music on hold audio file sample automatically installs for customer use. To increase your music on hold (MOH) selection, you may download one of the following two files via the web:

- ciscocm-MusicOnHold, which is a set of wav files that provides the entire music selection from the disk
- ciscocm-MusicOnHoldSampler, which is a small set of files that offers a sample of music that is available on the disk

For information on the MOH feature, refer to the latest version of the *Cisco CallManager Administration Guide* and the latest version of the *Cisco CallManager System Guide*.

As a Cisco CallManager user, you can use any disk/file with music on hold. Because of licensing restrictions, you must not distribute the Cisco CallManager Music on Hold disk/files to anyone else, and you must not use the files for any other purpose.