

CHAPTER 5

Preparing for Your System Upgrade

This section discusses information to be aware of before performing the actual upgrade process, such as the general upgrade approach for different components, upgrade release versions of components involved in the upgrade, and release version compatibility.

This section includes the following topics:

- System Upgrade Approach
- System Upgrade Dependencies
- Upgrade Release Versions



Many of the IPT component names have changed as part of Cisco Unified Communications System releases. The latest product names are used in this document, even when referencing products from previous releases.

System Upgrade Approach

The general approach is to upgrade each Cisco Unified Communications Manager cluster and its associated IP telephony components one at a time before upgrading the next cluster.



Access and download the license files required to upgrade (or newly install) and operate the appropriate software at: http://www.cisco.com/go/license.

For each cluster, upgrade the components of the Cisco Unified Communications System solution in the following order:

- 1. Infrastructure components, including switches, routers, and security components. These components should be upgraded first to ensure that the infrastructure is able to support the services required by Cisco Unified Communications System components.
- 2. Cisco data and voice gateways and gatekeepers (including videoconferencing MCUs and 3G gateways).



These components should be upgraded first to ensure that the infrastructure is able to support the services required by Cisco Unified Communications System components.

3. Network Management Components

- 4. Call processing components, such as Unified Communications Manager clusters
- 5. Queuing and self-service components such as Cisco Unified Contact Center Express
- **6.** Messaging components such as Cisco Unity Connection
- 7. Cisco Unified MeetingPlace components
- 8. Video Conferencing components
- **9.** Cisco applications co-resident on servers

After all the Unified Communications Manager clusters in the network have been upgraded, install any new components included in the target release set and remove obsolete or end-of-life components.

See Chapter 6, "Performing Your System Upgrade" for detailed information about the order in which components have to be upgraded.

The upgrade sequence of the IP telephony components should be dictated by the following considerations:

- The criticality of the service that these components provide. For example, basic phone service is considered to be of greater importance than supplementary services or voice messaging services.
- Backward compatibility of the software releases of these components. For additional information, see Backward Compatibility Issues.
- The components which provide more critical service should be upgraded first. See Upgrade Release
 Versions section, which describes, for each base release set, whether components need to be
 upgraded before or after upgrading Unified Communications Manager, or if the upgrade order does
 not matter.

System Upgrade Dependencies

Cisco Unified Communications System Release 8.5(1) offers support for new hardware for several components and has removed support for some of the existing hardware platforms. The bridge upgrade provides a migration path for customers who use discontinued server models. A bridge upgrade works on unsupported or discontinued hardware for the purpose of creating a DRS backup. The DRS backup can be restored on new hardware after completion of a fresh installation. When preparing for an upgrade to Release 8.5(1), read all product upgrade documentation if you plan to migrate to the new hardware offerings.



You can set up a virtualized environment by running Unified Communications applications on a virtual machine on a Unified Computing System (UCS). For additional details, including UCS hardware information and third-party requirements, see: www.cisco.com/go/uc-virtualized.

Components within each release set are compatible with each other and will interoperate correctly. That is, components in a specific base release set are compatible with each other and will interoperate, and components in the target release set are compatible with each other and will interoperate.

The order of operations also needs to taken into account the impact of backward compatibility or incompatibility, especially for multistage system and multisite migration upgrades, where each stage (or maintenance window) upgrades only some of the components in the release set. Additional backward compatibility information is provided later in this section.

As you upgrade individual components of the integrated system, the overall system may operate in a state of degraded service when some components have been upgraded to the next release level and do not interoperate with components that are still at the previous release level.

Components that are upgraded first should interoperate with other components that are still at the previous release level. For example, Gateways are upgraded first so they can interoperate with Cisco Unified Communications Manager that is still on the base release.

Cisco Unified Communications Manager Upgrade and Compatibility Considerations

As some of the components have to be upgraded prior to Unified Communications Manager, there are certain upgrade issues and considerations to be aware of. For bridge upgrade and migration on Unified Communications Manager hardware, see *New and Changed Document for Cisco Unified Communications Manager 8.0(1)* at:

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/rel_notes/8_5_1/delta/install.html#wp122737 8

Pre-Upgrade Migration

You can migrate Cisco Unified Communications System applications before upgrading Unified Communications Manager, if:

- Existing version of the application is incompatible with the new version of Unified Communications Manager
- New version of the application is compatible with both the existing and new versions of Unified Communications Manager

Post-Upgrade Migration

You should migrate Cisco Unified Communications System applications after upgrading Unified Communications Manager, if:

- Existing version of application is compatible with new version of Unified Communications Manager
- New version of application is compatible with the new version of Unified Communications Manager, but incompatible with the existing version

For compatibility and interoperability information about Unified Communications Manager and Unified Communications components, see the following sites:

 Cisco Unified Communications Compatibility Tool: http://tools.cisco.com/ITDIT/vtgsca

Cisco Unified Communications Manager (CallManager) Compatibility Information: http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_device_support_tables_list.html

Upgrading from Cisco Unified Communications Manager Releases 6.1(1) to Cisco Unified Communications Manager Release 8.5(1)

Be aware of the following constraints regarding Cisco Unified Communications Manager when you upgrade from Cisco Unified Communications System Release 6.1(1) to Release 8.5(1):

- Unified Communications Manager must first be upgraded to the latest version of 6.1(x) available on CCO, before it can be upgraded to the target release version.
- If you have a Unified CCX deployment in your network and you are upgrading from:

- Cisco Unified Communications System Release 6.1(1) to Release 8.5(1), you can upgrade Unified CCX in the same maintenance window as the Unified Communications Manager for backward compatibility issue. So, you must first upgrade from Unified CCX 5.0(2) to Unified CCX 7.x or Unified CCX 8.0(2) and then upgrade to Unified CCX 8.5(1).
- Cisco Unified Communications System Release 7.1(3) to Release 8.5(1), there are no backward compatibility issues.
- Cisco Unified Communications System Release 8.0(2) to Release 8.5(1), there are no backward compatibility issues.

For upgrade recommendations, see Cisco Unified Contact Center Express Considerations, page 5-8.

- For Unified Communications Manager, you must perform all software installations and upgrades
 using the Software Upgrade Menu Options from either the Unified OS Administrator GUI or the CLI
 interface. Only software approved by Cisco Systems can be uploaded and processed by the system
 installer.
- Before you perform an upgrade, we recommend that you back up the Unified Communications Manager and CDR Analysis and Reporting (CAR) database to an external network directory using the Disaster Recovery Framework. This practice prevents any loss of data if the upgrade fails.

To back up data to a remote device on the network, you must have an SFTP server that is configured. Cisco allows you to use any SFTP server product but recommends SFTP products that have been certified with Cisco through the Cisco Technology Developer Partner program (CTDP). CTDP partners certify their products with specified versions of Unified Communications Manager. Information on the vendors who have certified their products with Unified Communications Manager is available at: http://www.cisco.com/pcgi-bin/ctdp/Search.pl



The above SFTP server information also applies to Unified Presence, Unified Contact Center Express, Unity Connection and Emergency Responder.

- After upgrading Cisco Unified Communications Manager 6.x release to Cisco Unified Communications Manager Release 8.5(1), upload the software feature license file for Cisco Unified Communications Manager Release 8.5(1) and restart the Cisco Unified Communications Manager service. Until you perform these tasks, Cisco Unified Communications Manager service will not be activated and devices will not register properly. For more information on licensing, refer to the Licensing chapter in Cisco Unified Communications Manager Features and Services Guide.
- If Unified Communications Manager clusters are set up in a 1:1 redundancy model, downtime during upgrade can be kept to a minimum by load-balancing device registrations across the first node (primary) and backup subsequent nodes (subscribers). This way, if either the subsequent node server fails or is taken down for maintenance, only half of the devices fail over to the remaining subsequent nodes, but all devices remain in service.
- After upgrading Cisco Emergency Responder 2.0(4) to Cisco Emergency Responder 8.5(1), upload the software feature license file for Cisco Emergency Responder 8.5(1) and restart the Cisco Emergency Responder service. Until you perform these tasks, Cisco Emergency Responder service will not be activated.
- When you upgrade Unified Communications Manager clusters set up in 1:1 redundancy model, the first node should always be upgraded first. Before rebooting the first node after its upgrade, upgrade all the subsequent nodes simultaneously without rebooting them.

Though Unified Communications Manager 8.5(1) is supported on 72 GB hard disk drives with MCS servers 7835 and 7845, it is highly recommended to use 146 GB hard disk drives with MCS servers 7835 and 7845.

After all nodes in the cluster are upgraded, make sure that you do the following in the listed order:

- 1. Reboot and switch versions to Unified Communications Manager 8.5(1) on the first node and wait until that node is initialized and fully operational.
- 2. Install the upgrade license and any other required licenses.
- **3.** Reboot and switch versions to Unified Communications Manager 8.5(1). Perform this procedure on the TFTP and Music-On-Hold (MOH) servers first. Wait until the TFTP servers fully build their configuration files.
- **4.** Reboot and switch versions to Unified Communications Manager 8.5(1) on the subsequent backup and call processing servers and wait until these servers are fully initialized.
- **5.** Complete the upgrade by rebooting and switching versions to Unified Communications Manager 8.5(1) on the remaining active call processing servers in the cluster.



For additional details about recommended upgrade procedures, see the "Call Processing" chapter in Cisco Unified Communications SRND based on Cisco Unified Communications Manager 8.x:

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/srnd/8x/uc8x.html

When you upgrade the Unified Communications Manager servers, note that the Unified IP Phone software is also automatically upgraded to the version included with Unified Communications Manager.

- Cisco Unity support for IBM Lotus Domino ended with Cisco Unified Communications System Release 8.0(2). The only upgrade option available is from Cisco Unity 6.x on IBM Lotus Domino to Cisco Unity Connection 8.5(1).
- Cisco Unified MeetingPlace Video Integration supports:
 - Cisco Unified Videoconferencing MCU 3540 4.x releases, which do not provide cascading MCU (virtual) feature that enables the use of multiple EMPs in a single meeting.
 - Cisco Unified Videoconferencing MCU 3545 5.x releases, which provide the virtual MCU feature.

If you do not require the virtual MCU feature, you do not need to upgrade your hardware and software to the Cisco Unified Videoconferencing MCU 3545 5.x release.

Cisco Secure Access Control Server (ACS) is a call recording server for calls that traverse Cisco
IOS gateways. It is mainly used for RADIUS accounting and billing purposes. Cisco Unified
Analysis Manager (Unified Analysis Manager), which is part of the Cisco Unified Real-Time
Monitoring Tool (Unified Real-Time Monitoring Tool) queries the RADIUS server to track call
status. It presents the user with failed, dropped or abandoned calls by parsing the records from the
ACS server.

If you have ACS servers deployed in your network, make sure that you have version 5.x installed as this is the only version with the API support for the Unified Analysis Manager recording capability and the database to store these records. If you do not have an ACS server with the supported hardware/software version, the gateway information will not be included in the call tracing data.

Upgrading from Cisco Unified Communications Manager Releases 7.1(3) to Cisco Unified Communications Manager Release 8.5(1)

Be aware of the following constraints with regards to Cisco Unified Communications Manager when upgrading from Cisco Unified Communications System Release 7.x to Release 8.5(1):

- If you have a Unified CCX deployment in your network and if you are upgrading Unified CCX in the same maintenance window as Unified Communications Manager, then there are no backward compatibility issue.
- If you are upgrading Unified CCX after upgarding Unified Communications Manager, then:
 - Unified Communications Manager Release 8.0(2) with Unified CCX Release 7.0(1) is not compatible
 - Unified Communications Manager Release 7.1(3) with Unified CCX 8.0(2) is compatible
- Cisco Unified Communications System Release 7.1(3) to Release 8.0(2), there are no backward compatibility issues.
- Cisco Unified Communications System Release 8.0(2) to Release 8.5(1), there are no backward compatibility issues.
 - For upgrade recommendations, see Cisco Unified Contact Center Express Considerations, page 5-8.
- For Unified Communications Manager, you must perform all software installations and upgrades using the Software Upgrade Menu Options. Only software approved by Cisco Systems can be uploaded and processed by the system installer.
- Before you perform an upgrade, we recommend that you back up the Unified Communications Manager and CDR Analysis and Reporting (CAR) database to an external network directory using the Disaster Recovery Framework. This practice will prevent any loss of data if the upgrade fails.

To back up data to a remote device on the network, you must have an SFTP server that is configured. Cisco allows you to use any SFTP server product but recommends SFTP products that have been certified with Cisco through the Cisco Technology Developer Partner program (CTDP). CTDP partners certify their products with specified versions of Unified Communications Manager. Information on the vendors who have certified their products with Unified Communications Manager is available at: http://www.cisco.com/pcgi-bin/ctdp/Search.pl



The above SFTP server information also applies to Unified Presence, Unified Contact Center Express, Unity Connection and Emergency Responder.

- After upgrading Cisco Unified Communications Manager Release 7.1(3) to Cisco Unified
 Communications Manager 8.5(1), upload the software feature license file for Cisco Unified
 Communications Manager 8.5(1) and restart the Cisco Unified Communications Manager service.
 Until you perform these tasks, Cisco Unified Communications Manager service will not be activated
 and devices will not register properly. For more information on licensing, refer to the Licensing
 chapter in Cisco Unified Communications Manager Features and Services Guide.
- When upgrading from Unified Communications Manager 7.x releases to 8.x releases, if the user requires backward compatibility for phone messaging, the messages service must be added in the Phone services page.
- If Unified Communications Manager clusters are set up in a 1:1 redundancy model, downtime during upgrade can be kept to a minimum. You can do this by load-balancing device registrations across the first node (primary) and backup subsequent nodes (subscribers). This way if either the subsequent node server fails or is taken down for maintenance, only half of the devices will have to failover to the remaining subsequent nodes, but will ensure that all devices can remain in service.
- When upgrading Unified Communications Manager clusters set up in a 1:1 redundancy model, the first node should always be upgraded first. Before rebooting the first node after its upgrade, upgrade all the subsequent nodes simultaneously without rebooting them.

Though Unified Communications Manager 8.5(1) is supported on 72 GB hard disk drives with MCS servers 7835 and 7845, it is highly recommended to use 146 GB hard disk drives with MCS servers 7835 and 7845.

After all nodes in the cluster are upgraded, make sure that you do the following in the listed order:

- 1. Reboot and switch versions to Unified Communications Manager 8.5(1) on the first node and wait until that node is initialized and fully operational.
- 2. Install the upgrade license and any other required licenses.
- **3.** Reboot and switch versions to Unified Communications Manager 8.5(1). Perform this procedure on the TFTP and Music-On-Hold (MOH) servers first. Wait until the TFTP servers fully build their configuration files.
- **4.** Reboot and switch versions to Unified Communications Manager 8.5(1) on the subsequent backup and call processing servers and wait until these servers are fully initialized.
- **5.** Complete the upgrade by rebooting and switching versions to Unified Communications Manager 8.5(1) on the remaining active call processing servers in the cluster.

When you upgrade the Unified Communications Manager servers, note that the Unified IP Phone software is upgraded automatically to the version included with Unified Communications Manager.

- Cisco Unity support for IBM Lotus Domino ended with Cisco Unified Communications System Release 8.0(2). The only upgrade option available if from Cisco Unity 6.x on IBM Lotus Domino to Cisco Unity Connection 8.5(1).
- Cisco Unified MeetingPlace Video Integration supports:
 - Cisco Unified Videoconferencing MCU 3540 4.x releases, which do not provide cascading MCU (virtual) feature that enables the use of multiple EMPs in a single meeting.
 - Cisco Unified Videoconferencing MCU 3545 5.x releases, which provide the virtual MCU feature.

If you do not require the virtual MCU feature, you do not have to upgrade your hardware and software to Cisco Unified Videoconferencing MCU 3545 5.x release.

Cisco Secure Access Control Server (ACS) is a call recording server for calls that traverse Cisco
IOS gateways. It is mainly used for RADIUS accounting and billing purposes. Cisco Unified
Analysis Manager (Unified Analysis Manager), which is part of the Cisco Unified Real-Time
Monitoring Tool (Unified Real-Time Monitoring Tool) queries the RADIUS server to track call
status. It presents the user with failed, dropped or abandoned calls by parsing the records from the
ACS server.

If you have ACS servers deployed in your network, make sure that you have version 5.x installed as this the only version with the API support for the Unified Analysis Manager recording capability and the database to store these records. If you do not have an ACS server with the supported hardware/software version, the gateway information will not be included in the call tracing data.

Upgrading from Cisco Unified Communications System Releases 8.0(2) to Cisco Unified Communications System Release 8.5(1)

Be aware of the following constraints when upgrading from Cisco Unified Communications System Release 8.0(2) to Release 8.5(1):

• Due to toll-fraud prevention, Cisco IOS Gateways, Unified SRST, and Unified Communications Manager Express require additional CLI configurations after upgrading from Cisco Unified Communications System Release 8.0(2) to Release 8.5(1).

For more information, see:

http://www.cisco.com/en/US/tech/tk652/tk90/technologies_tech_note09186a0080b3e123.shtml

Cisco Unified Contact Center Express Considerations

If you have a Unified CCX deployment in your network, before you proceed with the Cisco Unified CCX upgrade, consider the following requirements and recommendations.

Upgrade Requirements

- Use Backup n' Restore (BnR) system to take the regular backup of the Cisco CRS 5.0(x) or Cisco Unified Contact Center Express 7.0(x) server before you start the backup process using Pre-Upgrade Tool (PUT).
- PUT is required for an indirect upgrade from Unified CCX Release 7.0(1) to Release 8.5(1) due to the change in platform. For upgrade from Release 5.0(2) to Release 8.5(1), you must first upgrade to Release 7.0(1) or Release 8.0(2). If the intermediate upgrade is to Release 8.0(2), then you should use the 8.0.2 PUT.
- After running PUT and before installing Cisco Unified Contact Center Express 8.5(1), you must upgrade the system running Cisco Unified Communications Manager to the latest compatible version.



Note

You will install Cisco Unified Contact Center Express 8.5(1) on a new system or re-image your existing system running either Cisco CRS 5.0(x) or Cisco Unified Contact Center Express 7.x.

After installing Cisco Unified Contact Center Express 8.5(1), retrieve the backed up data on the system using the Cisco Unified Contact Center Express Administration web interface.

For information on how to upgrade to Cisco Unified Contact Center Express, Release 8.5(1) from the 5.0(x) and 7.0(x) releases, see Upgrading to Cisco Unified Contact Center Express, Release

http://www.cisco.com/en/US/docs/voice_ip_comm/cust_contact/contact_center/crs/express_8_5/in stallation/guide/uccx851ug.pdf

Upgrade Recommendations

If you are upgrading from the following base release sets:

- Cisco Unified Communications System Release 6.1(1) to Release 8.5(1)—Be aware that Unified CCX 8.5(1) is not backward compatible with Unified Communications Manager 6.1(2) and Unified Communications Manager Release 8.5(1) is not backward compatible with Unified CCX 5.0(2). You should first upgrade Unified CCX 5.0(2) to 5.0(2)SR2 and Unified Communications Manager Release 6.1(2) to 8.5(1) before proceeding with the upgrade recommendations listed below.
- Cisco Unified Communications System Release 7.1(3) to Release 8.5(1)—You will be running Unified CCX 7.0(1)SR4 and Unified Communications Manager Release 7.1(3). You can directly proceed with the upgrade recommendations listed below.

Cisco recommends the following two upgrade options:

• Same Maintenance Window—You can upgrade all call processing components first and Unified CCX 8.5(1) next. Be aware that time estimates for this option are approximately 16 hours.



To upgrade Unified Communications Manager and Unified CCX on the same maintenance window, ensure that Unified CCX is upgraded to 5.0(2)SR2 or 7.0(1)SR4 release before you upgrade the Unified Communications System Release 8.5(1) call processing components.

• Different Maintenance Windows—You should upgrade Unified CCX to Release 8.5(1) before upgrading Unified Communications Manager Release 8.5(1).

See Table 6-2 and Table 6-3 in Chapter 6, "Performing Your System Upgrade" for additional upgrade information on the above components.

Cisco Unified Presence Upgrade Considerations

Upgrade Cisco Unified Presence before you upgrade Unified Communications Manager. Be aware of the following considerations while upgrading Cisco Unified Presence:



Note: Cisco Unified Presence provides a bridge upgrade for customers to migrate from a discontinued hardware to supported hardware. The bridge upgrade allows you to create a DRS backup on the discontinued hardware. You can then restore the DRS backup on supported hardware after you complete a fresh Cisco Unified Presence installation on the supported hardware.

Upgrade Recommendations

If you are performing a bridge upgrade to Unified Presence Release 8.5(1), do the following:

Upgrading from Unified Presence Release 6.x to Release 8.5(1)

- **a.** Instead of performing a bridge upgrade to Unified Presence 8.5(1), you should first upgrade Unified Presence Release 6.x to 7.x on the discontinued hardware.
- **b.** Change the SIP Trunk Destination Port on Unified Communications Manager to 5060, since the SIP Trunk listening port for Unified Presence Release 7.x has changed to 5060.
- **c.** Perform a DRS backup.
- **d.** Then complete a fresh installation of Unified Presence Release 7.x on the supported hardware.
- **e.** Finally restore the DRS backup on the supported hardware and upgrade to Unified Presence Release 8.5(1).

Upgrading from Unified Presence Release 7.x to Release 8.5(1)

- **a.** Instead of performing a bridge upgrade to Unified Presence 8.5(1), you should perform a DRS backup of the Unified Presence Release 7.x on the discontinued hardware.
- **b.** Then complete a fresh installation of Unified Presence Release 8.5(1) on the supported hardware. For multi-node cluster (install first node, do post-install configuration, configure second node in GUI, install second node)
- **c.** Finally restore the DRS backup on the supported hardware (restore as a cluster, both nodes at the same time) and upgrade to Unified Presence Release 8.5(1).

- After upgrading Unified Communications Manager, stop and then restart the Intercluster Sync Agent using the Serviceability Pages in Unified Presence. This enables a complete reinitialization and resynchronization required due to database schema changes between Unified Communications Manager 6.x, 7.x and 8.x.
- Upgrade both nodes in a Unified Presence cluster, starting with the first node and then the subsequent node.

Proxy Profiles need not be configured for Unified Presence Release 8.x. If upgrading from Unified Presence Release 6.0(2) to 8.x, delete any Proxy Profiles that have been configured. They are not accessible and are not used in Release 8.x.

Cisco Unified IP Phones Considerations

The following are considerations to be aware of when upgrading Unified IP Phones:

 When you upgrade your Unified Communications Manager servers, note that the Unified IP Phone firmware is also automatically upgraded to the version bundled with the Unified Communications Manager.

For more detailed information about SIP Unified IP Phones and the differences between features on the SCCP and SIP phones, see the following documentation:

- Cisco 7900 Series IP Phones Maintain and Operate Guides: http://www.cisco.com/en/US/products/hw/phones/ps379/prod_maintenance_guides_list.html
- Cisco 7900 Series IP Phones End-User Guides: http://www.cisco.com/en/US/products/hw/phones/ps379/products_user_guide_list.html
- "IP Telephony Endpoints" chapter in Cisco Unified Communications SRND based on Cisco Unified Communications Manager 8.x: www.cisco.com/go/srnd

Cisco Unified Mobility Advantage Considerations

The following should be considered when upgrading the Unified Communications Manager:

• When a Unified Communications Manager cluster upgrade is performed, a restart of the Unified Mobility Advantage server is required. This is to ensure the Unified Mobility Advantage server can be in right state to handle mobile client registrations.

Considerations for Migrating to Cisco Unified MeetingPlace Release 8.0 from Cisco Unified MeetingPlace Express

Currently Cisco supports migrations from only Cisco Unified MeetingPlace Express Release 2.1.2 to Cisco Unified MeetingPlace Release 8.x; therefore, if you are using an earlier version of Cisco Unified MeetingPlace Express, you must first upgrade to Cisco Unified MeetingPlace Express Release 2.1.2.

Perform the following to migrate to Cisco Unified MeetingPlace Release 8.x from Cisco Unified MeetingPlace Express:

- 1. Use the migrate tool utility to export data from the Cisco Unified MeetingPlace Express system.
- 2. Install and configure your Cisco Unified MeetingPlace Release 8.5(1) system.

- **3.** Get new licenses for your Cisco Unified MeetingPlace Release 8.5(1) system. Licenses for Cisco Unified MeetingPlace Express do not work with a Cisco Unified MeetingPlace Release 8.x system.
- 4. Use the migrate_tool utility to import data to the Cisco Unified MeetingPlace Release 8.5(1) system.



Do not run any other processes or tasks on your system during the data migration. This can potentially affect the data that is being transferred from one system to another.

5. Verify that the data was successfully migrated to the Cisco Unified MeetingPlace Release 8.5(1) by comparing the number of user profiles on the Cisco Unified MeetingPlace Express system with the number of user profiles on the Cisco Unified MeetingPlace system.

For more information on migrating to Cisco Unified MeetingPlace Release 8.5(1) from Cisco Unified MeetingPlace Express, see the Cisco Unified MeetingPlace Documentation at: http://www.cisco.com/en/US/products/sw/ps5664/ps5669/tsd_products_support_series_home.html

Backward Compatibility Issues

In multistage system upgrade scenarios, you may have to consider additional issues such as backward compatibility across components.

A version of one component is backward compatible with a previous version of another component when service functionality and behavior are maintained between the two component versions. Backward compatibility between two components or applications may limit the order of upgrade of the components and cause service outage during upgrades.

If two components are upgraded during separate maintenance windows, as in the multistage system or multisite migration upgrade scenarios, the whole system exists in a partially upgraded state in the interval between the two maintenance windows.

The service capability during the period between maintenance windows depends on backward compatibility between the two components, as discussed in this section. If the two components are not backward compatible, service outages occur in the interval between the two maintenance windows.

Some backward compatibly situations that are described in Backward Compatibility Scenarios may occur during the upgrade process. For more information, see the component compatibility matrices that are listed in Compatibility Guides.

Backward Compatibility Scenarios

This section describes the various backward compatibility scenarios.

Both New Versions are Backward Compatible

It is possible for versions of two components to each be backward compatible with the previous version of the other component, for example Unified MeetingPlace and Unified Communications Manager. In this case, there is no backward compatibility restriction in the order of upgrades. Either component may be upgraded first and will be able to interoperate with the other component as illustrated in Figure 5-1.

You can perform the upgrade for these components across multiple maintenance windows. This type of upgrade is described in the multistage system and multisite migration upgrade approaches in Chapter 4, "Planning Your System Upgrade."

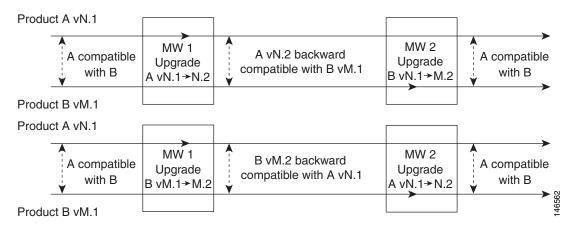


Figure 5-1 Both New Release Versions Are Backward Compatible

Only One New Version is Backward Compatible

It is possible that only one of the new versions is backward compatible with the previous version of the other component. There are no components that fit this model.

In this case, the component that is backward compatible should be upgraded first to avoid a service outage during the upgrade, as illustrated in Figure 5-2.

You should perform the upgrade for these components across two separate maintenance windows. This type of upgrade is described in the multistage system and multisite migration upgrade approaches in Chapter 4, "Planning Your System Upgrade."

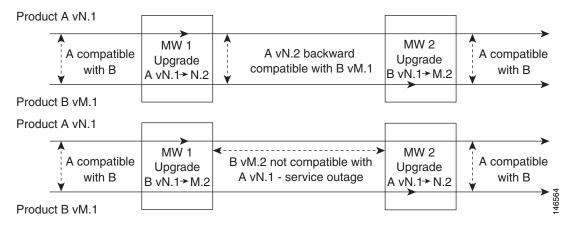


Figure 5-2 One New Release Version is Backward Compatible

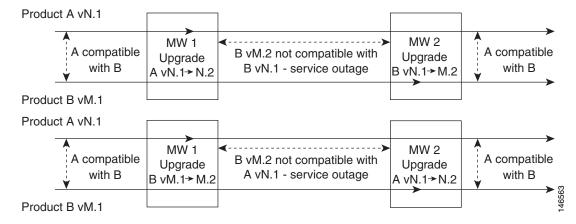
Neither New Version is Backward Compatible

It is possible that neither of the new versions is backward compatible with the previous version of the other component, as with Unified Contact Center Express and Unified Communications Manager.

In this case, a service outage exists from the time the first product is upgraded until the second component is upgraded, as shown in Figure 5-3.

This upgrade is described in the Single-Stage upgrade approach in Chapter 4, "Planning Your System Upgrade."

Figure 5-3 Neither New Release Version is Backward Compatible



Upgrade Release Versions

The tables in this section list the component release versions of the base and target release sets in relation to Unified Communications Manager 8.5(1).

Release 6.1(1) and Release 8.5(1) Software Release Sets

Table 5-1 lists the software versions for IP telephony components in the Cisco Unified Communications Release 6.1(1) and Release 8.5(1) release sets.

Table 5-1 IPT Components in Cisco Unified Communications System Release 6.1(1) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 6.1(1)
Cisco Unified Communications Manager	8.5(1)	$6.1(1a)^1$
Cisco Unified Communications Manager—Cisco IP Telephony Operating System	Bundled with Unified Communications Manager	Bundled with Unified Communications Manager
Cisco Unified Communications Manager Business Edition	8.5(1)	6.1(1)
Cisco Unified Communications Manager Express	8.5.1	4.2/IOS 12.4(15)T3 ³ ,
	15.1.3T ²	4.2/IOS 12.4(11)XW5
Cisco Unified Survivable Remote Site Telephony (SRST)	8.5(1)	4.1/IOS 12.4(15)T4.2/
	15.1.3T ²	IOS 12.4(11)XW5 ⁴
Cisco Intercompany Media Engine	8.5(1)	_
Cisco Unified Contact Center Express	8.5(1)	5.0(2)
Cisco Unified Contact Center Express Operating System	Bundled with Unified Contact Center Express	2003.1.1 SR4

Table 5-1 IPT Components in Cisco Unified Communications System Release 6.1(1) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 6.1(1)
Cisco Unified Presence	8.5(1)	$6.0(2)^1$
Cisco Emergency Responder	8.5(1)	$2.0(3)^1$
Cisco Emergency Responder—Cisco IP Telephony Operating System	Bundled with Cisco Emergency Responder	Bundled with Cisco Emergency Responder
Cisco Fax Server	_	9.0
Cisco Unified Application Environment	_	2.4
Cisco Unified Phone Proxy	_	1.0(2)
Cisco Unified Business Attendant Console and Unified Department Attendant Console	8.5	1.1.2.24 CM TSP 6.1 (0.10)
Cisco Unified Enterprise Attendant Console	8.5	_
Cisco Enterprise Policy Manager	_	_
Cisco Unified MeetingPlace	8.0^{5}	6.0(1)
Cisco Unified MeetingPlace Web Conferencing	8.0	6.0(1)
Microsoft Outlook for Cisco Unified MeetingPlace	8.0	6.0(1)
IBM Lotus Notes for Cisco Unified MeetingPlace Release	_	6.0(1)
Jabber for Cisco Unified MeetingPlace	8.0	_
Microsoft Office Communicator for Cisco Unified MeetingPlace	8.0	_
Cisco Unified MeetingPlace Express	_	2.0.2.126 1
Cisco Unified Videoconferencing 3515 MCU	_	5.1.0.0.24
Cisco Unified Videoconferencing 3540 MCU	_	4.2.10
Cisco Unified Videoconferencing Enhanced Media Processor (EMP) Module for 3540 MCU	_	4.2.8
Cisco Unified Videoconferencing 3545 MCU	_	5.1.0.0.24
Cisco Unified Videoconferencing Enhanced Media Processor EMP for 3545 MCU	_	5.1.0.0.27
Cisco Unified Media Server for 3545 MCU (video)	5.7.0.0.4	_
Cisco Unified Media Server for 3545 MCU (audio)	6.1.0.0.16	_
Cisco Unified Videoconferencing 3521 and 3522 BRI Gateways	5.0.0.0.22	5.0.0.0.22
Cisco Unified Videoconferencing 3526, 3527, and 3545 PRI Gateways	5.0.0.0.22	5.0.0.0.22
Cisco Unified Videoconferencing 3540 PRI Gateway	_	5.0.0.0.17
Cisco Unity	8.0(3)	5.0
Unity-CM TSP	8.4(3)	8.1(3)

Table 5-1 IPT Components in Cisco Unified Communications System Release 6.1(1) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 6.1(1)
Cisco Unity—Microsoft Exchange	Microsoft Exchange 2003 SP2 (on Cisco Unity and partner Exchange servers) and Microsoft Exchange 2007 SP1 or Exchange 2003 SP2 (on other message store servers)	Microsoft Exchange 2003 SP2 (on Cisco Unity and partnerExchange servers) and Microsoft Exchange 2000 SP3 or Exchange 2003 SP2 (on other message store servers)
Cisco Unity—IBM Lotus Domino	_	7.0 with DUC 1.2.3
Cisco Unity Connection	8.5(1)	2.1(1)
Cisco Unity Express	8.5(1)	3.1(1)
Cisco Unified Messaging Gateway	8.5(1)	1.0.1
Cisco Unified Survivable Remote Site Voicemail	8.5(1)	_
	IOS 15.1.3T ²	
Cisco Unified IP Phones models 7906G, 7931, 7941G, 7942G, 7945G, 7961G, 7962G, 7965G, 7970G, 7971G, 7975G	Bundled with Unified Communications Manager	Bundled with Unified Communications Manager
	Firmware 9.1(1) SR1	
Cisco Unified IP Phones models 7921G, 7925G	1.3(4)	Bundled with Unified Communications Manager
Cisco Unified IP Phones model 7937G	1.4(3)	Bundled with Unified Communications Manager
Cisco Unified IP Phones models 7940G, 7960G	Firmware 8.1(2)	8.1(1b)
Cisco Unified IP Phones models 7936, 7985G	_	Bundled with Unified Communications Manager
Cisco Unified IP Phones model 3911, 3951	8.1(2)SR1	8.1(1b)
Cisco Unified IP Phones models 6921, 6941, 6961	Firmware 9.1(1) Firmware 9.0(2) 9.0(2) SR1	_
Cisco Unified IP Phones models 6901, 6911	Firmware 9.1(1)	_
Cisco Unified IP Phones models 8961, 9951, 9971	Firmware 9.1(1) SR1	_
Cisco IP Communicator	7.0.(5)	2.1
Cisco Unified Personal Communicator	8.0(1)	1.2(1)
Cisco UC Integration for Microsoft Lync (formerly Microsoft Office Communicator)	8.5(1)	_
Cisco Unified Communications for RTX	8.5(1)	_
Cisco Unified Client Services Framework	_	_
Cisco UC Integration for Webex	_	_
Cisco Unified Video Advantage		2.0(3)

Table 5-1 IPT Components in Cisco Unified Communications System Release 6.1(1) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 6.1(1)
Cisco Unified Communications Widgets	8.0(1) VVM 8.0 C2C 7.0(1) PD	
Cisco Aironet Access Point (AP) 1200G	12.4(21a)JA2	12.3(8)JA
Cisco 4400 Series Wireless LAN Controllers	6.0.188.0	_
Cisco Unified Mobility Advantage	7.1(3)	3.0(3)
Cisco Unified Mobile Communicator	7.1(3)	3.0
Cisco Unified Mobile Communicator iPhone	7.1(3)	_
Cisco ASA Adaptive Security Appliance	8.4(1)	8.0(3)
Cisco Catalyst Firewall Service Module	_	3.2(2)
Cisco Intrusion Prevention System (AIP-SSM, IDSM-2 Module, IPS-4200)	7.0(2)E3	6.0(2)
Cisco NAC Appliance (Clean Access)	_	4.1.1
Management Center for Cisco Security Agents	5.2.1	5.0.0.216
Cisco Security Agent for Cisco Unified Communications Manager	Bundled with Unified Communications Manager	Bundled with Unified Communications Manager
Cisco Security Agent for Cisco Emergency Responder	Bundled with Unified Communications Manager	Bundled with Cisco Emergency Responder
Cisco Security Agent for Unified Contact Center Express	Bundled with Unified Contact Center Express	5.0.0.216-3.0.4
Cisco Security Agent for Cisco Unity	6.0(1)	4.5.1.639-2.0.3
Cisco Security Agent for Cisco Unified MeetingPlace	6.0(1)	5.0.0.205-6.0.7
Cisco Security Agent for Cisco Unified MeetingPlace Express	_	_
Cisco Unified Operations Manager	8.5.16	2.0.2
Cisco Unified Service Monitor	8.5.16	2.0.1
Cisco netManager Unified Communications	_	1.0
Cisco Unified Service Statistics Manager	8.5.16	1.0
Cisco Unified Provisioning Manager	8.5^{6}	1.2
Cisco Resource Management Essentials	_	4.0.5
Cisco IOS Mainline Release	IOS Extended MR 15.0.1M4	12.4(13d) ⁷
Unified Computing System B200 M2, C200 M2, and C210 M2 (Unified Communications Virtualizations)	VMWare ESXi 4.0	_
Cisco 2801, 2821, 2851, 3825, 3845 (router, voice/data gateway)	15.1(3)T ²	_
Cisco 38xx Gatekeepers	15.1(3)T ²	_
Cisco 3800 (IP-to-IP gateway)	15.1(3)T ²	_
Cisco 3900 (IP-to-IP gateway)	15.1(3)T ²	_
Cisco 3725, 3745 (voice/data gateway)	_	12.4(15)T3

Table 5-1 IPT Components in Cisco Unified Communications System Release 6.1(1) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 6.1(1)
Cisco 3745 (IP-to-IP gateway)	_	12.4(15)T3
Cisco 3745 (gatekeeper)	_	12.4(15)T3
Cisco Integrated Services Router (ISR) 1861	$15.1(3)T^2$	12.4(11)XW5
Cisco Integrated Services Router (ISR) 2901, 2911, 2921, 2951, 3925, 3945, 3925E, 3945E	15.1(3)T ²	_
Cisco Unified SIP Proxy	8.5(1)	_
Cisco Unified Border Element Enterprise Edition for Cisco ISR Series	$15.1(3)T^2$	12.4(11)XW3
Cisco Unified Border Element Enterprise Edition for Cisco ASR 1000 Series	3.2	_
Cisco Secure RTP and Cisco Secure SRST	$15.1(3)T^2$	12.4(15)T3
Cisco 7206 (voice/data gateway)	_	12.4(15)T3
Cisco 2610XM, 2611XM, 2620XM, 2621XM, 2650XM, 2651XM (routers)	_	12.4(15)T3
Cisco Catalyst 3500XL (access switch)	_	12.0(5)WC17
Cisco Catalyst 3550 (access switch)	_	12.2(25)SEE3
Cisco Catalyst 3560 (access switch)	_	12.2(25)SEE3
Cisco Catalyst 3750 (data center switch)	12.2(53)SE2	12.2(25)SEE3
Cisco Catalyst 4503 Switch	12.2(53)SE2	12.2(25)EWA8
Cisco Catalyst 4506 (access switch)	12.2(54)SG	12.2(25)EWA8
Cisco Catalyst 6506, 6509 (voice access switch, supervisor 2/MSFC2)	12.2(33)SXI4 CatOS8.6(6a)	CatOS 8.5(8) / 12.2(18)SXF8
Cisco Catalyst Communications Media Module (CMM)	_	12.4(15)T3
Cisco Catalyst 6608, 6624 (voice gateway)	_	Bundled with Unified Communications Manager
Cisco VG202 and 204 (analog voice gateway)	15.1.3T ²	_
Cisco VG224 (analog voice gateway)	15.1.3T ²	12.4(15)T3
Cisco VG248 (analog voice gateway)	1.3(2)	1.3(2)
Cisco ATA 187 (analog telephony adaptor)	_	Bundled with Unified Communications Manager
McAfee Antivirus ⁸	Enterprise 8.7.0i	Enterprise 8.0.0 Patch Version: 11

^{1.} For software running on a MCS 7825-H2 server, an additional patch file is recommended; see the *System Release Notes for IP Telephony: Cisco Unified Communications System, Release 6.1(1)* for more information.

Cisco IOS Release 15.1(3)T and 15.1(1)T are short deployment Standard Maintenance releases ideal for the very latest new features and hardware support from
Cisco. Cisco provides 18 months of support for Standard Maintenance releases. Customers requiring longer-term maintenance support should consider upgrading
to the next 15 M Extended Maintenance release (when it becomes available), which will incorporate all features and hardware support of previous Standard
Maintenance and Extended Maintenance releases. For more information, refer to
http://www.cisco.com/en/US/prod/collateral/iosswrel/ps8802/ps10587/ps10591/ps10621/qa_c67_561940.html

^{3.} Tested on all ISR platforms except Unified Communications 500 Series for Small Business and ISR 1861. The Unified Communications 500 Series for Small Business and ISR 1861 platforms were tested on Cisco IOS version 12.4(11)XW2.

^{4.} Secure SRST deployments require advipservicesk9 image 4.2/IOS 12.4(11)XW5.

- 5. Adhoc conferencing feature in Unified MeetingPlace Releases 8.0/8.5 is not supported with Unified Communications Manager Release 8.5(1).
- 6. Will be available in CYQ1 2011.
- 7. Cisco IOS Mainline software was used for additional basic PSTN functionality and load testing as part of regression testing conducted in IP telephony environments.
- 8. You can install third-party antivirus agents on Windows-based servers such as Unified Operations Manager and Unified Provisioning Manager, but not on non-Windows appliances such as Unified Communications Manager and Unified Communications Manager Business Edition.

Release 7.1(3) and Release 8.5(1) Software Release Sets

Table 5-2 lists the software versions for the IP telephony components in the Cisco Unified Communications System Release 7.1(3) and Release 8.5(1) release sets.

Table 5-2 IP Telephony Components in Cisco Unified Communications System Release 7.1(3) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 7.1(3)
Cisco Unified Communications Manager	8.5(1)	7.1(3)
Cisco Unified Communications Manager—Cisco IP Telephony Operating System	Bundled with Unified Communications Manager	Bundled with Unified Communications Manager
Cisco Unified Communications Manager Business Edition	8.5(1)	7.1(3)
Cisco Unified Communications Manager Express	8.5.1 15.1.3T ¹	7.2/IOS 15.(0)1M 8.0/IOS 15.0(1)XA ²
Cisco Unified Survivable Remote Site Telephony (SRST)	8.5(1)	7.2/IOS 15.(0)1M
	15.1.3T ¹	8.0/IOS 15.0(1)XA ⁵
Cisco Intercompany Media Engine	8.5(1)	_
Cisco Unified Contact Center Express	8.5(1)	7.0(1) SR4
Cisco Unified Contact Center Express Operating System	Bundled with Unified Contact Center Express	Windows 2003 version: 2003.1.4a SR6
Cisco Unified Presence	8.5(1)	7.0(5)
Cisco Emergency Responder	8.5(1)	7.1(1)
Cisco Emergency Responder—Cisco IP Telephony Operating System	Bundled with Cisco Emergency Responder	Bundled with Cisco Emergency Responder
Cisco Fax Server	_	_
Cisco Unified Application Environment	_	2.5(1) SR2
Cisco ASA Phone Proxy	_	Bundled with Cisco Adaptive Security Appliance (ASA)
Cisco Unified Business Attendant Console and Unified Department Attendant Console	8.5	3.1
Cisco Unified Enterprise Attendant Console	8.5	3.1
Cisco Enterprise Policy Manager	_	_
Cisco Unified MeetingPlace	8.0^{3}	7.0 MR1
Cisco Unified MeetingPlace Web Conferencing	8.0	7.0MR1

Table 5-2 IP Telephony Components in Cisco Unified Communications System Release 7.1(3) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 7.1(3)
Microsoft Outlook for Cisco Unified MeetingPlace	8.0	7.0MR1
IBM Lotus Notes for Cisco Unified MeetingPlace Release	_	7.0MR1
Jabber for Cisco Unified MeetingPlace	8.0	7.0MR1
Microsoft Office Communicator for Cisco Unified MeetingPlace	8.0	7.0MR1
Cisco Unified MeetingPlace Express	_	2.1.1.2
Cisco Unified Videoconferencing 3515 MCU	_	_
Cisco Unified Videoconferencing 3540 MCU	_	_
Cisco Unified Videoconferencing Enhanced Media Processor (EMP) Module for 3540 MCU	_	_
Cisco Unified Videoconferencing 3545 MCU	_	_
Cisco Unified Videoconferencing Enhanced Media Processor EMP for 3545 MCU	_	_
Cisco Unified Media Server for 3545 MCU (video)	5.7.0.0.4	5.3.3.0.45A
Cisco Unified Media Server for 3545 MCU (audio)	6.1.0.0.16	6.1.0.0.16
Cisco Unified Videoconferencing 3521 and 3522 BRI Gateways	5.0.0.0.22	5.0.0.0.22
Cisco Unified Videoconferencing 3526, 3527, and 3545 PRI Gateways	5.0.0.0.22	5.0.0.0.22
Cisco Unified Videoconferencing 3540 PRI Gateway	_	5.6.1.1.13
Cisco Unity	8.0(3)	7.0(2)
Unity-CM TSP	8.4(3)	8.3(1)
Cisco Unity—Microsoft Exchange	Microsoft Exchange 2003 SP2 (on Cisco Unity and partner Exchange servers) and Microsoft Exchange 2007 SP1 or Exchange 2003 SP2 (on other message store servers)	Microsoft Exchange 2003 SP2 (on Cisco Unity and partner Exchange servers) and Microsoft Exchange 2007 SP1 or Exchange 2003 SP2 (on other message store servers)
Cisco Unity—IBM Lotus Domino	_	7.0(2) with DUC 1.2.3
Cisco Unity Connection	8.5.(1)	7.1(3) MR
Cisco Unity Express	8.5(1)	7.1
Cisco Unified Messaging Gateway	8.5(1)	1.0(2)/IOS 15.0(1)M
Cisco Unified Survivable Remote Site Voicemail	8.5(1) IOS 15.1.3T ¹	_
Cisco Unified IP Phones models 7906G, 7911G, 7931, 7941G, 7942G, 7945G, 7961G, 7962G, 7965G, 7970G, 7971G, 7975G	Bundled with Unified Communications Manager Firmware 9.1.1 SR1	Bundled with Unified Communications Manager Firmware 8.5.3

Table 5-2 IP Telephony Components in Cisco Unified Communications System Release 7.1(3) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 7.1(3)
Cisco Unified IP Phones models 7921G, 7925G	1.3(4)	Bundled with Unified Communications Manager
		Firmware 8.5.3
Cisco Unified IP Phones model 7937G	1.4(3)	Bundled with Unified Communications Manager
		Firmware 8.5.3
Cisco Unified IP Phones models 7940G, 7960G,	Firmware 8.1(2)	8.1(2)SR1
Cisco Unified IP Phones models 7936, 7985G,	_	Bundled with Unified Communications Manager
		Firmware 8.5.3
Cisco Unified IP Phones model 3911, 3951	8.1(2)SR1	8.1(2)SR1
Cisco Unified IP Phones models 6921, 6941, 6961	Firmware 9.1(1) Firmware 9.0(2) 9.0(2)SR1	Firmware 8.5.3
Cisco Unified IP Phones models 6901, 6911	Firmware 9.1(1)	_
Cisco Unified IP Phones models 8961, 9951, 9971	Firmware 9.1(1)	_
Cisco IP Communicator	7.0.(5)	7.0.(3)MR
Cisco Unified Personal Communicator	8.0(1)	7.0(2)
Cisco UC Integration for Microsoft Lync (formerly Microsoft Office Communicator)	8.5(1)	_
Cisco Unified Communications for RTX	8.5(1)	_
Cisco Unified Client Services Framework	_	_
Cisco UC Integration for Webex	_	_
Cisco Unified Video Advantage	_	2.1(2)
Cisco Aironet Access Point (AP) 1200G	12.4(21a)JA2	12.3-8.JA2
Cisco 4400 Series Wireless LAN Controllers	6.0.188.0	5.2.193.0
Cisco Unified Mobility Advantage	7.1(3)	7.1(3)
Cisco Unified Mobile Communicator	7.1(3)	7.1(3)
Cisco Unified Mobile Communicator iPhone	7.1(3)	7.1
Cisco ASA Adaptive Security Appliance	8.4(1)	8.2(1)
Cisco Catalyst Firewall Service Module	_	4.0(6)
Cisco Intrusion Prevention System (AIP-SSM, IDSM-2 Module, IPS-4200)	7.0(2)E3	6.1(1)E2 Signature: S359.0
Cisco NAC Appliance (Clean Access)	_	_
Management Center for Cisco Security Agents	5.2.1	5.2.0.272

Table 5-2 IP Telephony Components in Cisco Unified Communications System Release 7.1(3) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 7.1(3)
Cisco Security Agent for Cisco Unified Communications Manager	Bundled with Unified Communications Manager	Bundled with Unified Communications Manager
Cisco Security Agent for Cisco Emergency Responder	Bundled with Unified Communications Manager	Bundled with Unified Communications Manager
Cisco Security Agent for Unified Contact Center Express	Bundled with Unified Contact Center Express	5.2.0.272-3.1.2
Cisco Security Agent for Cisco Unity	6.0(1)	5.2.0.272-3.1.6
Cisco Security Agent for Cisco Unified MeetingPlace	6.0(1)	5.2.0.263-7.0
Cisco Security Agent for Cisco Unified MeetingPlace Express	_	6.0.517
Cisco Unified Operations Manager	8.5.14	2.2
Cisco Unified Service Monitor	8.5.14	2.2
Cisco netManager Unified Communications	_	_
Cisco Unified Service Statistics Manager	8.5.14	1.2
Cisco Unified Provisioning Manager	8.5^{3}	2.0
Cisco Resource Management Essentials	_	4.0.5
Cisco IOS Mainline Release	IOS Extended MR 15.0.1M4	12.4(25)b
Cisco 2801, 2821, 2851, 3825, 3845 (router, voice/data gateway)	15.1(3)T ¹	15.0(1)M
Cisco 38xx Gatekeepers	15.1(3)T ¹	15.0(1)M
Cisco 3800 (IP-to-IP gateway)	15.1(3)T ¹	15.0(1)M
Cisco 3900 (IP-to-IP gateway)	15.1(3)T ¹	15.0(1)M
Cisco Integrated Services Router (ISR) 1861	15.1(3)T ¹	15.0(1)M
Cisco Integrated Services Router (ISR) 2901, 2911, 2921, 2951, 3925, 3945, 3925E, 3945E	15.1(3)T ¹	15.0(1)M
Cisco Unified SIP Proxy	8.5(1)	1.1(2)
Cisco Unified Border Element Enterprise Edition for Cisco ISR Series	15.1(3)T ¹	1.3/15.0(1)M
Cisco Unified Border Element Enterprise Edition for Cisco ASR 1000 Series	3.2	_
Cisco Secure RTP and Cisco Secure SRST	15.1(3)T ¹	15.0(1)M ⁵
Cisco 7206 (voice/data gateway)	_	15.0(1)M
Cisco 2610XM, 2611XM, 2620XM, 2621XM, 2650XM, 2651XM (routers)	_	_
Cisco Catalyst 3500XL (access switch)	_	_
Cisco Catalyst 3550 (access switch)	_	12.2(25)SEE4
Cisco Catalyst 3560 (access switch)	_	12.2(25)SEE4
Cisco Catalyst 3750 (data center switch)	12.2(53)SE2	12.2(25)SEE4

Table 5-2 IP Telephony Components in Cisco Unified Communications System Release 7.1(3) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 7.1(3)
Cisco Catalyst 4503 Switch	12.2(53)SE2	12.2(25)SEE4
Cisco Catalyst 4506 (access switch)	12.2(54)SG	12.2(25)EWA
Cisco Catalyst 6506, 6509 (voice access switch, supervisor 2/MSFC2)	12.2(33)SXI4 CatOS8.6(6a)	Cat OS 8.6.3 /12.2.(18)SXF9
		Cat OS 8.5(7)
Cisco Catalyst 6608, 6624 (voice gateway)	Bundled with Unified Communications Manager	Bundled with Unified Communications Manager
Cisco VG202 and 204 (analog voice gateway)	15.1.3T ¹	15.0(1)M
Cisco VG224 (analog voice gateway)	15.1.3T ¹	15.0(1)M
Cisco VG248 (analog voice gateway)	1.3(2)	1.3(2)
Cisco ATA 187 (analog telephony adaptor)	_	_
McAfee Antivirus ⁶	Enterprise 8.7.0i	Enterprise 8.0.0 Patch Version: 11

Cisco IOS Release 15.1(3)T and 15.1(1)T are short deployment Standard Maintenance releases ideal for the very latest new features and hardware support from Cisco. Cisco provides 18 months of support for Standard Maintenance releases. Customers requiring longer-term maintenance support should consider upgrading to the next 15 M Extended Maintenance release (when it becomes available), which will incorporate all features and hardware support of previous Standard Maintenance and Extended Maintenance releases. For more information, refer to http://www.cisco.com/en/US/prod/collateral/iosswrel/ps8802/ps10587/ps10591/ps10621/qa c67 561940.html

- Unified IP Phone models 6921, 6941, and 6961 were tested with Unified Communications Manager Express and Unified SRST Release 8.0 and IOS 15.0(1)XA; all other phone models were tested with Unified Communications Manager Express and Unified SRST Release 7.2 and IOS 15.0(1)M.
- 3. Adhoc conferencing feature in Unified MeetingPlace Releases 8.0/8.5 is not supported with Unified Communications Manager Release 8.5(1).
- 4. Will be available in CYQ1 2011.
- 5. Cisco Secure SRST 8.0/15.0(1)M for Cisco Unified IP Phones models 6921, 6941, 6961.
- 6. You can install third-party antivirus agents on Windows-based servers such as Unified Operations Manager and Unified Provisioning Manager, but not on non-Windows appliances such as Unified Communications Manager and Unified Communications Manager Business Edition.

Release 8.0(2) and Release 8.5(1) Software Release Sets

Table 5-3 lists the software versions for the IP telephony components in the Cisco Unified Communications System Release 8.0(2) and Release 8.5(1) release sets.

Table 5-3 IP Telephony Components in Cisco Unified Communications System Release 8.0(2) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 8.0(2)
Cisco Unified Communications Manager	8.5(1)	8.0(2)
Cisco Unified Communications Manager—Cisco IP Telephony Operating System	Bundled with Unified Communications Manager	Bundled with Unified Communications Manager
Cisco Unified Communications Manager Business Edition	8.5(1)	8.0(2)
Cisco Unified Communications Manager Express	8.5.1	8.0/IOS 15.1(1)T ⁵
	15.1.3T ¹	

Table 5-3 IP Telephony Components in Cisco Unified Communications System Release 8.0(2) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 8.0(2)
Cisco Unified Survivable Remote Site Telephony	8.5(1)	8.0/IOS 15.1(1)T ⁵
(SRST)	15.1.3T ¹	
Cisco Intercompany Media Engine	8.5(1)	8.0(2)
Cisco Unified Contact Center Express	8.5(1)	8.0(2)
Cisco Unified Contact Center Express Operating System	Bundled with Unified Contact Center Express	Bundled with Unified Contact Center Express
Cisco Unified Presence	8.5(1)	$8.0(2)^2$
Cisco Emergency Responder	8.5(1)	8.0(1)
Cisco Emergency Responder—Cisco IP Telephony Operating System	Bundled with Cisco Emergency Responder	Bundled with Cisco Emergency Responder
Cisco Fax Server	_	_
Cisco Unified Application Environment	_	8.0(1)
Cisco ASA Phone Proxy	_	Bundled with Cisco ASA Adaptive Security Appliance
Cisco Unified Business Attendant Console and Unified Department Attendant Console	8.5	8.0
Cisco Unified Enterprise Attendant Console	8.5	8.0
Cisco Enterprise Policy Manager	_	3.3
Cisco Unified MeetingPlace	8.0^{3}	8.0
Cisco Unified MeetingPlace Web Conferencing	8.0	8.0
Microsoft Outlook for Cisco Unified MeetingPlace	8.0	8.0
Jabber for Cisco Unified MeetingPlace	8.0	8.0
Microsoft Office Communicator for Cisco Unified MeetingPlace	8.0	8.0
Cisco Unified Media Server for 3545 MCU (video)	5.7.0.0.4	5.7.0.0.4
Cisco Unified Media Server for 3545 MCU (audio)	6.1.0.0.16	6.1.0.0.16
Cisco Unified Videoconferencing 3521 and 3522 BRI Gateways	5.0.0.0.22	5.0.0.0.22
Cisco Unified Videoconferencing 3526, 3527, and 3545 PRI Gateways	5.0.0.0.22	5.0.0.0.22
Cisco Unified Videoconferencing 3540 PRI Gateway	_	5.6.1.1.13
Cisco Unity	8.0(3)	8.0(3)
Unity-CM TSP	8.4(3)	8.4(3)
Cisco Unity—Microsoft Exchange	Microsoft Exchange 2003 SP2 (on Cisco Unity and partner Exchange servers) and Microsoft Exchange 2007 SP1 or Exchange 2003 SP2 (on other message store servers)	Microsoft Exchange 2003 SP2 (on Cisco Unity and partner Exchange servers) and Microsoft Exchange 2007 SP1 or Exchange 2003 SP2 (on other message store servers)

Table 5-3 IP Telephony Components in Cisco Unified Communications System Release 8.0(2) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 8.0(2)
Cisco Unity Connection	8.5.(1)	8.0(2)
Cisco Unity Express	8.5(1)	8.0(1)
Cisco Unified Messaging Gateway	8.5(1)	1.0(2)/IOS 15.1(1)T ⁵
Cisco Unified Survivable Remote Site Voicemail	8.5(1)	8.0/IOS 15.1(1)T ⁵
	IOS 15.1.3T ¹	
Cisco Unified IP Phones models 7906G, 7911G, 7931, 7941G, 7942G, 7945G, 7961G, 7962G, 7965G, 7970G, 7971G, 7975G Cisco Unified IP Phones model 7937G	Bundled with Unified	Bundled with Unified
	Communications Manager	Communications Manager
	Firmware 9.1(1)SR1	Firmware 9.0(2), 9.0(2)SR1
	1.4(3)	Bundled with Unified Communications Manager
		Firmware 9.0(2), 9.0(2)SR1
Cisco Unified IP Phones models 7921G, 7925G	1.3(4)	Bundled with Unified Communications Manager
		Firmware 9.0(2), 9.0(2)SR1
Cisco Unified IP Phones models 7940G, 7960G	Firmware 8.1(2)	8.1(2)SR1
Cisco Unified IP Phones models 7936, 7985G	_	Bundled with Unified Communications Manager
		Firmware 9.0(2), 9.0(2)SR1
Cisco Unified IP Phones model 3911, 3951	8.1(2)SR1	8.1(2)SR1
Cisco Unified IP Phones models 6921, 6941, 6961	Firmware 9.1(1)	Firmware 9.0(2), 9.0(2)SR1
0.000 0	Firmware 9.0(2), 9.0(2)SR1	
Cisco Unified IP Phones models 6901, 6911	Firmware 9.1(1)	Firmware 9.0(2)
Cisco Unified IP Phones models 8961, 9951, 9971	Firmware 9.1(1)SR1	Firmware 9.0(2)
Cisco IP Communicator	7.0.(5)	7.0.(3)
Cisco Unified Personal Communicator	8.0(1)	8.0(1)
Cisco UC Integration for Microsoft Lync (formerly Microsoft Office Communicator)	8.5(1)	_
Cisco Unified Communications for RTX	8.5(1)	_
Cisco Unified Client Services Framework	_	8.1(1)
Cisco UC Integration for Webex	_	8.0(1)
Cisco Unified Video Advantage	_	2.1(3)
Cisco Aironet Access Point (AP) 1200G	12.4(21a)JA2	12.4(21a)JA2
Cisco 4400 Series Wireless LAN Controllers	6.0.188.0	6.0.188.0
Cisco Unified Mobility Advantage	7.1(3)	7.1(3)
Cisco Unified Mobile Communicator	7.1(3)	7.1(3)

Table 5-3 IP Telephony Components in Cisco Unified Communications System Release 8.0(2) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 8.0(2)
Cisco Unified Mobile Communicator iPhone	7.1(3)	7.1(3)
Cisco ASA Adaptive Security Appliance	8.4(1)	8.3(1)
Cisco Intrusion Prevention System (AIP-SSM, IDSM-2 Module, IPS-4200)	7.0(2)E3	7.0(2)E3
Management Center for Cisco Security Agents	5.2.1	5.2.1
Cisco Security Agent for Cisco Unified Communications Manager	Bundled with Unified Communications Manager	Bundled with Unified Communications Manager
Cisco Security Agent for Cisco Emergency Responder	Bundled with Unified Communications Manager	Bundled with Unified Communications Manager
Cisco Security Agent for Unified Contact Center Express	Bundled with Unified Contact Center Express	Bundled with Unified Contact Center Express
Cisco Security Agent for Cisco Unity	6.0(1)	6.0(1)
Cisco Security Agent for Cisco Unified MeetingPlace	6.0(1)	6.0(1)
Cisco Unified Operations Manager	8.5.14	2.3
Cisco Unified Service Monitor	8.5.14	2.3
Cisco Unified Service Statistics Manager	8.5.14	1.3
Cisco Unified Provisioning Manager	8.54	2.1
Cisco Resource Management Essentials	_	4.0.5
Cisco IOS Mainline Release	IOS Extended MR 15.0.1M4	_
Cisco 2801, 2821, 2851, 3825, 3845 (router, voice/data gateway)	15.1(3)T ¹	15.1(1)T ⁵
Cisco 38xx Gatekeepers	15.1(3)T ¹	15.1(1)T ⁵
Cisco 3800 (IP-to-IP gateway)	15.1(3)T ¹	15.1(1)T ⁵
Cisco 3900 (IP-to-IP gateway)	15.1(3)T ¹	15.1(1)T ⁵
Cisco Integrated Services Router (ISR) 1861	15.1(3)T ¹	15.1(1)T ⁵
Cisco Integrated Services Router (ISR) 2901, 2911, 2921, 2951, 3925, 3945, 3925E, 3945E	15.1(3)T ¹	15.1(1)T ⁵
Cisco Unified SIP Proxy	8.5(1)	1.1(4)
Cisco Unified Border Element Enterprise Edition for Cisco ISR Series	15.1(3)T ¹	1.3/15.1(1)T ⁵
Cisco Unified Border Element Enterprise Edition for Cisco ASR 1000 Series	3.2	3.1
Cisco Secure RTP and Cisco Secure SRST	15.1(3)T ¹	8.0/15.1(1)T ⁵
Cisco 7206 (voice/data gateway)	_	15.1(1)T ⁵
Cisco Catalyst 3550 (access switch)	_	12.2(50)SE3
Cisco Catalyst 3560 (access switch)	_	12.2(50)SE3
Cisco Catalyst 4503 Switch	12.2(53)SE2	12.2(50)SE3
Cisco Catalyst 4506 (access switch)	12.2(54)SG	12.2(50)SE3

Table 5-3 IP Telephony Components in Cisco Unified Communications System Release 8.0(2) and Release 8.5(1) Release Sets

Component	Release 8.5(1)	Release 8.0(2)
Cisco Catalyst 6506, 6509 (voice access switch,	12.2(33)SXI4	Cat OS 8.6.3 /12.2.(18)SXF9
supervisor 2/MSFC2)	CatOS8.6(6a)	Cat OS 8.5(7)
Cisco Catalyst 6506, 6509 (core switch, supervisor 720)	12.2(33)SXI4	2.2(18)SXF9
Cisco Catalyst Communications Media Module (CMM)	_	_
Cisco Catalyst 6608, 6624 (voice gateway)	Bundled with Unified	Bundled with Unified
	Communications Manager	Communications Manager
Cisco VG202 and 204 (analog voice gateway)	15.1(3)T ¹	15.1(1)T ⁵
Cisco VG224 (analog voice gateway)	15.1(3)T ¹	15.1(1)T ⁵
Cisco VG248 (analog voice gateway)	1.3(2)	1.3(2)
Cisco ATA 187 (analog telephony adaptor)	_	_
McAfee Antivirus ⁶	Enterprise 8.7.0i	Enterprise 8.7.0i

^{1.} Cisco IOS Release 15.1(3)T and 15.1(1)T are short deployment Standard Maintenance releases ideal for the very latest new features and hardware support from Cisco. Cisco provides 18 months of support for Standard Maintenance releases. Customers requiring longer-term maintenance support should consider upgrading to the next 15 M Extended Maintenance release (when it becomes available), which will incorporate all features and hardware support of previous Standard Maintenance and Extended Maintenance releases. For more information, refer to http://www.cisco.com/en/US/prod/collateral/iosswrel/ps8802/ps10587/ps10591/ps10621/qa c67 561940.html

- 2. Multi-stage upgrade testing was performed with Unified Presence Release 8.0(1) and feature and interoperability testing was performed with Unified Presence 8.0(2).
- 3. Adhoc conferencing feature in Unified MeetingPlace Releases 8.0/8.5 is not supported with Unified Communications Manager Release 8.5(1).
- 4. Will be available in CYQ1 2011.
- 5. Cisco IOS Release 15.1(1)T is a short deployment Standard Maintenance release ideal for the very latest new features and hardware support from Cisco. Cisco provides 18 months of support for Standard Maintenance releases. Customers requiring longer-term maintenance support should consider upgrading to the next 15 M Extended Maintenance release (when it becomes available), which will incorporate all features and hardware support of previous Standard Maintenance and Extended Maintenance releases. For more information, refer to http://www.cisco.com/en/US/prod/collateral/iosswrel/ps8802/ps10587/ps10591/ps10621/qa_c67_561940.html.
- 6. You can install third-party antivirus agents on Windows-based servers such as Unified Operations Manager and Unified Provisioning Manager, but not on non-Windows appliances such as Unified Communications Manager and Unified Communications Manager Business Edition.