



# Using Cisco CallManager Upgrade Assistant Utility 4.1(3)

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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.

This version of Cisco CallManager Upgrade Assistant replaces previous versions of Cisco CallManager Upgrade Assistant, Release 3.3(5), Release 4.0(2a), and Release 4.1(2). Cisco CallManager Upgrade Assistant 4.1(3) adds support for multiple version upgrades. Use Cisco CallManager Upgrade Assistant Utility, version 4.1(3) or later, to detect the health of your servers before you upgrade to Cisco CallManager Release 3.3(5), 4.0(2a), 4.1(2), and 4.1(3).



## Caution

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This 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.

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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.



**Note**

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



**Caution**

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



**Timesaver**

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

## 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 Documentation and Software	URL and Additional Information
Operating system documentation and Virtual Network Computing (VNC) documentation (not readme documentation)	<a href="http://www.cisco.com/univercd/cc/td/doc/product/voice/iptel_os/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/voice/iptel_os/index.htm</a>
Cisco CallManager Compatibility Matrix	<a href="http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/ccmcomp.htm">http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/ccmcomp.htm</a>
Cisco CallManager documentation	<a href="http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/index.htm</a>
Cisco IP Telephony Applications Backup and Restore documentation	<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>
Service releases and readme documentation	<a href="http://www.cisco.com/kobayashi/sw-center/sw-voice.shtml">http://www.cisco.com/kobayashi/sw-center/sw-voice.shtml</a> <b>Note</b> 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	<a href="http://www.cisco.com/univercd/cc/td/doc/product/voice/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/voice/index.htm</a>

## Before You Begin

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

- Back up your Cisco CallManager servers. 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 a Cisco CallManager version, download and run the latest version of 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.

To verify that the server meets the minimum requirement for the Cisco CallManager version to which you are upgrading, refer to the *Cisco CallManager Compatibility Matrix*. To obtain the most recent version of this document, go to [http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_callmg/ccmcomp.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/ccmcomp.htm).



### Caution

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.

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 Server	Additional Information
<b>The utility performs the following validations for servers running Cisco CallManager Release 3.1 or 3.2.</b>		
Backup File Integrity Validation	This check occurs on the publisher database server only.	<p>The Upgrade Assistant verifies the following items:</p> <ul style="list-style-type: none"> <li>• The existence of the chosen MCS.sti file</li> </ul> <p>If the file does not exist after you click Select, an error message displays.</p> <ul style="list-style-type: none"> <li>• The backup file size</li> <li>• The backup utility version that is used to create the file</li> </ul> <p>If you do not want the utility to validate the backup file, click the Skip button; a dialog box prompts you to skip the backup file validation.</p> <p>If you do not choose a backup file for the utility to validate, the utility assigns a Skipped status to the module.</p>
OS Flag Files Validation	This check occurs on the publisher database and subscriber servers.	The utility verifies that the Stirnw.flg and Stisys.inf files exist.
Database Location Setting Validation	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.
Resource Validation	This check occurs on the publisher database and subscriber servers.	This utility verifies that the system has enough physical memory.
<b>The utility performs the following validations for servers running Cisco CallManager Release 3.3, 4.0, or 4.1</b>		
Software Version Validation	This check occurs on the publisher database and subscriber servers.	<p>The utility validates the Cisco-provided operating system/related service releases and SQL Server/related service releases.</p> <p>For information on minimum software requirements, refer to the <i>Cisco CallManager Compatibility Matrix</i>. To obtain the most recent version of this document, see <a href="#">Table 1</a>.</p> <p>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.</p>
Database Location Setting Validation	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	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 Server	Additional Information
Security Settings Validation	This check occurs on the publisher database and subscriber servers.	<p>The utility validates the following policies and accounts:</p> <ul style="list-style-type: none"> <li>• Password policies, including Enforce Password History, Minimum Password Age, and Minimum Password Length Verify that these policies are set to default.</li> <li>• Account lockout policies Verify that these policies are set to default.</li> <li>• Local system accounts for all Administrator accounts Verify that the local system accounts for all Administrator accounts are set to Never Expire.</li> </ul> <p><b>Note</b> The utility validates the settings of the publisher database server even when it is running on the subscriber server.</p>
Cisco CallManager Database Replication Validation	This check occurs on the publisher database server.	<p>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.</p> <p>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.</p>
Hostname Resolution Validation	This check occurs on the subscriber database server only.	The utility validates that the server hostname resolves to a valid IP address.
Password Validation	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.
Domain Validation	This check occurs on the publisher database and subscriber servers.	The utility verifies that the system is not part of a domain.
Resource Validation	This check occurs on the publisher database and subscriber servers.	This utility verifies that the system has enough physical memory.

## Installing the Utility



### Caution

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](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 4.1**.

**Step 3** Download the Upgrade Assistant file to your hard drive.



#### Tip

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.



#### Note

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, click the **I accept the terms in the license agreement** radio button to accept the terms, and click **Next** to proceed with the installation.

**Step 8** Verify the customer information. Click **Next**.

The Ready to Install window displays. Click **Install**.

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

## Running the Utility



#### Tip

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** The Choose a Cisco CallManager Version displays. Choose the Cisco CallManager version to which you are interested in upgrading and click **Next**.

**Step 4** The Upgrade Assistant Confirmation window displays with a list of checks that the utility performs. Review the information in the window and click **Next**.

During the validation process, the Cisco CallManager Upgrade Assistant Status windows displays. 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 5** In the Upgrade Assistant Summary window, the validation results display. To interpret the results, see the [“Interpreting the Results” section on page 7](#).



**Caution**

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 7](#).

**Step 6** 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.



**Caution**

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.

**Tip**

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 documentation and additional literature are available on Cisco.com. Cisco also provides several ways to obtain 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 at this URL:

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

You can access the Cisco website at this URL:

<http://www.cisco.com>

You can access international Cisco websites at this URL:

[http://www.cisco.com/public/countries\\_languages.shtml](http://www.cisco.com/public/countries_languages.shtml)

## Ordering Documentation

You can find instructions for ordering documentation at this URL:

[http://www.cisco.com/univercd/cc/td/doc/es\\_inpk/pdi.htm](http://www.cisco.com/univercd/cc/td/doc/es_inpk/pdi.htm)

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Ordering tool:  
<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, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

## Documentation Feedback

You can send comments about technical documentation to [bug-doc@cisco.com](mailto: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  
Attn: Customer Document Ordering  
170 West Tasman Drive  
San Jose, CA 95134-9883

We appreciate your comments.

## Obtaining Technical Assistance

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, Cisco Technical Support provides 24-hour-a-day, award-winning technical assistance. The Cisco Technical Support Website on Cisco.com features extensive online support resources. In addition, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not hold a valid Cisco service contract, contact your reseller.

### Cisco Technical Support Website

The Cisco Technical Support Website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day, 365 days a year at this URL:

<http://www.cisco.com/techsupport>

Access to all tools on the Cisco Technical Support Website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

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

### Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool automatically provides recommended solutions. If your issue is not resolved using the recommended resources, your service request will be assigned to a Cisco TAC engineer. The TAC Service Request Tool is located at this URL:

<http://www.cisco.com/techsupport/servicerequest>

For S1 or S2 service requests or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco TAC engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553 2447

For a complete list of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/techsupport/contacts>

## Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—Your 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.

Severity 2 (S2)—Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Severity 3 (S3)—Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

## Obtaining Additional Publications and Information

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

- Cisco Marketplace provides a variety of Cisco books, reference guides, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:

<http://www.cisco.com/go/marketplace/>

- 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://cisco.com/univercd/cc/td/doc/pcat/>

- *Cisco Press* publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:

<http://www.ciscopress.com>

- *Packet* magazine is the Cisco Systems technical user magazine for maximizing Internet and networking investments. Each quarter, Packet delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources. You can access Packet magazine at this URL:

<http://www.cisco.com/packet>

- *iQ Magazine* is the quarterly publication from Cisco Systems designed to help growing companies learn how they can use technology to increase revenue, streamline their business, and expand services. The publication identifies the challenges facing these companies and the technologies to help solve them, using real-world case studies and business strategies to help readers make sound technology investment decisions. 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/ipj>

- World-class networking training is available from Cisco. You can view current offerings at this URL:

<http://www.cisco.com/en/US/learning/index.html>

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