

Using Cisco CallManager Upgrade Assistant Utility 4.0(1)

The Cisco CallManager Upgrade Assistant Utility, a nonintrusive tool, detects the health of the servers in the Cisco CallManager cluster before you perform an upgrade to Cisco CallManager 4.0(1).

You obtain the Cisco CallManager Upgrade Assistant Utility from the web.



This version-specific utility identifies problems that could cause the Cisco CallManager upgrade to fail. This utility does not correct the problem(s); you must perform the corrective action for the problem that the utility identifies.

Cisco strongly recommends that all servers in the cluster pass the validation before you upgrade any servers to Cisco CallManager 4.0(1).

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Conventions

Consider the following documentation conventions as you review this upgrade document: Blue Text—To quickly navigate to a section or URL, click text that appears in blue.



Reader, take note. Notes contain helpful suggestions or references to material not covered in the publication.



Reader, be careful. You may do something that could result in equipment damage or loss of data.



Reader, this tip saves you time as you perform the procedure.

Locating Related Documentation

Use the following documentation in conjunction with this document. Click the URLs in Table 1 to navigate to the appropriate documentation.

Table 1 Quick Reference for URLs

Related Information and Software	URL and Additional Information		
Operating system documentation and Virtual Network Computing (VNC) documentation	http://www.cisco.com/univered/cc/td/doc/product/voice/iptel_os/index.htm		
(not readme documentation)			
Cisco CallManager Compatibility Matrix	http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/index.htm		
Cisco CallManager documentation	http://www.cisco.com/univered/cc/td/doc/product/voice/c_callmg/index.htm		
Cisco CallManager backup and restore documentation	http://www.cisco.com/univercd/cc/td/doc/product/voice/backup/index.htm		
Service releases and readme documentation	http://www.cisco.com/kobayashi/sw-center/sw-voice.shtml		
	Note The operating system and SQL Server support patches post on the voice products operating system cryptographic software page. You can navigate to the site from the Cisco CallManager software page.		
Related Cisco IP telephony application documentation	http://www.cisco.com/univercd/cc/td/doc/product/voice/index.htm		

Before You Begin

Before you run the utility, Cisco strongly recommends that you perform the following tasks:

• Upgrade the Cisco IP Telephony Applications Backup Utility to version 3.5.48 (or later). If you are upgrading from Cisco CallManager 3.2, the upgrade assistant validates the backup file.

To obtain the backup utility documentation, go to http://www.cisco.com/univercd/cc/td/doc/product/voice/backup/index.htm.

- Review the "Understanding How the Utility Works" section on page 3.
- Verify that your server login account has Administrative privileges to run the utility.

Understanding How the Utility Works

Before you perform an upgrade to Cisco CallManager 4.0(1), run the Cisco CallManager Upgrade Assistant Utility, a nonintrusive tool, that detects the health of the servers in the Cisco CallManager cluster without changing the state of the system.

The Cisco CallManager Upgrade Assistant Utility version corresponds to the Cisco CallManager version to which you plan to upgrade the server. Use Cisco CallManager Upgrade Assistant Utility, Version 4.0(1), if you plan to upgrade to Cisco CallManager 4.0(1) from a compatible release of Cisco CallManager 3.2 or 3.3. The utility will not run if the server is not at the minimum requirement for the Cisco CallManager 4.0(1) upgrade. Refer to the *Cisco CallManager Compatibility Matrix* for minimum compatibility requirements. To obtain the most recent version of this document, go to http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/index.htm.

You cannot run Cisco CallManager Upgrade Assistant Utility 4.0(1) on a server that runs Cisco CallManager 4.0(1).



Your server login account must have Administrative privileges to run the utility. You may log in to the server by using the Administrator username and password.

Before you begin the upgrade on the publisher database server, you must run the utility on all servers in the cluster. If any server fails the validation process, investigate and correct the problem(s) before you begin the upgrade on the publisher database server. After you correct the problem(s), run the utility again before you upgrade.

You can run the utility on only one server at a time.

Cisco strongly recommends that you run this utility during a scheduled, maintenance window.

If you want to install a later version of the utility, you must uninstall the version that exists on the server before you install the later version.

The utility runs the validation modules that display in Table 2. The utility runs some validation modules only on publisher servers, some validation modules only on subscriber servers, and some modules on both publisher and subscriber servers. As soon as the utility identifies a problem with a module, the utility begins checking the next module. After the utility performs the entire validation process, review the validation list in the Summary window for modules that fail the validation or for modules that provide warnings.

Table 2 Validation Checks That the Utility Performs

Module	Applicable Cisco CallManager Release	Applicable Server	Additional Information				
For Cisco CallManager 3.2							
Backup File Integrity Validation	The utility performs this check if the server runs Cisco CallManager 3.2.	This check occurs on the publisher database server only.	 The Upgrade Assistant verifies the following items: The existence of the chosen MCS.sti file If the file does not exist after you click Select, an error message displays. The backup file size The backup utility version that is used to create the file If you do not want the utility to validate the backup file, click the Cancel button; a dialog box prompts you to skip the backup file validation. If you do not choose a backup file for the utility to validate, 				
Database Location Setting Validation	The utility performs this check if the server runs Cisco CallManager 3.2.	This check occurs on the publisher database and subscriber servers.	this portion of the validation process fails. The utility performs a check of your Cisco CallManager registry (specifically, dbconnection0) to verify that the registry points to the proper database.				
For Cisco CallManage	er 3.3						
Software Version Validation	The utility performs this check if the server runs Cisco CallManager 3.3.	This check occurs on the publisher database and subscriber servers.	The utility validates the Cisco-provided operating system/related service releases and SQL Server/related service releases. For information on minimum software requirements, refer to the Cisco CallManager Compatibility Matrix. To obtain the most recent version of this document, see Table 1. The Upgrade Assistant Utility checks only for software applications that this document lists. If you run other applications in the cluster or other applications on the servers, verify that compatibility exists between Cisco CallManager and the application before you upgrade. Failing to do so may cause applications to not work as expected.				
Database Location Setting Validation	The utility performs this check if the server runs Cisco CallManager 3.3.	This check occurs on the publisher database and subscriber servers.	The utility performs a check of your Cisco CallManager registry (specifically, dbconnection0) to verify that the registry points to the proper database.				
DC Directory HealthCheck Validation	The utility performs this check if the server runs Cisco CallManager 3.3.	This check occurs on the publisher database and subscriber servers.	The utility validates whether Cisco CallManager is integrated with DC Directory. This utility validates the DC Directory connection and the DC Directory configuration containers.				

Table 2 Validation Checks That the Utility Performs (Continued)

Module	Applicable Cisco CallManager Release	Applicable Server	Additional Information
Security Settings Validation	The utility performs this check if the server runs Cisco CallManager 3.3.	This check occurs on the publisher database and subscriber servers.	 The utility validates the following policies and accounts: Password policies, including Enforce Password History, Minimum Password Age, and Minimum Password Length Verify that these policies are set to default. Account lockout policies Verify that these policies are set to default. Local system accounts for all Administrator accounts Verify that the local system accounts for all Administrator accounts are set to Never Expire. Note The utility validates the settings of the publisher database server even when it is running on the subscriber server.
Cisco CallManager Database Replication Validation	The utility performs this check if the server runs Cisco CallManager 3.3.	This check occurs on the publisher database server.	The publisher database server upgrade requires that all call-processing processes that the server handles fail over to the configured subscriber servers. Database replication must exist prior to the upgrade, so failover occurs. This utility verifies the database replication status for all subscriber servers in the cluster. This utility validates that the database contains the latest information about the system. Validation results include Running, Idle, Failed, or Succeeded.
Hostname Resolution Validation	This utility performs this check if the server runs Cisco CallManager 3.3.	This check occurs on the subscriber database server only.	The utility validates that the server hostname resolves to a valid IP address.
Password Validation	The utility performs this check if the server runs Cisco CallManager 3.3.	This check occurs on the subscriber database server only	The utility performs a check on each subscriber database server to verify that the Administrator password on the subscriber database servers matches the Administrator password on the publisher database server.

Installing the Utility



If you choose to do so, you can use Virtual Network Computing (VNC) to install and run this utility. To obtain the most recent version of this document, go to

http://www.cisco.com/univercd/cc/td/doc/product/voice/iptel_os/index.htm.

Do not use Integrated Lights Out (ILO) or Terminal Services to install or run this utility; Cisco installs Terminal Services, so Cisco Technical Assistance Center (TAC) can perform remote management and configuration tasks.

Perform the following procedure to install the utility.

Procedure

- **Step 1** Click http://www.cisco.com/kobayashi/sw-center/sw-voice.shtml.
- Step 2 Click Cisco CallManager 4.0.
- **Step 3** Download the Upgrade Assistant file to your hard drive.



For this utility, Cisco uses the file format, CCMUpgdAsstInstall_<utility version>.exe.

- **Step 4** Note the location where you save the downloaded file.
- **Step 5** To begin the installation, double-click the download file.



If Cisco Security Agent (CSA) is enabled, a prompt asks you if you are installing software. To continue the installation, click **Yes to All**.

The Preparing to Install window displays.

Step 6 The Welcome window displays; click **Next**.

The license agreement displays.

- **Step 7** Review the license agreement and click **Yes**.
- **Step 8** Choose the location where you want to install the application. Click **Next**.

The Setup Status window displays.

Step 9 When the InstallShield Wizard Complete window displays, click **Finish**.

Running the Utility



You can run the utility on only one server at a time.

Running this utility takes approximately 1 to 60 (or more) minutes for the publisher database server. The time it takes on the publisher database server depends on the size of the backup file.

The utility takes approximately 1 to 5 minutes for each subscriber server.

To run the utility, perform the following procedure.

Procedure

- Step 1 Choose Start > Programs > Cisco Systems, Inc > CallManager Upgrade Assistant.
- Step 2 The Welcome window displays. Review the information in the window and click Next.
- **Step 3** If you are running the utility on a Cisco CallManager 3.2 publisher database server, continue with this step. If you are running the utility on the subscriber or are running a different version of Cisco CallManager, go to Step 5.

The Upgrade Assistant validates the Cisco CallManager MCS.sti backup file. Perform one of the following tasks, depending on whether the backup file is stored to a network directory, local drive, or tape device:

- Browse to the latest backup file that you have stored in your chosen backup destination.
- Specify the tape device that contains the tape backup. Use the format TapeN, where N specifies the tape device number (for example, Tape0, Tape1, and so on.)



If you do not want the utility to validate the backup file, click the Cancel button; a dialog box prompts you to skip the backup file validation.

If you do not choose a backup file for the utility to validate, this portion of the validation process fails.

Step 4 Click Select.

If the file does not exist after you click Select, an error message displays.

Step 5 The Upgrade Assistant Status window displays with a list of checks that the utility performs.

If you chose a backup file in Step 3, the Upgrade Assistant Confirmation window also displays the backup file name that you entered. Verify that you chose the correct backup file.

Step 6 Click Next.

An "x" indicates that the validation failed; a check indicates that the validation succeeded; an arrow indicates the validation task that the utility currently performs.

Step 7 In the Upgrade Assistant Summary window, the validation results display. To interpret the results, see the "Interpreting the Results" section on page 8.



Clicking **Finish** closes the window. Review the results before you click Finish. If you close the window, you can obtain the results from the log file; see the "Obtaining the Log File" section on page 8.

Step 8

After you fix the problems that the utility identifies, run the utility again on every server in the cluster before you begin the upgrade.

Interpreting the Results

The validation results display in the Upgrade Assistant Summary window. At the top of the window, a report summarizes the results for all modules and displays which modules failed, which modules produced warnings, and which modules passed. A link to the folder that contains all log files, including the Upgrade Assistant Summary report, displays also.

To identify a problem with the failed validation module, review the following information that displays in the Summary window:

- The first link points to the log file that specifies the error or warning.
 Click the first link and search for the error or warning; for example, ERR: <message> or WARN: <message>.
- The second link points to the corrective action file that describes the log file error message and recommends the corrective action.

Click the second link to open the corrective action file. Search the corrective action file for the error message that is noted in the log file. Review the description and corrective action.



After you correct all problems that the utility identifies, Cisco strongly recommends that you run the utility again on every server in the cluster before you begin the upgrade.

Obtaining the Log File

You can obtain the results from the utility in the following directory:

C:\Program Files\Common Files\Cisco\Logs\UPGRADEASST<date> (for example, UPGRADEASST-05-15-2003_13.47.58)

To access the log file, click the Summary file.



A link to the log file displays in the Summary window for every failed validation module. To access the log file, click the link in the Summary window.

The Summary.html file, which is the Upgrade Assistant Summary report, provides the exact same information that displays in the Upgrade Assistant Summary window.

Each time that you run the utility, the utility creates a new log folder and new set of log files. The utility does not remove the log files, even if you uninstall the utility. You erase the log files when you reimage the server or manually delete the files.

Obtaining Documentation

Cisco provides several ways to obtain documentation, technical assistance, and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

Cisco.com

You can access the most current Cisco documentation on the World Wide Web at this URL:

http://www.cisco.com/univercd/home/home.htm

You can access the Cisco website at this URL:

http://www.cisco.com

International Cisco websites can be accessed from this URL:

http://www.cisco.com/public/countries_languages.shtml

Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which may have shipped with your product. The Documentation CD-ROM is updated regularly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual or quarterly subscription.

Registered Cisco.com users can order a single Documentation CD-ROM (product number DOC-CONDOCCD=) through the Cisco Ordering tool:

http://www.cisco.com/en/US/partner/ordering/ordering_place_order_ordering_tool_launch.html

All users can order monthly or quarterly subscriptions through the online Subscription Store:

http://www.cisco.com/go/subscription

Ordering Documentation

You can find instructions for ordering documentation at this URL:

http://www.cisco.com/univercd/cc/td/doc/es_inpck/pdi.htm

You can order Cisco documentation in these ways:

• Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products MarketPlace:

http://www.cisco.com/en/US/partner/ordering/index.shtml

 Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, U.S.A.) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

You can submit comments electronically on Cisco.com. On the Cisco Documentation home page, click **Feedback** at the top of the page.

You can e-mail your comments to bug-doc@cisco.com.

You can submit comments by using the response card (if present) behind the front cover of your document or by writing to the following address:

Cisco Systems, Inc. Attn: Customer Document Ordering 170 West Tasman Drive San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

Cisco provides Cisco.com, which includes the Cisco Technical Assistance Center (TAC) website, as a starting point for all technical assistance. Customers and partners can obtain online documentation, troubleshooting tips, and sample configurations from the Cisco TAC website. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC website, including TAC tools and utilities.

Cisco.com

Cisco.com offers a suite of interactive, networked services that let you access Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com provides a broad range of features and services to help you with these tasks:

- Streamline business processes and improve productivity
- Resolve technical issues with online support
- Download and test software packages
- Order Cisco learning materials and merchandise
- Register for online skill assessment, training, and certification programs

To obtain customized information and service, you can self-register on Cisco.com at this URL:

http://tools.cisco.com/RPF/register/register.do

Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two types of support are available: the Cisco TAC website and the Cisco TAC Escalation Center. The type of support that you choose depends on the priority of the problem and the conditions stated in service contracts, when applicable.

We categorize Cisco TAC inquiries according to urgency:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration. There is little or no impact to your business operations.
- Priority level 3 (P3)—Operational performance of the network is impaired, but most business operations remain functional. You and Cisco are willing to commit resources during normal business hours to restore service to satisfactory levels.
- Priority level 2 (P2)—Operation of an existing network is severely degraded, or significant aspects of your business operations are negatively impacted by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.
- Priority level 1 (P1)—An existing network is "down," or there is a critical impact to your business
 operations. You and Cisco will commit all necessary resources around the clock to resolve the
 situation.

Cisco TAC Website

The Cisco TAC website provides online documents and tools to help troubleshoot and resolve technical issues with Cisco products and technologies. To access the Cisco TAC website, go to this URL:

http://www.cisco.com/tac

All customers, partners, and resellers who have a valid Cisco service contract have complete access to the technical support resources on the Cisco TAC website. Some services on the Cisco TAC website require a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to this URL to register:

http://tools.cisco.com/RPF/register/register.do

If you are a Cisco.com registered user, and you cannot resolve your technical issues by using the Cisco TAC website, you can open a case online at this URL:

http://www.cisco.com/tac/caseopen

If you have Internet access, we recommend that you open P3 and P4 cases online so that you can fully describe the situation and attach any necessary files.

Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses priority level 1 or priority level 2 issues. These classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer automatically opens a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to this URL:

http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml

Before calling, please check with your network operations center to determine the Cisco support services to which your company is entitled: for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). When you call the center, please have available your service agreement number and your product serial number.

Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- The Cisco Product Catalog describes the networking products offered by Cisco Systems, as well as ordering and customer support services. Access the Cisco Product Catalog at this URL:
 - http://www.cisco.com/en/US/products/products_catalog_links_launch.html
- Cisco Press publishes a wide range of networking publications. Cisco suggests these titles for new
 and experienced users: Internetworking Terms and Acronyms Dictionary, Internetworking
 Technology Handbook, Internetworking Troubleshooting Guide, and the Internetworking Design
 Guide. For current Cisco Press titles and other information, go to Cisco Press online at this URL:
 - http://www.ciscopress.com
- Packet magazine is the Cisco quarterly publication that provides the latest networking trends, technology breakthroughs, and Cisco products and solutions to help industry professionals get the most from their networking investment. Included are networking deployment and troubleshooting tips, configuration examples, customer case studies, tutorials and training, certification information, and links to numerous in-depth online resources. You can access Packet magazine at this URL:
 - http://www.cisco.com/go/packet
- iQ Magazine is the Cisco bimonthly publication that delivers the latest information about Internet business strategies for executives. You can access iQ Magazine at this URL:
 - http://www.cisco.com/go/iqmagazine
- Internet Protocol Journal is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:
 - http://www.cisco.com/en/US/about/ac123/ac147/about_cisco_the_internet_protocol_journal.html
- Training—Cisco offers world-class networking training. Current offerings in network training are listed at this URL:
 - http://www.cisco.com/en/US/learning/le31/learning_recommended_training_list.html

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