



## Using Cisco Unified Communications Manager Upgrade Utility 4.3(2)

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The Cisco Unified Communications Manager Upgrade Utility, a nonintrusive tool, detects the health of the servers in the Cisco Unified Communications Manager cluster before you perform an upgrade to Cisco Unified Communications Manager.

This version of Cisco Unified Communications Manager Upgrade Utility replaces the following versions of Cisco Unified CallManager Upgrade Utility:

- Release 3.3(5)
- Release 4.0(2a)
- Release 4.1(2)
- Release 4.1(3)
- Release 4.2(1)
- Release 4.2(2)
- Release 4.2(3)
- Release 4.3(1)

Cisco Unified Communications Manager Upgrade Utility 4.3(2) adds support for multiple version upgrades. Use Cisco Unified Communications Manager Upgrade Utility, version 4.3(2) or later, to detect the health of your servers before you upgrade to Cisco Unified Communications Manager (formerly known as Cisco Unified CallManager) Release 3.3(5), 4.0(2a), 4.1(2), 4.1(3), 4.2(1), 4.2(2a), 4.2(3), 4.3(1), 5.0, 5.1(1), and 6.0(1).



### Caution

This utility identifies problems that could cause the Cisco Unified Communications Manager 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/en/US/products/hw/voiceapp/ps378/prod_installation_guides_list.html">http://www.cisco.com/en/US/products/hw/voiceapp/ps378/prod_installation_guides_list.html</a>
<i>Cisco Unified Communications Manager Compatibility Matrix</i>	<a href="http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_device_support_tables_list.html">http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_device_support_tables_list.html</a>

Table 1 Quick Reference for URLs (continued)

Related Documentation and Software	URL and Additional Information
Cisco Unified Communications Manager documentation	<a href="http://www.cisco.com/en/US/products/sw/voicesw/ps556/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/sw/voicesw/ps556/tsd_products_support_series_home.html</a>
Cisco Unified Communications Applications Backup and Restore documentation	<a href="http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html">http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html</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 Unified Communications Manager software page.
Related Cisco IP telephony application documentation	<a href="http://www.cisco.com/en/US/products/sw/voicesw/tsd_products_support_category_home.html">http://www.cisco.com/en/US/products/sw/voicesw/tsd_products_support_category_home.html</a>

## Before You Begin

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

- Back up your Cisco Unified Communications Manager servers. To obtain the backup utility documentation, go to [http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod\\_maintenance\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_maintenance_guides_list.html).
- 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 Unified Communications Manager version, download and run the latest version of the Cisco Unified Communications Manager Upgrade Utility, a nonintrusive tool that detects the health of the servers in the Cisco Unified Communications Manager cluster without changing the state of the system.

To verify that the server meets the minimum requirement for the Cisco Unified Communications Manager version to which you are upgrading, refer to the *Cisco Unified Communications Manager Compatibility Matrix*. To obtain the most recent version of this document, go to

[http://www.cisco.com/en/US/products/sw/voicesw/ps556/products\\_device\\_support\\_tables\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_device_support_tables_list.html)



### 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 that are 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 Utility 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, a 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 Unified 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 that are running Cisco Unified CallManager Release 3.3, 4.0, 4.1, or 4.2</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 Unified Communications Manager Compatibility Matrix</i>. To obtain the most recent version of this document, see <a href="#">Table 1</a>.</p> <p>The Upgrade 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 Unified CallManager and the application before you upgrade. Failing to do so may cause applications to not work as expected.</p>

**Table 2**      **Validation Checks That the Utility Performs (continued)**

<b>Module</b>	<b>Applicable Server</b>	<b>Additional Information</b>
Database Location Setting Validation	This check occurs on the publisher database and subscriber servers.	The utility performs a check of your Cisco Unified 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 Unified CallManager is integrated with DC Directory. This utility validates the DC Directory connection and the DC Directory configuration containers.
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 Unified 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/en/US/products/hw/voiceapp/ps378/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/hw/voiceapp/ps378/prod_installation_guides_list.html).

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 **Unified Communications Manager Utilities**.

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


**Tip**

For this utility, Cisco uses the file format, CCMUpdAsstInstall\_<utility version>.exe.

**Step 4** Remember 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 that 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

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- Step 1** Choose **Start > Programs > Cisco Systems, Inc > CallManager Upgrade Utility**.
- Step 2** The Welcome window displays. Review the information in the window and click **Next**.
- Step 3** The Choose a Cisco Unified CallManager Version displays. Choose the Cisco Unified CallManager version to which you are interested in upgrading and click **Next**.
- Step 4** The Upgrade Utility 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 Unified CallManager Upgrade Utility 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 Utility 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 8](#).

- 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.
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## Interpreting the Results

The validation results display in the Upgrade Utility 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 Utility 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.

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

**Caution**

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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.

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## 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**

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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 Utility Summary report, provides the exact same information that displays in the Upgrade Utility 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 reimaged the server or manually delete the files.

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## Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, 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>

## Cisco Product Security Overview

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at: <http://www.cisco.com/wl/export/crypto/tool/stqrg.html>. If you require further assistance please contact us by sending email to [export@cisco.com](mailto:export@cisco.com)

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