



Postinstallation Tasks

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Postinstall Tasks for Cisco Unified Communications Manager

Procedure

	Command or Action	Purpose
Step 1	Read the Release Notes and any Readme files that come with your release.	You can download Release Notes from the below URL. Make sure that you understand the features for your release and any COP file requirements. https://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-release-notes-list.html
Step 2	Configure Software Location on cluster nodes that will be used for future upgrades and COP Installs.	Before you attempt to upgrade any cluster nodes or install any COP files on the cluster nodes, all cluster nodes need to have their Software Location fields configured. For more information on configuring software location details, see the 'Configure Cluster Software Location' section in the Upgrade and Migration Guide for Cisco Unified Communications Manager and the IM and Presence Service from Releases 12.5(1)SU6 and 14SU2 onwards.
Step 3	Reset Application User Passwords , on page 3	We recommend that you reset your application user passwords post installation.
Step 4	Install the Real-Time Monitoring Tool , on page 3	You can use the Cisco Unified Real-Time Monitoring Tool (RTMT) to monitor Unified

	Command or Action	Purpose
		Communications Manager and the IM and Presence Service in real time.
Step 5	Enable the Kerneldump Utility, on page 5	If you have a kernel crash, the kerneldump utility provides a mechanism for collecting and dumping the crash.
Step 6	Install Licenses, on page 6	Verify that you have the required licenses for your system and devices.
Step 7	Configure the Backup, on page 6	We recommend performing regular backups. You can set up automatic backups or invoke a backup at any time.
Step 8	Install New Locales, on page 7	Optional. The default locale is US - English. If you want to use a different locale, download and install it.
Step 9	COP File Installation Guidelines, on page 9	You may need to install a COP file after the installation to fix a known defect, or to enable support for a custom device type that you want to use that does not ship with Unified Communications Manager.
Step 10	Install a dial plan by completing these tasks: <ul style="list-style-type: none"> • Install a COP File, on page 10 • Install a Prebuilt Dial Plan, on page 10 • Restart the Cisco CallManager Service, on page 11 	If you want to use a dial plan other than the North American Numbering Plan (the default), you must download and install it.
Step 11	Activate Security, on page 11	Optional. If you want to enable security on your system, install the Cisco CTL Client and enable mixed mode.
Step 12	Configure the Simple Network Management Protocol, on page 12	Optional. If you are using a Network Management System such as Cisco Prime Collaboration Assurance, enable the Simple Network Management Protocol.
Step 13	Change Virtual Machine Configuration Specifications, on page 12	To change to the Guest OS version in the Cisco Unified Communications Manager virtual machine (VM) settings.
Step 14	Ensure that you configure the Trusted List of Hosts in HTTP Referer/Host Header and add the public IP address or DNS alias in the Cisco Unified CM Administration Enterprise Parameters page.	This configuration is necessary if your network topology has public IP address configured for external interfaces along with private IP address for the individual nodes in the cluster. Unified CM will now validate the IP address or hostname present in the Host header with the servers configured in the Unified CM cluster first before allowing access to Unified

	Command or Action	Purpose
		<p>CM. You must also configure the DNS alias used to access the Unified CM under the Trusted List of Hosts configuration. For example, if your server is <code>cm1.example.local</code>, and you use <code>phone.example.local</code> to access the server, you must add <code>phone.example.local</code> to the Trusted List of Hosts configuration.</p> <p>From the private network using a private IP address, navigate to the Cisco Unified CM Administration user interface and select System > Enterprise Parameters to configure the external IP addresses or DNS alias used.</p> <p>You must restart the Cisco Tomcat service after performing this activity for all the web pages to load correctly.</p>

Reset Application User Passwords

The install process sets all Application User passwords to the same default Application User password that you entered during installation. We recommend that you reset all these passwords post installation.

Procedure

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- Step 1** From Cisco Unified CM Administration, choose **User Management > Application User**.
 - Step 2** Click **Find**.
 - Step 3** Click an application user.
The details of the application user appear in the **Application User Configuration** window.
 - Step 4** Enter the new password in both the **Password** and **Confirm Password** fields.
 - Step 5** Click **Save**.
 - Step 6** Repeat this procedure for each application user.
-

Install the Real-Time Monitoring Tool

Use this procedure to install the Cisco Unified Real-Time Monitoring Tool (RTMT). You can use RTMT to monitor Unified Communications Manager and the IM and Presence Service in real time.

Before you begin

- Unified RTMT requires at least 128 MB in memory to run on a Windows OS platform; the tool requires at least 300 MB of disk space to run on a Windows/Linux OS platform.



Note The Linux Unified RTMT plugin CcmServRtmtPlugin.bin can be installed on RHEL 5, RHEL 6, or higher Linux machines. If you want to install it on a RHEL 4 machine, ensure that the glibc (OS library) version is 2.4.x or higher. If the glibc version is 2.3.x or earlier, the underlying JRE install fails.

- The current Unified RTMT download supports earlier releases of Unified Communications Manager or Cisco Unity Connection. Some releases of Unified Communications Manager may require different versions of Unified RTMT to be installed on your computer (one version per Unified Communications Manager release). Verify that the Unified RTMT version that you install is compatible with the product that you are monitoring. If the Unified RTMT version that you are using is not compatible with the server that you want to monitor, the system prompts you to download the compatible version.
- Your computer stores the user preferences, such as the IP address and Unified RTMT frame size, based on the last instance of Unified RTMT that you run.



Note Only the administrators with Standard Audit Users and Standard CCM Super Users privileges have access to Unified RTMT features. If an application user without these privileges logs into Unified RTMT, some of the features such as Call Control Discovery (CCD) and Service Advertisement Framework (SAF) will not work as expected.



Note On a Linux workstation, run RTMT with root access. Otherwise, when you initially install RTMT, the application will not start.

- The current Unified RTMT requires JRE to run. Verify that the system has JRE installed (Java 1.8).

Procedure

Step 1

Go to the **Plug-ins** window of the administration interface for your configuration:

Interface	How to access
Unified Communications Manager	From Unified Communications Manager Administration, choose Application > Plugins .
Unified Communications Manager IM and Presence Service	From Unified Communications Manager IM and Presence Administration, choose Application > Plugins .
Cisco Unity Connection	From Cisco Unity Connection Administration, choose System Settings > Plugins .

Step 2

Click **Find**.

Step 3

To install Unified RTMT on a client that is running the Microsoft Windows operating system, click the **Download** link for the Real-Time Monitoring Tool - Windows.

To install Unified RTMT on a client that is running the Linux operating system, click the **Download** link for the Real-Time Monitoring Tool - Linux.

Tip When you install Unified RTMT on Windows 7 or later, ensure that you perform the installation as an administrator.

- Step 4** Download the executable to the preferred location on your client.
- Step 5** To install the Windows version, double-click the Unified RTMT icon that appears on the desktop or locate the directory where you downloaded the file and run the Unified RTMT installation file.
- The extraction process begins.
- Step 6** To install the Linux version, ensure that the file has execute privileges; for example, enter the following command, which is case sensitive: **chmod +x CcmServRtmtPlugin.bin**.
- Step 7** After the Unified RTMT welcome window appears, click **Next**.
- Step 8** To accept the license agreement, click **I accept the terms of the license agreement**; then, click **Next**.
- Step 9** Choose the absolute path of Java Virtual Machine executable from your system (java.exe from the JRE installed directory, that is latest version 1.8) as prompted in the installation screen of Unified RTMT.
- Step 10** Choose the location where you want to install Unified RTMT. If you do not want to use the default location, click **Browse** and navigate to a different location. Click **Next**.
- Step 11** To begin the installation, click **Next**.
- The **Setup Status** window appears.
- Step 12** To complete the installation, click **Finish**.



Note For more details on how to use the Real-Time Monitoring Tool, refer to the *Cisco Unified Real-Time Monitoring Tool Administration Guide*.

Enable the Kerneldump Utility

Use this procedure to enable the kerneldump utility. In the event of a kernel crash, the utility provides a mechanism for collecting and dumping the crash. You can configure the utility to dump the core to either the local server, or to an external server.

Procedure

- Step 1** Log in to the Command Line Interface.
- Step 2** Complete either of the following:
- To dump kernel crashes on the local server, run the `utils os kerneldump enable` CLI command.
 - To dump kernel crashes to an external server, run the `utils os kerneldump ssh enable <ip_address>` CLI command with the IP address of the external server.
- Step 3** Reboot the server.

Install Licenses

Make sure that you acquire the necessary licenses.

Unified Communications Manager Requirements

Use Cisco Smart Software Manager or Cisco Smart Software Manager satellite to manage licenses for Unified Communications Manager. For details on how to acquire licenses, see the "Smart Software Licensing" chapter of the [System Configuration Guide for Cisco Unified Communications Manager](#).

IM and Presence Service Requirements

The IM and Presence Service does not require a server license or software version license.

Configure the Backup

We recommend performing regular backups. You can use the Disaster Recovery System (DRS) to do a full data backup for all servers in a cluster. You can set up automatic backups or invoke a backup at any time.

You can initiate a manual backup or configure a backup schedule. For more details, see the "Backup the System" chapter of the [Administration Guide for Cisco Unified Communications Manager](#).

Locale Installation

You can configure Unified Communications Manager and IM and Presence Service to support multiple languages. There is no limit to the number of supported languages you can install.

Cisco provides locale-specific versions of the Unified Communications Manager Locale Installer and the IM and Presence Service Locale Installer on www.cisco.com. Installed by the system administrator, the locale installer allows the user to view/receive the chosen translated text or tones, if applicable, when a user works with supported interfaces.

For upgrades of Unified Communications Manager or the IM & Presence Service, you must install locales after you have completed all your upgrades and migrations. For upgrades, you must reinstall any locales that you are using, except for US-English, which is installed by default. Install the latest version of the locales that match the major.minor version number of your Unified Communications Manager node or IM and Presence Service node.

Install locales after you have installed Unified Communications Manager on every node in the cluster and have set up the database. If you want to install specific locales on IM and Presence Service nodes, you must first install the Unified Communications Manager locale file for the same country on the Unified Communications Manager cluster.

Use the information in the following sections to install locales on Unified Communications Manager nodes and on IM and Presence Service nodes after you complete the software upgrade.

User Locales

User locale files contain language information for a specific language and country. They provide translated text and voice prompts, if available, for phone displays, user applications, and user web pages in the locale that the user chooses. These files use the following naming convention:

- `cm-locale-language-country-version.cop` (Unified Communications Manager)

- `ps-locale-language_country-version.cop` (IM and Presence Service)

Network Locales

Network locale files provide country-specific files for various network items, including phone tones, annunciators, and gateway tones. The combined network locale file uses the following naming convention:

- `cm-locale-combinednetworklocale-version.cop` (Unified Communications Manager)

Cisco may combine multiple network locales in a single locale installer.

You can install locale files from either a local or a remote source by using the same process for installing software upgrades. You can install more than one locale file on each node in the cluster. Changes do not take effect until you reboot every node in the cluster. We strongly recommend that you do not reboot the nodes until you have installed all locales on all nodes in the cluster. Minimize call-processing interruptions by rebooting the nodes after regular business hours.

Install New Locales

Use this procedure to install a new locale on Unified Communications Manager or IM and Presence Service. If you are installing a locale for both products, install the locale on all cluster nodes in the following order:

1. Unified Communications Manager publisher node
2. Unified Communications Manager subscriber nodes
3. IM and Presence database publisher node
4. IM and Presence subscriber nodes

Before you begin

Make sure that you have completed your installation or upgrade of Unified Communications Manager or IM and Presence Service on all cluster nodes before you attempt to install a new locale.

Procedure

- Step 1** Find the locale installer for your release on [cisco.com](https://www.cisco.com):
- For Unified Communications Manager, go to <https://software.cisco.com/download/navigator.html?mdfid=268439621&i=rm>
 - For IM and Presence Service, go to <https://software.cisco.com/download/navigator.html?mdfid=280448682&i=rm>
- Step 2** Download your release's locale installer to a server that supports SFTP.
- Step 3** Log in to Cisco Unified OS Administration using the administrator account.
- Step 4** Choose **Software Upgrades > Install/Upgrade**.
- Step 5** Complete the following fields in the **Software Installation/Upgrade** window:
- For the **Source**, choose **Remote file System**.
 - From the **Directory**, enter the path to the directory where you saved the locale installer.
 - From the **Server** field, enter the server name for the remote file system.

- Enter the credentials for the remote file system.
- From the **Transfer Protocol** drop-down list, choose **SFTP**. You must use SFTP for the transfer protocol.

- Step 6** Click **Next**.
- Step 7** Download and install the locale on the server.
- Step 8** Restart the server. The updates take effect after the server restarts.
- Step 9** Repeat this procedure on all Unified Communications Manager and IM and Presence Service cluster nodes in the prescribed order.



Note Do not reset user locales for your end users until the new locale is installed on all cluster nodes. If you are installing the locale for both Unified Communications Manager and IM and Presence Service, you must install the locale for both products before you reset user locales. If you run into any issues, such as could occur if an end user resets a phone language before the locale installation is complete for IM and Presence Service, have your users reset their phone language in the Self-Care Portal to English. After the locale installation is complete, users can reset their phone language, or you use Bulk Administration to synchronize locales to the appropriate language by bulk.

What to do next

After the locale installation is complete for all cluster nodes, your end users can begin using the new user locale.

Error Messages

See the following table for a description of the messages that can occur during Locale Installer activation. If an error occurs, you can view the messages in the installation log.

Table 1: Locale Installer Error Messages and Descriptions

Message	Description
[LOCALE] File not found: <language>_<country>_user_locale.csv, the user locale has not been added to the database.	This error occurs when the system cannot locate the CSV file, which contains user locale information to add to the database. This indicates an error with the build process.
[LOCALE] File not found: <country>_network_locale.csv, the network locale has not been added to the database.	This error occurs when the system cannot locate the CSV file, which contains network locale information to add to the database. This indicates an error with the build process.

Message	Description
<p>[LOCALE] Communications Manager CSV file installer installldb is not present or not executable.</p>	<p>This error occurs because a Unified Communications Manager application called installldb must be present; it reads information that is contained in a CSV file and applies it correctly to the Unified Communications Manager database. If this application is not found, it either was not installed with Unified Communications Manager (very unlikely), has been deleted (more likely), or the node does not have Unified Communications Manager installed (most likely). Installation of the locale terminates because locales do not work without the correct records that are held in the database.</p>
<p>[LOCALE] Could not create /usr/local/cm/application_locale/cmservices/ipma/com/cisco/ipma/client/locales/maDialogs_<II>_<CC>.properties.Checksum.</p> <p>[LOCALE] Could not create /usr/local/cm/application_locale/cmservices/ipma/com/cisco/ipma/client/locales/maMessages_<II>_<CC>.properties.Checksum.</p> <p>[LOCALE] Could not create /usr/local/cm/application_locale/cmservices/ipma/com/cisco/ipma/client/locales/maGlobalUI_<II>_<CC>.properties.Checksum.</p> <p>[LOCALE] Could not create /usr/local/cm/application_locale/cmservices/ipma/LocaleMasterVersion.txt.Checksum.</p>	<p>These errors could occur when the system fails to create a checksum file; causes can include an absent Java executable, /usr/local/thirdparty/java/j2sdk/jre/bin/java, an absent or damaged Java archive file, /usr/local/cm/jar/cmutil.jar, or an absent or damaged Java class, com.cisco.ccm.util.Zipper. Even if these errors occur, the locale will continue to work correctly, with the exception of Unified Communications Manager Assistant, which cannot detect a change in localized Unified Communications Manager Assistant files.</p>
<p>[LOCALE] Could not find /usr/local/cm/application_locale/cmservices/ipma/LocaleMasterVersion.txt in order to update UnifiedCMAssistant locale information.</p>	<p>This error occurs when the file does not get found in the correct location, which is most likely due to an error in the build process.</p>
<p>[LOCALE] Addition of <RPM-file-name> to the Unified Communications Manager database has failed!</p>	<p>This error occurs because of the collective result of any failure that occurs when a locale is being installed; it indicates a terminal condition.</p>

COP File Installation Guidelines

Depending on your installation, you may need to install a COP file after the installation to fix a known defect, or to enable support for a custom device type that you want to use that does not ship with Unified Communications Manager.

If you need to install a COP file, follow these guidelines:

- Install the appropriate COP file on every node in a cluster. Perform this task before you install new software on each node in the cluster and after set up the database.
- After you install a COP file, you must restart the node.
- Restart Unified Communications Manager and/or the IM and Presence Service to ensure that configuration changes that are made during the COP file installation get written into the database.

Install a COP File

If you want to use a prebuilt Dial Plan other than the North American Numbering Plan (the system default), you must install a COP file with your dial plan.

Procedure

- Step 1** Begin this procedure on the Unified Communications Manager publisher node. From Cisco Unified Communications OS Administration, choose **Software Upgrades > Install**. The **Software Installation/Upgrade** window appears.
- Step 2** In the **Source** field, choose **Remote File System**.
- Step 3** Configure the fields on the **Software Installation/Upgrade** window. See the Related Topics for more information about the fields and their configuration options.
- Step 4** Click **Next**.
The window refreshes with a list of available software options and upgrades.
- Step 5** From the **Options/Upgrades** drop-down list, choose the **DP COP** file and click **Next**.
The **Installation File** window opens and downloads the file from the FTP server. The window displays the progress of the download.
- Step 6** When the **Checksum** window appears, verify the checksum value against the checksum for the file that you downloaded.
- Step 7** Click **Next** to proceed with the software upgrade.
A warning message displays the DP COP file that you selected to install.
- Step 8** Click **Install**.
The **Install Status** window appears.
- Step 9** Click **Finish**.
- Step 10** Repeat this procedure on the Unified Communications Manager subscriber nodes. You must install the COP file on all the nodes in the cluster.
-

What to do next

To apply the dial plan to the system, [Install a Prebuilt Dial Plan, on page 10](#).

Install a Prebuilt Dial Plan

Install the national numbering plan on each Unified Communications Manager node in the cluster beginning. Begin with the Unified Communications Manager publisher node.



Note Complete this procedure only if you are installing a national numbering plan for countries outside of North America (the system default).

Before you begin

Install a COP file with your prebuilt dial plan. For details, see [Install a COP File, on page 10](#).

Procedure

- Step 1** From Cisco Unified Communications Manager Administration, choose **Call Routing > Dial Plan Installer**.
 - Step 2** Enter search criteria and click **Find**.
 - Step 3** Choose the dial plan version that you want to install from the **Available Version** drop-down list.
 - Step 4** Click **Install**.
The Status displays that the dial plan has been installed.
 - Step 5** Repeat this procedure for every subscriber node in the cluster.
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What to do next

[Restart the Cisco CallManager Service, on page 11](#)

Restart the Cisco CallManager Service

If you have installed a new dial plan, you must restart the Cisco CallManager service.

Procedure

- Step 1** From the Cisco Unified Serviceability interface, choose **Tools > Control Center - Feature Services**.
 - Step 2** Choose the Unified Communications Manager server from the **Servers** drop-down list.
In the CM Services area, Cisco CallManager displays in the **Service Name** column.
 - Step 3** Click the radio button that corresponds to the Cisco CallManager service.
 - Step 4** Click **Restart**.
The service restarts and displays the message, `Service Successfully Restarted`.
-

Activate Security

If you want to enable security on your system, you must install the Cisco CTL Client and enable mixed mode. You can download the CTL installation file in Cisco Unified CM Administration from the **Applications > Plugins** window.

When mixed mode is enabled, the system uses the Certificate Trust List (CTL) file for authentication. The CTL file contains a server certificate, public key, serial number, signature, issuer name, subject name, server function, DNS name, and IP address for each server.

For details on how to install the CTL client and enable mixed mode on your system, see the [Security Guide for Cisco Unified Communications Manager](#).

Configure the Simple Network Management Protocol

If you are using a Network Management System, such as Cisco Prime Collaboration Assurance, enable the Simple Network Management Protocol.

Before you begin

Your system does not allow more than ten concurrent polling queries. We recommend a maximum of eight trap destinations; anything higher will affect CPU performance. This requirement applies to all installations regardless of the OVA template that you use.

Procedure

- Step 1** Install and configure the SNMP NMS.
 - Step 2** In the **Control Center - Network Services** window, verify that the system started the SNMP services.
 - Step 3** Unified Communications Manager: In the **Service Activation** window, activate the Cisco CallManager SNMP service. Cisco Unity Connection only: The Connection SNMP Agent service automatically activates.
 - Step 4** If you are using SNMP V1/V2c, configure the community string.
 - Step 5** If you are using SNMP V3, configure the SNMP user.
 - Step 6** Configure the notification destination for traps or informs.
 - Step 7** Configure the system contact and location for the MIB2 system group.
 - Step 8** Configure trap settings for CISCO-SYSLOG-MIB.
 - Step 9** Unified Communications Manager only: Configure trap settings for CISCO-CCM-MIB.
 - Step 10** Restart the Primary Agent service.
 - Step 11** On the NMS, configure the Unified Communications Manager trap parameters.
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Change Virtual Machine Configuration Specifications

Use the following procedure to change to the Guest OS version in the Unified Communications Manager virtual machine (VM) settings.

Procedure

- Step 1** Shut down the virtual machine.
- Step 2** Change the configuration of the virtual machine as needed through vSphere. You can update the Guest OS and VM Hardware Compatibly.

- a. Update VM Hardware Compatibly—Left click Virtual Machine. Check for *Updates*. Click **Update**
Note If you are not aware of the host click **Check status** and click **Upgrade** to match host.
- b. Update Guest OS—Right click the **Virtual Machine** > **Edit Settings** > **Virtual Machine Option** > **General Option** > **Guest OS Version**.

Step 3 Power on the Virtual Machine.

Note Following warning messages appears in ESXi while opening the Virtual Machine settings while running when there is a mismatch.

Warning The configured guest OS (CentOS 4/5 or later (64 bit)) for this virtual machine does not match the guest that is currently running (CentOS 7 (64 bit)). You should specify the correct guest OS to allow for guest-specific optimizations.

Postinstall tasks for the IM and Presence Service

If you have installed a new cluster or new node for the IM and Presence Service, complete these tasks after your installation.



Note Many of these tasks are documented in more detail in the [Configuration and Administration of the IM and Presence Service Guide](#). Where indicated, see that guide for detail on how to complete these tasks.

Procedure

	Command or Action	Purpose
Step 1	Read the Release Notes and any Readme files that come with your release.	You can download Release Notes from the below URL. Make sure that you understand the features for your release and any COP file requirements. https://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/products-release-notes-list.html
Step 2	Check for software and firmware updates for IM and Presence Service on Cisco.com.	You can download software from https://software.cisco.com/download/navigator.html?mdfid=280448682&i=rm
Step 3	Configure Presence Redundancy Groups.	For details, see the Configuration and Administration of the IM and Presence Service Guide .

	Command or Action	Purpose
Step 4	Change the default domain.	For details, see the Configuration and Administration of the IM and Presence Service Guide .
Step 5	Change the IM and Presence Service IM address scheme.	For details, see the Configuration and Administration of the IM and Presence Service Guide .
Step 6	Change the IM and Presence Service node name.	For details, see the Configuration and Administration of the IM and Presence Service Guide .
Step 7	Configure Unified Communications Manager as a Presence Gateway.	For details, see the Configuration and Administration of the IM and Presence Service Guide .
Step 8	Configure a SIP Publish trunk on Unified Communications Manager.	For details, see the Configuration and Administration of the IM and Presence Service Guide .
Step 9	Assign users to servers.	For details, see the Configuration and Administration of the IM and Presence Service Guide .
Step 10	Activate services, on page 14	Turn on essential IM and Presence Service services.

Activate services

You must activate the following services:

- Cisco SIP Proxy
- Cisco Presence Engine
- Cisco XCP Connection Manager
- Cisco XCP Authentication Service

To activate the services, select **Tools > Service Activation** in Cisco Unified Serviceability.



Note You must complete this task on each server that you install in an IM and Presence cluster.

Where to Go Next

You have now installed your system. You are now ready to proceed with configuring your system, including tasks such as configuring the dial plan, provisioning users, registering devices, and setting up instant messaging and presence. See the following guide for details on how to configure your system:

- [System Configuration Guide for Cisco Unified Communications Manager](#)