



# System Release Notes for Contact Center: Cisco Unified Communications System, Release 6.0(1)

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# Overview

It is standard methodology for Cisco Systems to perform system-wide testing of Cisco Unified Communications components, supplementing the product-level testing performed on each Cisco Unified Communications product.

A major deliverable of the System Release and Cisco Unified Communications system testing is a recommendation of compatible software releases that have been verified by the test for customers. The recommendations are not exclusive and are in addition to interoperability recommendations for each of the individual voice application or voice infrastructure products.

For information on the software releases for Cisco Unified Communications System Release 6.0(1), see [System Requirements](#). Software compatibility for all Unified Communications system releases, as well as updated compatibility information for this release, is available in the Cisco Unified Communications Compatibility Tool at: <http://tools.cisco.com/ITDIT/vtgsca>

The focus of this document is the contact center family of products of Cisco Unified Communications System testing.

Information about IP Telephony (IPT) components that have also been tested is available at the Cisco Technical Information Site: <http://www.cisco.com/iam/unified/ipt601/index.htm>

This document is the Cisco Unified Communications System release notes on the testing conducted on voice systems composed of the following major components:

- Call control components, such as Cisco Unified Communications Manager (formerly known as Unified CallManager) and Cisco Unified Presence
- Contact center components, such as Cisco Unified Contact Center Enterprise (Unified CCE), Cisco Unified Intelligent Contact Management Enterprise (Unified ICM), Cisco Customer Response Solutions (Cisco CRS / Cisco Unified IP IVR), and Cisco Unified Customer Voice Portal (Unified CVP)
- Voice mail and unified messaging components, such Cisco Unity Connection
- Endpoints and clients, such as Cisco Unified IP Phone 7900 Series phones
- Wireless components, such as Cisco Aironet Access Points
- Security devices, such as Cisco Catalyst 6500 Series Switch Firewall Services Module (FWSM), Cisco ASA 5500 Series Adaptive Security Appliances and Cisco Security Agents
- Network management tools, such as Cisco Unified Operations Manager
- Communications infrastructure devices, such as Cisco routers, gateways/gatekeepers, and switches

**Note**

For a more complete list of contact center components that are included in a Unified Communications Release 6.0(1) system, see [Software Version Matrix](#).

## Tested Functionality

The system-wide testing of contact center functionality for Cisco Unified Communications System Release 6.0(1) includes the testing of the following:

- Three recommended upgrade paths for contact center environments:
  - Multistage upgrade of contact center components from IP Communications System Test Release 4.4 versions to Cisco Unified Communications System Release 6.0(1) versions. For a list of the base Release 4.4 versions, see the *Systems Release Notes for Unified Contact Center*

*Enterprise: IP Communications Systems Test Release 4.4* at:

[http://www.cisco.com/univercd/cc/td/doc/product/voice/ip\\_tele/gblink/system/gbtst4x/4\\_4\\_rng44ipc.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/ip_tele/gblink/system/gbtst4x/4_4_rng44ipc.htm)

- Multistage stage upgrade of contact center components from Cisco Unified Communications Release 5.0(2) versions Cisco Unified Communications System Release 6.0(1) versions. For a list of the base Release 5.0(2) versions, see the *System Release Notes for Contact Center: Cisco Unified Communications System, Release 5.0(2)* at:  
<http://www.cisco.com/univercd/cc/td/doc/systems/unified/uc502/relnotes/rnipc502.htm>
- Multistage stage upgrade of contact center components from Cisco Unified Communications Release 5.1(1) versions Cisco Unified Communications System Release 6.0(1) versions. For a list of the base Release 5.1(1) versions, see the *System Release Notes for Contact Center: Cisco Unified Communications System, Release 5.1(1)* at:  
<http://www.cisco.com/univercd/cc/td/doc/systems/unified/uc511/relnotes/rnipc511.htm>

For a list of the target Cisco Unified Communications System Release 6.0(1) versions that the contact center components were upgraded to, see [Software Version Matrix](#). System upgrade information is provided in the *System Installation and Upgrade Manual for Contact Center* at:  
<http://www.cisco.com/univercd/cc/td/doc/systems/unified/uc601/siumipcc/suimc601.pdf>

- Deployment models including:
  - Unified IP IVR test bed (Unified Communications Manager Post-Routed calls)—Multisite with Distributed Call Processing, Clustering over the WAN (CoW), Cisco Unified Mobile Agent (Unified MA) Over Broadband, Unified Outbound Option Dialer (Unified OUTD)
  - Parent and Child test bed (Parent and Child calls)—Single Unified ICM Parent with Multiple Unified CCE Children
  - Unified CVP test bed (Unified CVP Post-Routed calls)—Multisite with Distributed Call Processing, CoW, Unified MA Over Broadband, Unified OUTD, Cisco Unified Communications Manager Express as B-ACD (Backup-ACD)
- Unified CVP implemented in multiple deployment models including:
  - Branch office model with Unified CVP in comprehensive mode
  - Unified CVP in hybrid mode Unified CVP hybrid call routing (simultaneous support for H.323 and SIP) to child systems
  - Standalone VXML server deployment with and without Unified ICM lookup
- New Unified CVP Reporting and OAM&P (Operations, Administration, Maintenance and Provisioning) servers
- IP-to-IP gateway colocated on Unified CVP branch office gateway that functions as an MGCP Gateway (branch office gateway can be an H.323 gateway or a SIP and VXML gateway)
- New enterprise SIP proxy support capabilities in Cisco Unified Presence for Unified CVP SIP call flows
- Cisco Unified Cisco Contact Center Express (Unified CCX) implemented as a child system
- New Parent and Child call flow where call routing occurs between three (3) child systems (one child to another child system)
  - Unified System Contact Center (Unified SCC) child system and Unified CCE child system
  - Unified SCC child system and Unified SCC child system
  - Unified SCC child system and Unified CCX child system
- Unified Communications Manager Silent Monitoring and Call Recording features

- Cisco Unified Communications Manager Express as B-ACD (Backup-ACD)
- Support for 2000 agents per Peripheral Gateway (PG)
- Unified MA with Cisco Unified IP Phones deployed via the Business Ready Teleworker Solution
- Interoperability with IP Communications System Test Release 4.4 and Cisco Unified Communications System Release 5.1(1) release sets
- Infrastructure security implemented with Cisco Catalyst 6500 Series Switch Firewall Services Module (FWSM) and Cisco Adaptive Security Appliance (ASA) 5540 Services
- Support for Cisco Unified IP Phone 7921G (wireless phone) and Cisco Unified IP Phone 7962G (wideband codec phone) as agent endpoints
- Extension Mobility feature in Unified Communications Manager
- Cisco gateways and gatekeepers implemented as follows:
  - For Unified CVP test bed—Branch office gateway as combined PSTN and VXML gateways, IP-to-IP gateway co-located on a branch office gateway, which can be a combined H.323, SIP and VXML gateway.
  - For Unified IP IVR test bed—SIP, H.323, and MGCP gateways that route VoIP traffic.
- Failover and redundancy testing of all major contact center components.

## New and Changed Features

Cisco Unified Communications Release 6.0(1) integrates telephony, conferencing (voice and web), messaging, and contact center products for enterprise IP customers in a variety of deployment models using SIP and SCCP endpoints over IP networks. The contact center system is a portion of the end-to-end system release for enterprise Cisco Unified Communications, which is centered on the latest Unified Communications Manager release.

The following sections provide brief overviews of new and enhanced features for Cisco Unified Communications System Release 6.0(1) components and links to release note documentation:

- [Cisco Unified Communications Manager](#)
- [Cisco Unified Contact Center Enterprise and Cisco Unified Intelligent Contact Management Software](#)
- [Cisco Customer Response Solutions](#)
- [Cisco Unified Customer Voice Portal](#)
- [Cisco Computer Telephony Integration Object Server](#)
- [Cisco Agent Desktop](#)
- [Cisco Unified Presence](#)
- [Cisco Unified Operations Manager](#)
- [Cisco IP Communicator](#)
- [Cisco Unity Connection](#)
- [Cisco IOS](#)

## Cisco Unified Communications Manager

Unified Communications Manager Release 6.0(1) includes the following changes and updates to functionality:

- Call recording and silent call monitoring:
  - The Call Recording feature allows system administrators or authorized personnel to archive conversations between the agent and the customer.
  - The Silent Call Monitoring feature allows a supervisor to eavesdrop on a conversation between an agent and a customer without allowing the agent to detect the monitoring session.
- Enhancements to CTI that support new standard CTI user groups for monitor and record functionality and expanded SIP support, which allows CTI applications such as Cisco Unified Communications Manager Assistant to support Cisco SIP IP Phones.
- New phone system features including Programmable Line Keys, Intercom, Hold Reversion, Message Waiting Indicator (MWI) audio notification, and Do Not Disturb (DND).
- SIP Trunk enhancements such as Advanced Audio Codec (AAC) and Internet Low Bit Rate Codec (iLBC) audio codecs were added to the user interface of the Cisco Unified CallManager Administration.
- Cisco Unified IP Phone 7931, which supports IEEE 802.3af Power over Ethernet, security, and other calling features, dedicated hold, redial, and transfer keys that facilitate call handling, and illuminated mute and speakerphone keys that provide a clear indication of speaker status.
- Support for secure conferencing on the following:
  - Intracluster trunks (ICTs), H.323 trunks and gateways, and MGCP gateways.
  - With SRTP encryption, over a secure TLS or IPSec connection.
  - Licensed CTI devices.




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**Note** Secure conferencing is not supported for encrypted phones running firmware release 8.2 or earlier and when the conference involves SIP trunks.

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- Peer-to-peer image distribution.
- Wideband codec support includes AAC/iLBC and G.722.

For a detailed description of these features and functionality, see *Release Notes for Cisco Unified Communications Manager Release 6.0(1)* at:

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/cucm/rel\\_notes/6\\_0\\_1/601cmrn.html](http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/rel_notes/6_0_1/601cmrn.html)

## Cisco Unified Contact Center Enterprise and Cisco Unified Intelligent Contact Management Software

Unified CCE and Unified ICM software new features include:

- Silent call recording and monitoring:
  - Unified Communications Manager-based Silent Monitoring by supervisor—Standard silent monitor session where an agent using a Unified IP Phone is monitored by a supervisor using either the CAD or CTI Toolkit desktop. The supervisor will listen to the monitored session on their Unified IP Phone.

- Call Recording by Witness Impact 360 Server (third-party application)—This is typically accomplished today through applications connecting as all-event clients to CTI server, with stand-alone RTP stream packet sniffing and recording.
- Phone-In Silent Monitoring—Supervisor calls into contact center, enters an authorization/authentication code followed by a special code to initiate monitoring.
- Newer version of Cisco Security Agent for Unified CCE and Unified ICM.
- Default enabling of the Support Tools Node Agent

For a detailed description of new and enhanced features and functionality, see *Release Notes for Cisco ICM/IPCC Enterprise & Hosted Editions Release 7.2(1)* at:

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/cust\\_contact/contact\\_center/icm\\_enterprise/icm\\_enterprise\\_7\\_2/release/notes/icme72rn.pdf](http://www.cisco.com/en/US/docs/voice_ip_comm/cust_contact/contact_center/icm_enterprise/icm_enterprise_7_2/release/notes/icme72rn.pdf)

## Cisco Customer Response Solutions

Cisco CRS 5.0(1) (Unified IP IVR) software new features include:

- Compatibility with Unified Communications Manager 5.1 and 6.0.
- Support for the Windows 2003 Server operating system.
- Support for a deployment with an additional server for high availability.
- Enhanced installation, upgrade, and patching procedures through simplified wizards.
- New historical reports.
- New log collection tool and support tool for serviceability.
- Open CTI for third-party integration.
- Agent/Supervisor desktop enhancements,
- Cisco Unified E-Mail Interaction Manager (Unified EIM) and Cisco Unified Web Interaction Manager (Unified WIM).
- Workforce Optimization (WFO) including Cisco Workforce Management and Cisco Quality Management.
- Cisco Unified Outbound Preview Dialer Express, which enables configuring contact centers for automated outbound activities and allows agents who are not busy with inbound calls to perform outbound calls.
- Wrap-up code feature, which provides wrap-up data to track the frequency of activities, to identify the account to which a call is charged, and to provide information for other similar situations.
- New Backup and Restore application that is embedded in the Cisco CRS Administrator. You do not need to install it separately on a remote server.

For a detailed description of Cisco CRS (Unified IP IVR) features and functionality, see *Release Notes for Cisco Customer Response Solutions 5.0(1)* at:

[http://www.cisco.com/application/pdf/en/us/guest/products/ps8219/c1178/ccmigration\\_09186a008084e264.pdf](http://www.cisco.com/application/pdf/en/us/guest/products/ps8219/c1178/ccmigration_09186a008084e264.pdf)

## Cisco Unified Customer Voice Portal

Unified CVP 4.0(2) includes the following changes and updates to functionality:

- Upgrading to the Windows 2003 operating system platform.
- SIP proxy support provided by Unified Presence.
- Unified CVP hybrid call routing support (H.323 and SIP).
- A new operations console, Unified CVP Operations Server, which serves as a central point for managing and configuring all Unified CVP solution components.
- Migration of key Unified CVP components onto a J2EE web server, enabling a variety of web-based services and accommodating Eclipse-based plug-ins to provide OAM&P and reporting functionality.
- Centralized reporting server, Unified CVP Reporting Server, that aggregates all Unified CVP-related call information into a relational database with associated reporting tools and pre-packaged report templates.
- Support for large database size (100GB) for Unified CVP Reporting Server.
- Changes to Voice Response Unit (VRU) VRU Type 5 (switch leg) and Type 7 (VRU leg) to a VRU Type 10 to provide the same combined functionality for call treatment.
- Support for HTTPS which includes:
  - Along with the release of IOS version 12.4(15)T, Unified CVP 4.0(2) can be configured to use HTTPS on the VoiceXML Server, and on the IVR leg of the Call Server.
  - VXML gateway configuration changes to provide support for HTTPS.

For a detailed description of Unified CVP features and functionality, see *Release Notes for Cisco Customer Voice Portal (CVP) Release 4.0(2)* at:

[http://www.cisco.com/web/ccbu/CVP/4/0/2/0/0/0/CVP4.0.2\\_Release\\_Notes.pdf](http://www.cisco.com/web/ccbu/CVP/4/0/2/0/0/0/CVP4.0.2_Release_Notes.pdf)

## Cisco Computer Telephony Integration Object Server

The following are the new features in the CTI OS product:

- Silent install—This mode is supported for the following components only:
  - CTI OS Agent and Supervisor stand-alone installations
  - CTI OS Agent and Supervisor Installation under Citrix
  - CTI OS Server Install
- CTI OS-based silent monitoring—Updates to the architecture enable CTI OS-based silent monitoring in the following configurations:
  - Where the agent PC is not connected to the Unified IP Phone, such as with the Unified MA feature
  - Where the CTI OS Desktop is not running on the agent PC, such as in a Citrix environment
  - Where limited bandwidth is a consideration, such as with small remote locations with remote supervisors
- Unified Communications Manager-based silent monitoring—An agent using a Unified IP Phone is monitored by a supervisor using either the CAD or CTI Toolkit desktop.

- Support for up to 2000 agents—In certain deployments, it is possible to support up to 2000 agents. To achieve this agent capacity, both CTI OS and Unified ICM PGs must be upgraded to Release 7.2(1).
- Agent Routing Integration (ARI)—This functionality allows the Unified ICM software to select agents and to route calls directly to them. The ARI deployment is implemented by using an ARS PG, where the traditional ACD functions move to Unified ICM. The role of the ACD changes from a TDM ACD to an ACD/PBX that serves as the telephone switching system. In this role, the ACD/PBX provides connections for agent phones and connects a call to an agent, as directed by the Unified ICM Router.

For a detailed description of new and enhanced features and functionality, see *Release Notes for Cisco CTI OS Release 7.2(1)* at:

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/cust\\_contact/contact\\_center/ctios/ctios7\\_2/release/notes/CTI721RelNotes.pdf](http://www.cisco.com/en/US/docs/voice_ip_comm/cust_contact/contact_center/ctios/ctios7_2/release/notes/CTI721RelNotes.pdf)

## Cisco Agent Desktop

The following new features are part of the Cisco Agent Desktop:

- Support for Windows Vista operating system and Windows 2003 Server R2.
- Cisco Agent Desktop Browser Edition and Cisco Unified IP Phone Agent with login and password encryption capabilities.
- Cisco Supervisor Desktop (CSD) includes the following:
  - An integrated browser window
  - A supervisor workflow email alert that notifies supervisors whenever skill group thresholds for Number of Calls Waiting and Oldest Call in Queue are not met.
  - Support for Cisco Unified CallManager-based agent call silent monitoring via an IP phone.
- Cisco Desktop Administrator enhancements such as streamlined configuration during installation, integration of LDAP and RASCAL configuration, and support for Microsoft Simple Network Management Protocol (SNMP).
- Unified MA is supported for use with both CAD and CAD-BE.
- Unified ICM reason codes are integrated into CAD.
- Reason codes, wrap-up data, and phone books are assigned on both the global and work flow group levels.
- CAD can receive messages from third-party applications via the new remote access IPC Receive event.

For a detailed description of new and enhanced features and functionality, see *Release Notes for Cisco Agent Desktop 7.2(1)* at:

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/cust\\_contact/contact\\_center/cad\\_enterprise/cadenterprise7\\_2/release/notes/cad721rn.pdf](http://www.cisco.com/en/US/docs/voice_ip_comm/cust_contact/contact_center/cad_enterprise/cadenterprise7_2/release/notes/cad721rn.pdf)

## Cisco Unified Presence

Cisco Unified Presence 6.0(1) includes the following significant additions and changes:

- Enhanced Presence features in conjunction with Unified Communications Manager users
- Enhanced Presence service for mobility users

- Support for Unified Presence policy enhancements to allow for greater user preferences and user control of presence
- Support for integration of Location and Calendaring as part of Rich Presence for Unified Presence
- Support for greater scalability for Unified Presence
- Unified Presence infrastructure enhancements
- SIP proxy support for Unified CVP call flow routing
- Enhanced application interface to allow for rapid presence service development
- Serviceability enhancements

For a detailed description of new and enhanced features and functionality, see *Release Notes for Cisco Unified Presence Release 6.0(1)* at:

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/cups/6\\_0\\_1/rel\\_notes/cup601rn\\_wb.pdf](http://www.cisco.com/en/US/docs/voice_ip_comm/cups/6_0_1/rel_notes/cup601rn_wb.pdf)

## Cisco Unified Operations Manager

Cisco Unified Operations Manager Release 2.0.1 includes the following changes and updates to functionality:

- Ability to create and run phone tests on demand using the UI to select, from the phone report, the phones that need to be tested.
- Ability to identify and generate reports for all Cisco 1040 Sensors connected to the switches that Cisco Operations Manager monitors.
- Ability to identify and monitor Rich Media Appliance support in Cisco Unified Communications Manager. Includes a new icon for the Rich Media Appliance in the Service Level View.
- Changes to the phone search, allowing for wildcard entries for extension number, IP address, and MAC address. The first matched result displays the corresponding Tree and Map View.
- Changes to the topology, include the following:
  - Avoidance overlaps of links and node icons.
  - Higher resolution displays.

For a detailed description of these features and functionality, see *Release Notes for Cisco Unified Operations Manager 2.0.1* available at:

[http://www.cisco.com/en/US/products/ps6535/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/ps6535/prod_release_notes_list.html)

## Cisco IP Communicator

Cisco IP Communicator 2.1(1) includes the following new features and functionality:

- Support for Windows Vista operating system.
- Adjunct licensing with Cisco Unified Communications Manager, which allows you to associate a secondary soft-phone device with a primary device and consume only one device license per device.
- Audio quality enhancements such as echo cancellation, noise suppression, voice activity detection, and silence suppression.
- Bandwidth reservation through Windows generic quality of service (GQoS) for improved audio quality when Cisco IP Communicator is used over networks with limited bandwidth.
- Support for SIP endpoints with Session Initiation Protocol (SIP) signaling.

- Enhanced security against device spoofing, which prevents Cisco IP Communicator from impersonating another Unified IP Phone.
- Support for the Cisco Unified IP Phone 7970 firmware 8.0(4) code base for features such as call pickup notification, directed call park, and logging out of hunt groups.

For a detailed description of new and enhanced features and functionality, see *Release Notes for Cisco IP Communicator Release 2.1* at:

[http://www.cisco.com/en/US/products/sw/voicesw/ps5475/prod\\_release\\_note09186a0080758002.html](http://www.cisco.com/en/US/products/sw/voicesw/ps5475/prod_release_note09186a0080758002.html)

## Cisco Unity Connection

Unity Connection Release 2.0 includes the following changes and updates to functionality since Release 1.2(1):

- Unity Connection servers now runs the Linux operating system and a Cisco Security Agent stand-alone agent is installed automatically when you install Unity Connection.
- Modified GUI with a consistent appearance to Unified Communications Manager.
- Support for VPIM Networking.
- Support for the following features with Exchange 2007 that were formerly supported only with Exchange 2000 and Exchange 2003:
  - Basing personal call transfer rules on data in Exchange 2007 calendars and contacts.
  - Accessing Exchange 2007 e-mail by using text to speech.
- Log Viewer Port and Status Monitor have been incorporated into a Real-Time Monitoring Tool. For more information, see the Real-Time Monitoring Tool Administration Guide.
- Some platform- and Unity Connection-specific administrative tasks can now be performed using a command-line interface (CLI).
- Unity Connection Disaster Recovery Backup and Restore tools have been replaced by the Disaster Recovery System

For a detailed description of new and enhanced features and functionality, see *Release Notes for Cisco Unity Connection Release 2.0(1)* at:

[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/2x/release/notes/201ucrn.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/2x/release/notes/201ucrn.html)

## Additional Cisco Unified IP Phone Support

Cisco Unified Communications System Release 6.0(1) introduces support for the following new wideband codec phone models, including:

- Cisco Unified IP Phone 7942G
- Cisco Unified IP Phone 7945G
- Cisco Unified IP Phone 7962G
- Cisco Unified IP Phone 7965G

These phones comprise a suite of evolutionary Cisco Unified IP Phone 7900 Series endpoints that extend the features and functionality of the existing 7941x, 7961x, and 797x phones, while enhancing the end-user experience through high-fidelity wideband audio, new color displays, and other features. These new phones provide:

- Backlit TFT color displays on the Cisco Unified IP Phone 7945G/7965G/7975G models and high-resolution 4-bit grey scale displays on the Cisco Unified IP Phone 7942G/7962G models.

- An integrated Gigabit Ethernet switch and a four-way navigation rocker with Select key on Cisco Unified IP Phone 7945G/7965G/7975G models.
- High-quality wideband audio (G.722 / TIA920-adherent) on all models, including handset, speakerphone and headset (although a third-party wideband headset must be purchased separately). Also, iLBC narrow band codec is supported on all models.
- All call features and other features/functions supported by existing Cisco Unified IP Phones 7941Gx, 7961Gx, and 797x models.

For more information on Cisco Unified IP Phone models, see the appropriate release notes at:

[http://www.cisco.com/en/US/products/hw/phones/ps379/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/hw/phones/ps379/prod_release_notes_list.html)

## Cisco IOS

IOS software release 12.4(15)T offers the following features and functionality:

- ISDN setup—The hash mark (#) within the Called Party Number can also be used as an indication of *sending complete* to stop digit collection. As a result, the hash mark is treated as a terminating character for the Called party Number.
- Outbound proxy support for the SIP gateway—Configures an outbound-proxy server that receives all initiating request (INVITE and SUBSCRIBE) messages and routes them to the designated destination.
- Cisco IOS VoiceXML Browser updates to W3C VoiceXML 2.1 and Media Resource Control Protocol (MRCP) Version 2.0.
- Security and QoS feature enhancements

For a detailed description of these and other new and enhanced features and functionality, see *Cross-Platform Release Notes for Cisco IOS Release 12.4T, Part 3: New Feature Descriptions and Important Notes* at:

[http://www.cisco.com/en/US/products/ps6441/prod\\_release\\_note09186a00804a19ae.html](http://www.cisco.com/en/US/products/ps6441/prod_release_note09186a00804a19ae.html)

## System Requirements

This section provides the following information about the software versions of Cisco components and firmware versions of Cisco Unified IP phones used in system-wide testing of Cisco Unified Communications System Release 6.0(1) for Contact Center.

- [End-of-Sale Components](#)
- [Deployment Considerations](#)
- [Related Documentation](#)
- [Firmware Version Matrix](#)

## End-of-Sale Components

The following components have reached end-of sale (EOS) status. However, because they are still supported and may be present in existing customer deployments, have remained installed in the Cisco Unified Contact Center Enterprise test beds for this Cisco Unified Communications System release.

- Cisco MCS-7845H-3000

- Cisco MCS-7835H-3000
- Cisco MCS-7825H-3000
- Cisco MCS 7845H-2400
- Cisco MCS 7835H-2400
- Cisco MCS 7855I-1500
- Cisco MCS 7845-H1
- Cisco MCS 7835-H1
- Cisco 3550 Catalyst Switches (replaced by Cisco 3750 Catalyst Switches)
- Cisco 3600 Series Routers (Cisco 3620, Cisco 3640A, and Cisco 3660 (non “-CO” models))
- Cisco 3700 Series Routers (replaced by Cisco 3800 Series Routers)

The EOS date is the last date to order the product through Cisco point-of-sale mechanisms. The product is no longer for sale. There is also an end-of-life (EOL) cycle that is a process that guides the final business operations associated with the product life cycle.

The EOL process consists of a series of technical and business milestones and activities that, once completed, make a product obsolete. Once obsolete, the product is not sold, manufactured, improved, repaired, maintained, or supported.

For information about recommended replacements, see the comprehensive list of announcements at End-of-Life and End-of-Sale Products at the following URL:

[http://www.cisco.com/en/US/products/prod\\_end\\_of\\_life.html](http://www.cisco.com/en/US/products/prod_end_of_life.html)

For information on specific products, choose a product from the following URL:

[http://www.cisco.com/en/US/products/sw/voicesw/tsd\\_products\\_support\\_category\\_home.html](http://www.cisco.com/en/US/products/sw/voicesw/tsd_products_support_category_home.html). Then click on the End-of-Life and End-of-Sale Notices link in the Product Literature box.

For an overview of the Products and Services EOL policy, see the information at the following URL:

[http://www.cisco.com/en/US/products/products\\_end-of-life\\_policy.html](http://www.cisco.com/en/US/products/products_end-of-life_policy.html)

## Deployment Considerations

Tables in this section list the recommended software and firmware releases based on Cisco Unified Communications System Release 6.0(1) for Contact Center. Note that not every rebuild is tested as part of the Cisco Unified Communications System testing. Therefore, additional regression testing in a customer or Cisco-specific certification lab is recommended before deployment.

When deploying the Cisco Unified Communications System in a customer environment, remember the following:

- At the minimum, customers should deploy the software release recommended in these tables.
- For CSA, customers should use the latest engine and policy release. CSA software is available at: <http://www.cisco.com/cgi-bin/tablebuild.pl/csa>
- For other software components, customers should use the most current rebuild of a maintenance release. For IOS, information about the latest releases, including deferral advisories, is available at: <http://www.cisco.com/kobayashi/sw-center/sw-ios.shtml>

At this URL, you can also access Feature Navigator and read about the Cisco IOS Roadmap.

- If the recommended release has been deferred to a subsequent release, customers should use the subsequent release.

- Before deploying a release, examine the open caveats in the chosen release to determine if any will impact your implementation. Open caveats can be viewed through the Bug Toolkit, located at: [http://www.cisco.com/cgi-bin/Support/Bugtool/launch\\_bugtool.pl](http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl)
- Deploy the chosen release in a lab environment that uses the same product components as the customer's product components before moving it to a production environment.

## Software Version Matrix

Table 1 lists the software release versions of the system components in the contact center test environment.

**Table 1** *Software Versions for Contact Center Components in Cisco Unified Communications System Release 6.0(1)*

Category	Component	Release Version
Call Control	Cisco Unified Communications Manager	6.0(1)
	Cisco Unified Presence	6.0(1)
Contact Center	Cisco Unified Intelligent Contact Management and Cisco Unified Contact Center Enterprise	7.2(1)
	Cisco Unified Intelligent Contact Management and Cisco Unified Contact Center Enterprise Operating System	Win2003 SP2/ Win2003 R2 SP2
	Cisco Unified ICM Support Tools (Server and Agent)	2.1
	Cisco Customer Response Solutions (Unified IP IVR)	5.0(1) SR1
	Cisco Customer Response Solutions (Unified IP IVR) Operating System	2003.1.1 SR5
	Cisco Unified Customer Voice Portal	4.0(2)
	Cisco Unified Customer Voice Portal Operating System	Win2003 SP2/ Win2003 R2 SP2
Voice Mail and Unified Messaging	Cisco Unity Connection	2.0
End Points and Clients	Cisco IP Communicator	2.1(1)
	Cisco Unified IP Phones—See “ <a href="#">Firmware Version Matrix</a> ” for models	Bundled with Unified Communications Manager
Network Management	Cisco Unified Operations Manager	2.0(1)

**Table 1** *Software Versions for Contact Center Components in Cisco Unified Communications System Release 6.0(1) (continued)*

Category	Component	Release Version
Security	Cisco Catalyst 6500 Series Switch Firewall Services Module (FWSM)	3.1(5)
	Cisco Adaptive Security Appliance (ASA) 5540 Services	8.0
	CiscoWorks Management Center for Cisco Security Agents	5.0.0.216
	Cisco Security Agent for Unified Communications Manager	Bundled with Unified Communications Manager
	Cisco Security Agent for Customer Response Solutions	5.0.0.216 /3.0.4
	Cisco Security Agent for Unified Intelligent Contact Management	5.0.0.210 /3.0.1-W
	Cisco Security Agent for Unified Customer Voice Portal	5.2.0.203 /2.2.1-W-K9
Communications Infrastructure	Cisco 3725, 3745 (Unified CVP VXML voice/data, H.323, SIP, and MGCP gateways)	12.4(15)T
	Cisco 3825, 3845 (Unified CVP VXML, voice/data, H.323, SIP, and MGCP gateways)	12.4(15)T
	Cisco AS5400HPX, AS5400XM (Unified CVP VXML voice, H.323, and PSTN gateways)	12.4(15)T
	Cisco AS5850 (PSTN and voice gateway)	12.4(15)T
	Cisco 3745 (gatekeeper)	12.4(15)T
	RSVP Agent (on 37xx and 38xx platforms)	12.4(15)T
	Cisco 7206 (core/WAN router)	12.4(15)T
	Cisco 871 router	12.3(8)Y12
	Cisco Catalyst 3750 (access switch)	12.2(25)SEC2
	Cisco Catalyst 6506, 6509 (core switch, Supervisor 2)	CatOS 8.5(8)
	Cisco Catalyst 6506, 6509 (MSFC, Supervisor 2)	12.2(18)SXF8
	Cisco CSS 11501 Content Services Switch	WebNs 7.50.3.3
	Cisco Communication Media Module (CMM)	12.4(15)T
	Wireless	Cisco Aironet Access Point 1240AG
Third-party	McAfee Antivirus <sup>1</sup>	Enterprise 8.0
	Witness Impact 360 Server	7.8
	Nuance (ScanSoft) Open Speech Recognizer (OSR)	2.0(9)
	Nuance (ScanSoft) Open Speech Media Server (OSMS)	2.0(4)
	Nuance (ScanSoft) Speechify	3.0(1)

1. You can install third-party antivirus agents on Windows-based servers such as Unified ICM, Unified CVP, Cisco CRS, CTI, CTI OS and CAD servers, but not on non-Windows appliances such as Unified Communications Manager.

## Firmware Version Matrix

Table 2 lists the recommended firmware versions of the Cisco Unified IP Phones (SCCP and SIP) used in the contact center test environment.

**Table 2** *Firmware Versions of Cisco SCCP and SIP Phones in Cisco Unified Communications System Release 6.0(1)*

Component	SCCP Firmware Version	SIP Firmware Version
Cisco Unified IP Phone 7921G (Wireless)	CP7921G-1.0.3	not applicable
Cisco Unified IP Phone 7940	P00308000500	not applicable
Cisco Unified IP Phone 7941G	SCCP41.8-3-1S	SIP41.8-3-1S
Cisco Unified IP Phone 7960	P00308000500	not applicable
Cisco Unified IP Phone 7961G	SCCP41.8-3-1S	SIP41.8-3-1S
Cisco Unified IP Phone 7962G	SCCP42.8-3-1S	SIP42.8-3-1S
Cisco Unified IP Phone 7970	SCCP70.8-3-1S	SIP70.8-3-1S
Cisco Unified IP Phone 7971G	SCCP70.8-3-1S	SIP70.8-3-1S

## Related Documentation

Table 3 provides links to the main page for documentation on various Cisco Unified Communications components, from which you can navigate to individual documents.

**Table 3** *Documentation for Contact Center Components in Cisco Unified Communications System Release 6.0(1)*

Category	Component	Documentation URLs
Call Control	Cisco Unified Communications Manager	<a href="http://www.cisco.com/en/US/products/sw/voicew/ps556/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/sw/voicew/ps556/tsd_products_support_series_home.html</a>
	Cisco Unified Presence	<a href="http://www.cisco.com/en/US/products/ps6837/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/ps6837/tsd_products_support_series_home.html</a>

**Table 3** *Documentation for Contact Center Components in Cisco Unified Communications System Release 6.0(1) (continued)*

Category	Component	Documentation URLs
Contact Center	Cisco Unified Intelligent Contact Management and Cisco Unified ICM Support Tools (Server and Agent)	<a href="http://www.cisco.com/en/US/products/sw/custcosw/ps1001/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/sw/custcosw/ps1001/tsd_products_support_series_home.html</a>
	Cisco Unified Contact Center Enterprise	<a href="http://www.cisco.com/en/US/products/sw/custcosw/ps1844/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/sw/custcosw/ps1844/tsd_products_support_series_home.html</a>
	Cisco Customer Response Solutions (Unified IP IVR)	<a href="http://www.cisco.com/en/US/products/sw/custcosw/ps1846/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/sw/custcosw/ps1846/tsd_products_support_series_home.html</a>
	Cisco Unified Customer Voice Portal	<a href="http://www.cisco.com/en/US/products/sw/custcosw/ps1006/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/sw/custcosw/ps1006/tsd_products_support_series_home.html</a>
	Computer Telephony Integration Object Server (CTI OS) and Agent Desktop	<a href="http://www.cisco.com/en/US/products/sw/custcosw/ps14/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/sw/custcosw/ps14/tsd_products_support_series_home.html</a>
	Cisco Agent Desktop (CAD) Server and Agent Desktop	<a href="http://www.cisco.com/en/US/products/sw/custcosw/ps427/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/sw/custcosw/ps427/tsd_products_support_series_home.html</a>
Voice Mail and Unified Messaging	Cisco Unity Connection	<a href="http://www.cisco.com/en/US/products/ps6509/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/ps6509/tsd_products_support_series_home.html</a>
End Points and Clients	Cisco IP Communicator	<a href="http://www.cisco.com/en/US/products/sw/voicew/ps5475/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/sw/voicew/ps5475/tsd_products_support_series_home.html</a>
	Cisco Unified IP Phones—See “Firmware Version Matrix” for models	<a href="http://www.cisco.com/en/US/products/hw/phones/ps379/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/hw/phones/ps379/tsd_products_support_series_home.html</a>
Network Management	Cisco Unified Operations Manager	<a href="http://www.cisco.com/en/US/products/ps6535/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/ps6535/tsd_products_support_series_home.html</a>
Security	Cisco Catalyst 6500 Series Switch Firewall Services Module (FWSM)	<a href="http://www.cisco.com/en/US/products/hw/modules/ps2706/ps4452/tsd_products_support_model_home.html">http://www.cisco.com/en/US/products/hw/modules/ps2706/ps4452/tsd_products_support_model_home.html</a>
	Cisco Adaptive Security Appliance (ASA) 5540 Services	<a href="http://www.cisco.com/en/US/products/ps6120/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/ps6120/tsd_products_support_series_home.html</a>
	CiscoWorks Management Center for Cisco Security Agents	<a href="http://www.cisco.com/en/US/products/sw/cscowork/ps5212/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/sw/cscowork/ps5212/tsd_products_support_series_home.html</a>
	Cisco Security Agent for Unified Communications Manager	<a href="http://www.cisco.com/en/US/products/sw/voicew/ps556/prod_installation_guides_list.html">http://www.cisco.com/en/US/products/sw/voicew/ps556/prod_installation_guides_list.html</a>
	Cisco Security Agent for Customer Response Solutions	<a href="http://www.cisco.com/en/US/products/sw/custcosw/ps1846/prod_installation_guides_list.html">http://www.cisco.com/en/US/products/sw/custcosw/ps1846/prod_installation_guides_list.html</a>
	Cisco Security Agent for Unified Intelligent Contact Management	<a href="http://www.cisco.com/en/US/products/sw/custcosw/ps1001/products_installation_and_configuration_guides_list.html">http://www.cisco.com/en/US/products/sw/custcosw/ps1001/products_installation_and_configuration_guides_list.html</a>
	Cisco Security Agent for Unified Customer Voice Portal	<a href="http://www.cisco.com/en/US/products/sw/custcosw/ps1006/prod_installation_guides_list.html">http://www.cisco.com/en/US/products/sw/custcosw/ps1006/prod_installation_guides_list.html</a>

**Table 3**      **Documentation for Contact Center Components in Cisco Unified Communications System Release 6.0(1) (continued)**

Category	Component	Documentation URLs
Communications Infrastructure	Cisco 3725, 3745 (Unified CVP VXML voice/data, H.323, SIP, and MGCP gateways)	<a href="http://www.cisco.com/en/US/products/hw/routers/ps282/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/hw/routers/ps282/tsd_products_support_series_home.html</a>
	Cisco 3825, 3845 (Unified CVP VXML, voice/data, H.323, SIP, and MGCP gateways)	<a href="http://www.cisco.com/en/US/products/ps5855/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/ps5855/tsd_products_support_series_home.html</a>
	Cisco AS5400HPX, AS5400XM (Unified CVP VXML voice, H.323, and PSTN gateways)	<a href="http://www.cisco.com/en/US/products/hw/univgate/ps505/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/hw/univgate/ps505/tsd_products_support_series_home.html</a>
	Cisco AS5850 (PSTN and voice gateway)	<a href="http://www.cisco.com/en/US/products/hw/univgate/ps509/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/hw/univgate/ps509/tsd_products_support_series_home.html</a>
	Cisco 3745 (gatekeeper)	<a href="http://www.cisco.com/en/US/products/hw/routers/ps282/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/hw/routers/ps282/tsd_products_support_series_home.html</a>
	RSVP Agent (on 37xx and 38xx platforms)	<a href="http://www.cisco.com/en/US/products/hw/routers/ps282/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/hw/routers/ps282/tsd_products_support_series_home.html</a>
	Cisco 7206 (core/WAN router)	<a href="http://www.cisco.com/en/US/products/hw/routers/ps341/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/hw/routers/ps341/tsd_products_support_series_home.html</a>
	Cisco 871 router	<a href="http://www.cisco.com/en/US/products/hw/routers/ps380/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/hw/routers/ps380/tsd_products_support_series_home.html</a>
	Cisco Catalyst 3750 (access switch)	<a href="http://www.cisco.com/en/US/products/hw/switches/ps5023/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/hw/switches/ps5023/tsd_products_support_series_home.html</a>
	Cisco Catalyst 6506, 6509 (core switch, Supervisor 2)	<a href="http://www.cisco.com/en/US/products/hw/switches/ps708/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/hw/switches/ps708/tsd_products_support_series_home.html</a>
	Cisco Catalyst 6506, 6509 (MSFC, Supervisor 2)	
	Cisco CSS 11501 Content Services Switch	<a href="http://cisco.com/en/US/products/hw/contnetw/ps792/tsd_products_support_series_home.html">http://cisco.com/en/US/products/hw/contnetw/ps792/tsd_products_support_series_home.html</a>
Cisco Communication Media Module (CMM)	<a href="http://cisco.com/en/US/products/hw/switches/ps708/tsd_products_support_series_home.html">http://cisco.com/en/US/products/hw/switches/ps708/tsd_products_support_series_home.html</a>	
Wireless	Cisco Aironet Access Point 1240AG	<a href="http://www.cisco.com/en/US/products/ps6521/tsd_products_support_series_home.html">http://www.cisco.com/en/US/products/ps6521/tsd_products_support_series_home.html</a>

The following URLs are additional links to related documentation:

- Cisco Unified Communications System:  
<http://www.cisco.com/go/unified-techinfo>
- Voice documentation:  
[http://www.cisco.com/en/US/products/sw/voicesw/tsd\\_products\\_support\\_category\\_home.html](http://www.cisco.com/en/US/products/sw/voicesw/tsd_products_support_category_home.html)
- Cisco IOS Software Release 12.4 T:  
[http://www.cisco.com/en/US/products/ps6441/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps6441/tsd_products_support_series_home.html)

# Install and Upgrade Notes

Additional information about installation of the components in these release notes, including the platforms tested, is available at:

[http://www.cisco.com/iam/unified/ipcc601/Install\\_and\\_Configure\\_System\\_Components.htm](http://www.cisco.com/iam/unified/ipcc601/Install_and_Configure_System_Components.htm)

See this content for additional information on the components tested and links to relevant documentation for installation and configuration procedures.

Upgrade information for components that have been tested and verified during system testing is discussed in the *System Upgrade Manual* at:

<http://www.cisco.com/univercd/cc/td/doc/systems/unified/uc601/siumipcc/siumc601.pdf>

For additional information on specific hardware recommendations or bills of material for each product, see the [System Requirements](#) section.

## Latest Software Upgrades and Licenses

The following are links to the latest software upgrades and licenses for Cisco Unified Communications System Release 6.0(1) components:

- Unified Communications Manager, Unified IP Phones, Customer Response Solutions, Unified Contact Center Enterprise, and Cisco Unity Connection:  
<http://www.cisco.com/kobayashi/sw-center/sw-voice.shtml>
- Unified Intelligent Contact Management, Unified Outbound Dialer, Unified Customer Voice Portal, Cisco Agent Desktop, and Computer Telephony Integration Object Server:  
<http://www.cisco.com/kobayashi/sw-center/sw-custcontact.shtml>
- Cisco IOS routers and gateways: <http://www.cisco.com/kobayashi/sw-center/sw-ios.shtml>
- Catalyst switches:  
<http://tools.cisco.com/support/downloads/go/MDFTree.x?butype=switches>
- Wireless products: <http://www.cisco.com/kobayashi/sw-center/sw-wireless.shtml>
- Firewalls and security modules: <http://www.cisco.com/kobayashi/sw-center/sw-ciscosecure.shtml>
- Network management software:  
<http://www.cisco.com/kobayashi/sw-center/cw2000/lan-planner.shtml>
- Cisco Agent Desktop Web Licensing Site:  
<http://209.46.83.138/sws/WebLicensingInitial/InitialLicensePage.html>
- Cisco Unity Connection License Files:  
[http://www.cisco.com/en/US/products/ps6509/products\\_installation\\_guide\\_chapter09186a008055e1f6.html#wp1041859](http://www.cisco.com/en/US/products/ps6509/products_installation_guide_chapter09186a008055e1f6.html#wp1041859)
- Product Upgrade Tool (for ordering CDs of new major/minor releases):  
<http://tools.cisco.com/gct/Upgrade/jsp/index.jsp>

## Limitations and Restrictions

This section includes the following:

- [Important Notes, page 19](#)
- [Resolved Caveats](#)

- [Open Caveats, page 21](#)

If you are a Cisco partner or a registered Cisco.com user with a Cisco service contract, you can use the Bug Toolkit to find caveats of any severity for any release. Access the Bug Toolkit at: [http://www.cisco.com/cgi-bin/Support/Bugtool/launch\\_bugtool.pl](http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl)

**Note**

Not all caveats documented in this section are applicable to the contact center environment or deployment scenarios. They have been included for information purposes only.

## Important Notes

This section includes important notes related to the testing of Cisco Unified Communications System Release 6.0(1) for Contact Center.

- [Deleting an Active Unified Communications Manager Server](#)
- [Maximum Unified Communications Manager Trace Settings](#)
- [Changing the IP Address for a Unified Communications Manager Server](#)
- [ASA Firewall Performance](#)
- [Bidirectional NAT on Firewall Services Module Not Supported for VoIP Calls](#)
- [Configuring and Registering SCCP Unified IP Phones Affects Virtual Memory](#)

### Deleting an Active Unified Communications Manager Server

In Cisco Unified Communications Manager Administration, you cannot delete the first node of a Cisco Unified Communications Manager cluster, but you can delete subsequent nodes. Before you delete a subsequent node in the Find and List Servers window, Cisco Unified Communications Manager Administration displays the following message: “You are about to permanently delete one or more servers. This action cannot be undone. Continue?”. If you click OK, the server is deleted from the Cisco Unified Communications Manager database and is not available for use.

Deleting an active Unified Communications Manager server may have serious ramifications. The “Deleting a Server” section in the System-Level Configuration Settings chapter in the *Cisco Unified Communications Manager System Guide* does not adequately address these ramifications. Instead, consider the following information when you delete a server:

- Cisco Unified Communications Manager Administration does not allow you to delete the first node in the cluster, but you can delete any subsequent node.
- Cisco recommends that you do not delete any node that has Cisco Unified Communications Manager running on it, especially if the node has devices, such as phones, registered with it.
- Although dependency records exist for the subsequent nodes, the records do not prevent you from deleting the node.
- If any Call Park numbers are configured for Cisco Unified Communications Manager on the node that is being deleted, the deletion fails. Before you can delete the node, you must delete the Call Park numbers in Cisco Unified Communications Manager Administration.
- The system may automatically delete some devices, such as Music-on-Hold (MoH) servers, when you delete a server.
- Before you delete a node, Cisco recommends that you deactivate the services that are active on the subsequent node. Performing this task ensures that the services work after you delete the node.

- If you mistakenly delete a server and later decide to add it back, perform the steps described in the “Deleting Then Adding Back a Server in Cisco Unified Communications Manager Administration” section in the *Release Notes for Cisco Unified Communications Manager Release 6.0(1)* available at:  
[http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/cucm/rel\\_notes/6\\_0\\_1/601cmmr.html](http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/rel_notes/6_0_1/601cmmr.html)

## Maximum Unified Communications Manager Trace Settings

The maximum recommended trace setting for Cisco Unified Communications Manager is 2,500 files of 2 MB each for System Diagnostic Interface (SDI) and Signal Distribution Layer (SDL) traces, for a combined total of 5,000 files.

Trace settings for all other components must be configured within the limit of 126 MB (for example, 63 files of 2 MB each). Increasing traces past the recommended limits can result in decreased system performance due to IOWait issues. If the system experiences IOWait issues that cause performance degradation, reduce trace collection and remove all existing traces from the system.



### Note

You can increase SDI traces to 5,000 files if SDL traces are disabled, but not if SDI traces are disabled.

## Changing the IP Address for a Unified Communications Manager Server

For step-by-step instructions on changing the IP address of a Unified Communications Manager server running Release 6.0(1) or an earlier release, see the *Changing the IP Address for Cisco Unified CallManager/Unified Communications Manager* Troubleshooting TechNote available at:

[http://www.cisco.com/en/US/products/sw/voicesw/ps556/products\\_tech\\_note09186a0080094601.shtml](http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_tech_note09186a0080094601.shtml)

## ASA Firewall Performance

During a sudden or prolonged burst of certain traffic, Cisco ASA 5500 Series Adaptive Security Appliance may log error messages indicating no interface buffers available and exhibit lower performance, despite reporting CPU utilization of only 90%. Because the CPU utilization is an average calculation, it does not reflect the heavy load burst that caused the condition.

## Bidirectional NAT on Firewall Services Module Not Supported for VoIP Calls

On a Cisco Catalyst 6500 Series Switch Firewall Services Module (FWSM), you can configure the **inspect ctiqbe** command to enable CTIQBE protocol inspection which supports Network Address Translation (NAT) and Port Address Translation (PAT). However, Firewall Services Modules running Release 3.1(5) do not support bidirectional NAT for VoIP calls.

## Configuring and Registering SCCP Unified IP Phones Affects Virtual Memory

Configuring and registering non-secure SCCP Unified IP Phones increases the size of the virtual memory of a Unified Communications Manager subsequent node, which is not part of the phone device pool where the phones are configured and registered.

## Resolved Caveats

Table 4 lists caveats, grouped by severity, that are resolved now but are *not* included in the recommended component versions of Cisco Unified Communications System Release 6.0(1) for Contact Center.



### Note

For information on the caveats that were resolved in specific versions of each component, refer to the appropriate release notes for each component.

To determine the software version that includes the fix, click on the linked caveat number in the Identifier column in Table 4 to go to the Bug Toolkit.

**Table 4** Resolved Caveats Not Included in Cisco Unified Communications System Release 6.0(1)

Identifier	Headline
<b>Severity 1-3 caveats</b>	
<a href="#">CSCsg96469</a>	Unified Operations Manager fails to properly alert on Unified CallManager related service outage
<a href="#">CSCsi25936</a>	Conference List softkey does not show all participants on a TNP phone
<a href="#">CSCsi41499</a>	AXL database performance significantly degraded on Cisco Unified Communications Manager 6.0(1)
<a href="#">CSCsi92369</a>	Unified Communications Manager Cisco Security Agent logs are duplicated in messages file and csalog file
<a href="#">CSCsj27803</a>	Unified Communications Manager Platform CLI command <b>file view system-management-log</b> does not work on MCS 78xx-H2 or MCS 78xx-H3 servers

## Open Caveats

Table 5 lists known caveats, grouped by severity, related to the testing of contact center components in Cisco Unified Communications System Release 6.0(1) and previous releases, which were not resolved at the time this document was written.

For additional information on each defect, click on the linked caveat number in the Identifier column in Table 5 to go to the Bug Toolkit.

**Table 5** Open Caveats in Cisco Unified Communications System Release 6.0(1)

Identifier	Headline
<b>Severity 1-3 caveats</b>	
<a href="#">CSCsb27177</a>	Annotations and chat frozen temporarily
<a href="#">CSCse58807</a>	CPU is not protected by current ARP throttling code
<a href="#">CSCse72363</a>	Tomcat log in Unified Communications Manager should not use syslog daemon
<a href="#">CSCsf07135</a>	Adaptive Security Device Manager (ASDM) connection may cause packet loss
<a href="#">CSCsg07605</a>	Unified Communications Manager Disaster Recovery System (DRS) backup puts Unified Communications Manager database in read-only mode
<a href="#">CSCsg13979</a>	Inside ACL and Same-Security settings on Adaptive Security Appliance (ASA) allows SIP/SCCP signaling but no audio
<a href="#">CSCsg33442</a>	Drives not detected correctly on MCS 7845-H1 platform

**Table 5** Open Caveats in Cisco Unified Communications System Release 6.0(1) (continued)

Identifier	Headline
<a href="#">CSCsg65683</a>	High CPU usage due to voice conferencing on Cisco 2600XM used as SIP gateway
<a href="#">CSCsg98070</a>	Unified Communications Manager service parameter Asynchronous SDL Logging Enabled should be left at default disabled setting
<a href="#">CSCsh06553</a>	Extension Mobility auto-logout occurs after Extension Mobility login to another phone fails many times
<a href="#">CSCsh31645</a>	Unified CallManager 5.x/Unified Communications Manager 6.x database replication error - table mismatch directly after synchronization
<a href="#">CSCsh68238</a>	Unified Communications Manager Answer File Generator tool creates incorrect platformConfig.xml file
<a href="#">CSCsh75260</a>	NP-PCmplx logger frame timeout on Firewall Services Module (FWSM) during SIP traffic
<a href="#">CSCsh76059</a>	Disaster Recovery System does not back up or restore remote SSH keys used for Trace and Log Central Scheduled Trace collection or Call Detail Records (CDRs)
<a href="#">CSCsi05452</a>	CTI OS agent desktop of outbound agent displays the wrong dialing mode
<a href="#">CSCsi07044</a>	Media Routing reservation failed and customer data was lost from Unified Outbound Dialer Dialing List
<a href="#">CSCsi40221</a>	Unified Operations Manager generates false BackupActivated alerts for gateways
<a href="#">CSCsi51814</a>	RISDC Perfmon data CSV files rotate too fast during Unified Communications Manager upgrades
<a href="#">CSCsi56067</a>	Adaptive Security Appliance (ASA) Unicorn Admin Thread process consumes CPU when new Adaptive Security Device Manager (ASDM) connection launched
<a href="#">CSCsi57171</a>	Adaptive Security Appliance (ASA) Dispatch Unit process consumes CPU when new Adaptive Security Device Manager (ASDM) connection launched
<a href="#">CSCsi67798</a>	Peer-to-Peer Image Distribution (PPID) Unified IP Phone 7961G failed upgrade due to Authentication *** FAILED ** code 88 error
<a href="#">CSCsi70101</a>	Some Unified Communications Manager platform agents cannot be started/stopped using CLI or GUI
<a href="#">CSCsi70718</a>	Cisco IP Communicator SCCP client not registered in SRST mode
<a href="#">CSCsi77044</a>	Unified Communications Manager Change Notification Requests for cluster TFTP service stuck in memory
<a href="#">CSCsi75567</a>	Unified Communications Manager MCS 7825-H2-IPC1 server randomly rebooting for no apparent reason
<a href="#">CSCsi82549</a>	Setting JTAPI trace levels using the JTAPI Preferences tool does not start tracing
<a href="#">CSCsi88504</a>	Unified Communications Manager Platform CLI can not restart tomcat process under certain conditions
<a href="#">CSCsi89279</a>	Unified Communications Manager Call Forward All (CFA) activation takes more than 4 seconds to propagate
<a href="#">CSCsj14607</a>	Unified Operations Manager cannot discover Unified Communications Manager cluster if AXL service is not enabled on Unified Communications Manager
<a href="#">CSCsj20653</a>	Large number of phone unregistrations leads to critical alarms being dropped
<a href="#">CSCsj24114</a>	Voice/fax calls fail when <b>mgcp fax t38 inhibit</b> command is configured
<a href="#">CSCsj27101</a>	Unified Communications Manager Ethernet interface (eth0) stops functioning and logs NETDEV WATCHDOG error

**Table 5** *Open Caveats in Cisco Unified Communications System Release 6.0(1) (continued)*

Identifier	Headline
<a href="#">CSCsj30978</a>	Unified Presence should suppress duplicate 200 OK SIP messages
<a href="#">CSCsj34597</a>	Unified Presence on MCS 7825-H2 spontaneously reboots and hangs
<a href="#">CSCsj37446</a>	Unified Communications Manager upgrade halts due to database utility process
<a href="#">CSCsj54212</a>	Unified Communications Manager SIP timeout not compatible with default firewall setting
<b>Severity 4-6 caveats</b>	
<a href="#">CSCdv21481</a>	Unified Communications Manager TFTP issues in large scale Cisco 7900 Series Unified IP Phone deployments
<a href="#">CSCea82559</a>	Unified Communications Manager in call throttling mode still accepts incoming calls
<a href="#">CSCsb92419</a>	Unified Communications Manager does not support static codec G.726r32 on a SIP trunk
<a href="#">CSCsb96065</a>	BAT.xlt Device and Line fields should match the Unified Communications Manager phone fields
<a href="#">CSCsb96526</a>	Job Configuration Page does not automatically update
<a href="#">CSCsc12008</a>	Real-Time Monitoring Tool Graphs do not have the capability to highlight nodes and counters
<a href="#">CSCsc30731</a>	Multicast Music-On-Hold not supported by SIP gateway
<a href="#">CSCsc67031</a>	Migration of Unified IP 7960 Phones from SCCP to SIP requires phone power cycle
<a href="#">CSCsd56104</a>	Resetting CFwdALL on Unified IP Phones does not produce correct tone
<a href="#">CSCsd62658</a>	Certificate Authority Proxy Function (CAPF) logging requires service restart
<a href="#">CSCsd64029</a>	Bulk Administration Tool (BAT) should support more than 12,000 records per transaction
<a href="#">CSCse06753</a>	No protection for limiting number of active nailed up callers
<a href="#">CSCse26225</a>	Large-scale phone unregistrations leads to Unified Communications Manager Code Yellow entry
<a href="#">CSCse65206</a>	Remote access account required to test netdump server and download kernel panic logs
<a href="#">CSCsf04535</a>	Unified Communications Manager Recovery CD should have hardware diagnostic option
<a href="#">CSCsf28239</a>	Disaster Recovery restore attempt on a first node fails
<a href="#">CSCsg14500</a>	Default view should be given the option to enable or disable
<a href="#">CSCsg51364</a>	Several Unified Communications Manager critical alarms need option for being sent to remote syslog server
<a href="#">CSCsh58895</a>	Unified Communications Manager cannot send system or platform agent logs to remote syslog server
<a href="#">CSCsh67902</a>	Codec preference not getting used during calls through an IP-to-IP Gateway
<a href="#">CSCsh68282</a>	Unified Communications Manager installation does not detect Cisco brand USB drive/key in answer file
<a href="#">CSCsh76093</a>	Disaster Recovery System does not back up or restore its own settings
<a href="#">CSCsh80286</a>	After Unified Communications Manager upgrade, you cannot access the Alert Central window after opening an Real-Time Monitoring Tool (RTMT) saved profile with Alert Central
<a href="#">CSCsh81228</a>	Issuing a Show Cluster command displays the initial subsequent node in the cluster as a first node
<a href="#">CSCsi03591</a>	Real-Time Monitoring Tool (RTMT) Trace & Log Central on-demand jobs should provide warnings when Unified Communications Manager is experiencing a high I/O condition
<a href="#">CSCsi26984</a>	Need a way to set Unified Communications Manager route list and route group thresholds using Unified Operations Manager Service Level View

**Table 5** Open Caveats in Cisco Unified Communications System Release 6.0(1) (continued)

Identifier	Headline
<a href="#">CSCsi46698</a>	Cisco Security Agent (CSA) must be disabled on Cisco CRS platform in order to perform JTAPI resynchronization
<a href="#">CSCsi65435</a>	Peer-to-Peer Image Distribution (PPID) functionality on Unified IP Phone 7961G fails at low bandwidth due to source phone TFTP timeout

## Troubleshooting

For important troubleshooting information, tips, and recommendations related to the testing of Cisco Unified Communications System Release 6.0(1) for Contact Center, see Troubleshooting information at: [http://www.cisco.com/iam/unified/ipcc601/Introduction\\_to\\_Troubleshooting.htm](http://www.cisco.com/iam/unified/ipcc601/Introduction_to_Troubleshooting.htm)

## Documentation Updates

- Technical Information Sites—The Cisco Unified Communications System Technical Information Site at <http://www.cisco.com/go/unified-techinfo> is your one-stop location for all system-level documentation, resources, and training. This site provides information on tested deployment models and sites, topology diagrams, and call flows.

The information sites specific to IP telephony and contact center system applications for Cisco Unified Communications System Release 6.0(1) are:

  - Cisco Unified Communications System for Contact Center Release 6.0(1) at: <http://www.cisco.com/iam/unified/ipcc601/index.htm>
  - Cisco Unified Communications System for IP Telephony Release 6.0(1) at: <http://www.cisco.com/iam/unified/ipt601/index.htm>
- System Installation and Upgrade Manual*—The document now contains two parts: Part 1—System Installation for Contact Center and Part 2—System Upgrade for Contact Center. Part 1 provides new system-level information required to install contact center components, including types of installations, installation strategies, and the recommended installation sequence. Part 2 has been updated with the supported upgrade paths to Cisco Unified Communications System Release 6.0(1), upgrade considerations to be aware as you perform the upgrade, and the recommended upgrade sequence. This document is available at: <http://www.cisco.com/univercd/cc/td/doc/systems/unified/uc601/siumipcc/siumc601.pdf>
- System Test Results for Contact Center: Cisco Unified Communications System Release 6.0(1)*—Test results of the contact center system testing are now available at: [http://www.cisco.com/iam/unified/ipcc601/System\\_Test\\_Results.htm](http://www.cisco.com/iam/unified/ipcc601/System_Test_Results.htm)

# Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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*System Release Notes for Contact Center: Cisco Unified Communications System Release 6.0(1)*

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