



# System Release Notes for Contact Center: Cisco Unified Communications System, Release 5.1(2)

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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. See [System Requirements](#) for more information.

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 Unified Communications System Technical Information Site:

<http://www.cisco.com/iam/unified/ipt3/index.htm>

This document is the Cisco Unified Communications System release notes on the testing conducted on voice systems composed of Cisco voice gateways, routers, Catalyst switches and the following components:

- Cisco Unified CallManager (Unified CallManager)
- Cisco Unified Contact Center Enterprise (Unified CCE) / Cisco Unified Intelligent Contact Management (Unified ICM) software
- Cisco Customer Response Solutions (CRS / Cisco Unified IP IVR)
- Cisco Unified Customer Voice Portal (Unified CVP)
- Computer Telephony Integration Object Server (CTI OS)
- Cisco Agent Desktop (CAD)

## Tested Functionality

The focus of the Cisco Unified Communications System Release 5.1(2) testing was on system maintenance and defect resolution. The features and functionality tested were the same as in Cisco Unified Communications System Release 5.1(1), as described in the *System Release Notes for Contact Center Cisco Unified Communications System, Release 5.1(1)* available at:

<http://www.cisco.com/univercd/cc/td/doc/systems/unified/uc511/relnotes/rnipc511.htm>

- The following main components were upgraded from Cisco Unified Communications System Release 5.1(1) versions:
  - Unified CallManager to Release 5.1(2)
  - Unified CCE / Unified ICM to Release 7.1(4)ES2
  - Unified CVP to Release 3.1(0)SR2
  - CTI OS to Release 7.1(4)
  - CAD to Release 7.1
  - Cisco IP Communicator to Release 2.0(2)
  - Cisco IOS to Release 12.4(11)T2

## New and Changed Features

Cisco Unified Communications Release 5.1(2) 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 CallManager release.

Since the focus of the Cisco Unified Communications System Release 5.1(2) testing was on system maintenance and defect resolution, the features and functionality tested were the same as in Cisco Unified Communications System Release 5.1(1).

The following sections provide links to release note documentation for the following components:

- [Cisco Unified CallManager](#)
- [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 Operations Manager](#)
- [Cisco IP Communicator](#)
- [Cisco Unity Connection](#)

### Cisco Unified CallManager

The following are the new features that are available with Unified CallManager Release 5.1(2):

- AXL Field Enhancement—Unified CallManager Release 5.1(2) now supports several new tags that have been added to the AXL APIs.
- Database Backup—In Unified CallManager Release 5.1(2) and later, when you perform a back up of the database, the database will no longer become Read Only.
- Enhancements to Device Mobility and Extension Mobility—Call Forward All Calling Search Space backward compatibility and updates to the progress login indicator.
- New Join Across Lines and Single Button Barge/Cbargе functionality.
- IP Multimedia Subsystem (IMS) caching changes.

The documentation that supports Unified CallManager Release 5.1(2) comprises of existing Unified CallManager Releases 5.0(4) and 5.1(1) documentation.

The *Cisco Unified CallManager New and Changed Information Guide, Release 5.1(1)* is a document that is specific to Unified CallManager Release 5.1(1), but can be used for customers that have release 5.1(2). It is available at:

[http://www.cisco.com/en/US/products/sw/voicesw/ps556/products\\_administration\\_guide\\_book09186a0080731b6c.html](http://www.cisco.com/en/US/products/sw/voicesw/ps556/products_administration_guide_book09186a0080731b6c.html)

For a detailed description of features and functionality specific to this release, see the *Release Notes for Cisco Unified CallManager Release 5.1(2)* at:

[http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod\\_release\\_note09186a008084221a.html](http://www.cisco.com/en/US/products/sw/voicesw/ps556/prod_release_note09186a008084221a.html)

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

For a detailed description of features and functionality related to Unified CCE/Unified ICM Release 7.1(4)ES2, see *Release Notes for Cisco IPCC/ICM Enterprise & Hosted Editions Release 7.1(4)* at:

[http://www.cisco.com/web/ccbu/ICM/7/1/4/0/0/0/ICM7.1.4\\_Release\\_Notes.pdf](http://www.cisco.com/web/ccbu/ICM/7/1/4/0/0/0/ICM7.1.4_Release_Notes.pdf)

## Cisco Customer Response Solutions

For a detailed description of features and functionality specific to this release, see *Release Notes for Cisco Customer Response Solutions 4.5(2)* at:

[http://www.cisco.com/application/pdf/en/us/guest/products/ps6879/c1178/ccmigration\\_09186a008063b195.pdf](http://www.cisco.com/application/pdf/en/us/guest/products/ps6879/c1178/ccmigration_09186a008063b195.pdf)

## Cisco Unified Customer Voice Portal

No additional features or functionality has been added to Unified CVP 3.1(0)SR2 since the SR1 release. For a detailed description of features and functionality specific to this release, see *Release Notes for Cisco Customer Voice Portal (CVP) Release 3.1(0)SR1* at:

[http://www.cisco.com/application/pdf/en/us/guest/products/ps1006/c1178/ccmigration\\_09186a008062fbc3.pdf](http://www.cisco.com/application/pdf/en/us/guest/products/ps1006/c1178/ccmigration_09186a008062fbc3.pdf)

## Cisco Computer Telephony Integration Object Server

For a detailed description of features and functionality specific to this release, see *Release Notes for Cisco CTI OS Release 7.1(4)* at:

[http://www.cisco.com/web/ccbu/CTI/7/1/4/0/0/0/CTIOS7.1.4\\_Release\\_Notes.pdf](http://www.cisco.com/web/ccbu/CTI/7/1/4/0/0/0/CTIOS7.1.4_Release_Notes.pdf)

## Cisco Agent Desktop

For a detailed description of features and functionality specific to this release, see *Release Notes for Cisco Agent Desktop 7.1(1)* at:

[http://www.cisco.com/application/pdf/en/us/guest/products/ps427/c1178/ccmigration\\_09186a00806d7900.pdf](http://www.cisco.com/application/pdf/en/us/guest/products/ps427/c1178/ccmigration_09186a00806d7900.pdf)

## Cisco Unified Operations Manager

For a detailed description of features and functionality specific to this release, see the *Release Notes for Cisco Unified Operations Manager Release 2.0* at:

[http://www.cisco.com/en/US/products/ps6535/prod\\_release\\_note09186a008077a5d8.html](http://www.cisco.com/en/US/products/ps6535/prod_release_note09186a008077a5d8.html)

## Cisco IP Communicator

For a detailed description of features and functionality specific to this release, see *Release Notes for Cisco IP Communicator Release 2.0(2)* at:

[http://www.cisco.com/en/US/products/sw/voicesw/ps5475/prod\\_release\\_note09186a008073235c.html](http://www.cisco.com/en/US/products/sw/voicesw/ps5475/prod_release_note09186a008073235c.html)

## Cisco Unity Connection

For a detailed description of features and functionality specific to this release, see *Release Notes for Cisco Unity Connection Release 1.2(1)* at:

[http://www.cisco.com/en/US/products/ps6509/prod\\_release\\_note09186a00806b7bfb.html](http://www.cisco.com/en/US/products/ps6509/prod_release_note09186a00806b7bfb.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 5.1(2) 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 5.1(2) 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 5.1(2)*

Component	Release Version
Cisco Unified CallManager	5.1(2)
Cisco Customer Response Solutions (Unified IP IVR)	4.5(2)
Cisco Customer Response Solutions (Unified IP IVR) Operating System	2000.4.3a SR5
Cisco Unified Intelligent Contact Management and Cisco Unified Contact Center Enterprise	7.1(4) ES2
Cisco Unified Intelligent Contact Management and Cisco Unified Contact Center Enterprise Operating System	Win2003 SP1
Cisco Unified Customer Voice Portal	3.1(0)SR2
Cisco Unified Customer Voice Portal Operating System	Win2000 SP4
Computer Telephony Integration Object Server (CTI OS)	7.1(4)
Computer Telephony Integration Object Server (CTI OS) Operating System	Win XP SP2
Cisco Agent Desktop (CAD)	7.1
Cisco Agent Desktop (CAD) Server Operating System	Win XP SP2
ScanSoft Open Speech Recognizer (OSR)	2.0(9)
ScanSoft Open Speech Media Server (OSMS)	2.0(4)
ScanSoft Speechify	3.0(1)
Cisco CSS 11501 Content Services Switch	WebNs 7.50.1.05s
Cisco Unity Connection	1.2(1)
Cisco IP Communicator	2.0(2)
Cisco 3725, 3745 (Unified CVP VXML voice gateway)	12.4(11)T2
Cisco 3825, 3845 (Unified CVP VXML voice gateway)	12.4(11)T2
Cisco AS5400HPX, AS5400XM (Unified CVP VXML voice and PSTN gateways)	12.4(11)T2
Cisco AS5850 (PSTN gateway)	12.4(11)T2
Cisco 3660 (Cluster gatekeeper)	12.4(11)T2
Cisco 3745 (HSRP gatekeeper)	12.4(11)T2
Cisco 3725, 3745 (voice/data gateway)	12.4(11)T2
Cisco 3825, 3845 (voice/data gateway)	12.4(11)T2
RSVP Agent (on 37xx and 38xx platforms)	12.4(11)T2
Cisco 3825 MGCP gateway	12.4(11)T2
Cisco 7206 (core/WAN router)	12.4(11)T2
Cisco 871 router	12.3(8)Y12
Cisco Catalyst 3550 (access switch)	12.2(35)SE1
Cisco Catalyst 6506, 6509 (core switch, Supervisor 2)	CatOS 8.5(8)

**Table 1** *Software Versions for Contact Center Components in Cisco Unified Communications System Release 5.1(2) (continued)*

Component	Release Version
Cisco Catalyst 6506, 6509 (MSFC, Supervisor 2)	12.1(26)E7
Cisco Communication Media Module (CMM)	12.4(11)T2
CiscoWorks Management Center for Cisco Security Agents	4.5.1-639
Cisco Security Agent for Unified CallManager	Bundled with Unified CallManager
Cisco Security Agent for Customer Response Solutions	4.5.1.655 / 2.0.4
Cisco Security Agent for Unified Intelligent Contact Management	4.5.1-639 / 2.0.3-W
Cisco Security Agent for Unified Customer Voice Portal	4.5.1-639 / 2.0.0
Cisco Unified Operations Manager	2.0
Cisco Unified ICM Support Tools (Server and Agent)	2.0
McAfee Antivirus <sup>1</sup>	Enterprise 8.0i
Cisco Unified IP Phones—See “ <a href="#">Firmware Version Matrix</a> ” for models	Bundled with Unified CallManager

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

## 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 5.1(2)*

Component	SCCP Firmware Version	SIP Firmware Version
Cisco Unified IP Phone 7940	P00308000500	not applicable
Cisco Unified IP Phone 7941G	SCCP41.8-2-2SR2S	SIP41.8-2-2SR2S
Cisco Unified IP Phone 7960	P00308000500	not applicable
Cisco Unified IP Phone 7961G	SCCP41.8-2-2SR2S	SIP41.8-2-2SR2S
Cisco Unified IP Phone 7970	SCCP70.8-2-2SR2S	SIP70.8-2-2SR2S
Cisco Unified IP Phone 7971G	SCCP70.8-2-2SR2S	SIP70.8-2-2SR2S

## Related Documentation

The following URLs are links to documentation for related products:

- 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 Unified CallManager:  
[http://www.cisco.com/en/US/products/sw/voicesw/ps556/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/voicesw/ps556/tsd_products_support_series_home.html)
- Cisco Unified IP Phones:  
[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)
- Cisco Unified Intelligent Contact Management/Cisco Unified Contact Center Enterprise Edition:  
[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)
- Cisco Unified Contact Center Enterprise:  
[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)
- Customer Response Solutions (Cisco Unified IP IVR):  
[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)
- Cisco Unified Customer Voice Portal:  
[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)
- Cisco Telephony Integration Object Server:  
[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)
- Cisco Agent Desktop:  
[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)
- Cisco Unified Mobile Agent:  
[http://www.cisco.com/en/US/products/ps6223/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps6223/tsd_products_support_series_home.html)
- CiscoWorks Management Center for Cisco Security Agents:  
[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)
- Cisco Security Agents:  
[http://www.cisco.com/en/US/products/sw/secursw/ps5057/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/secursw/ps5057/tsd_products_support_series_home.html)
- Cisco Unified Operations Manager:  
[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)
- Cisco Unity Connection:  
[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)
- Cisco IP Communicator:  
[http://www.cisco.com/en/US/products/sw/voicesw/ps5475/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/voicesw/ps5475/tsd_products_support_series_home.html)
- CiscoWorks Remote Management Essentials:  
[http://www.cisco.com/en/US/products/sw/cscowork/ps2073/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/sw/cscowork/ps2073/tsd_products_support_series_home.html)
- Cisco 800 Series Routers:  
[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)
- Cisco 7200 Series Routers:  
[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)
- Cisco Catalyst 3600 Series MultiService Platforms:  
[http://www.cisco.com/en/US/products/hw/routers/ps274/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/hw/routers/ps274/tsd_products_support_series_home.html)

- Cisco AS5400 Series Universal Gateways:  
[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)
- Cisco AS5850 Series Universal Gateways:  
[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)
- Cisco 3700 Series Voice Gateways/Gatekeepers:  
[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)
- Cisco 3800 Series Voice Gateways:  
[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)
- Cisco Catalyst 3550 Series Access Switches:  
[http://www.cisco.com/en/US/products/hw/switches/ps646/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/hw/switches/ps646/tsd_products_support_series_home.html)
- Cisco Catalyst 6500 Series Switches:  
[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)
- Cisco Unified 7900 Series IP Phones:  
[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)
- 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

The features and functionality tested in Cisco Unified Communications System Release 5.1(2) were the same as in Cisco Unified Communications System Release 5.1(1). Additional information about installation of the components in these release notes, including the platforms tested, is available at: [http://www.cisco.com/iam/unified/ipcc3/Install\\_and\\_Configure\\_System\\_Components.htm](http://www.cisco.com/iam/unified/ipcc3/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/uc511/sum/su511.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 5.1(2) components:

- Unified CallManager, Unified IP Phones, Customer Response Solutions, Cisco Customer Contact Software, 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>
- 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 11](#)
- [Resolved Caveats](#)
- [Open Caveats, page 20](#)

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

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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.

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## Important Notes

This section includes important notes related to the testing of Cisco Unified Communications System Release 5.1(2) for Contact Center.

- [Cisco Unified CallManager TFTP issues in large scale Cisco 7900 Series Unified IP Phone deployments \(CSCdv21481\)](#)
- [Unified CallManager in call throttling mode still accepts incoming calls \(CSCea82559\)](#)
- [Archive .tar command from FTP/TFTP server gives a directory error message \(CSCek63178\)](#)
- [Cisco Unified CallManager does not support static codec G.726r32 on a SIP trunk \(CSCsb92419\)](#)
- [BAT.xlt Device and Line fields should match the Cisco Unified CallManager phone fields \(CSCsb96065\)](#)
- [Job Configuration Page does not automatically update \(CSCsb96526\)](#)
- [Real-Time Monitoring Tool Graphs do not have the capability to highlight nodes and counters \(CSCsc12008\)](#)
- [Multicast Music-On-Hold not supported by SIP gateway \(CSCsc30731\)](#)
- [Migration of Cisco Unified IP 7960 Phones from SCCP to SIP requires phone power cycle \(CSCsc67031\)](#)
- [Resetting CFwdALL on Cisco Unified IP Phones does not produce correct tone \(CSCsd56104\)](#)

- Certificate Authority Proxy Function (CAPF) logging requires service restart (CSCsd62658)
- Bulk Administration Tool (BAT) should support more than 12,000 records per transaction (CSCsd64029)
- No protection for limiting number of active nailed up callers (CSCse06753)
- Large-scale phone unregistrations leads to Cisco Unified CallManager Code Yellow entry (CSCse26225)
- No counters to track call throttling over an H.323 trunk (CSCsf10917)
- Real-Time Monitoring Tool Performance Log Viewer does not display sorted remote log files (CSCsf20296)
- Disaster Recovery restore attempt on a first node fails (CSCsf28239)
- Default view should be given the option to enable or disable (CSCsg14500)
- MGCP service restart required to apply configuration changes (CSCsg62087)
- Unified Operations Manager fails to properly alert on Unified CallManager related service outage (CSCsg96469)
- Issuing a Show Cluster command displays the initial subsequent node in the cluster as a first node (CSCsh81228)
- Call status is displayed incorrectly when mobile agent places outbound call on hold (CSCsi16072)

### Cisco Unified CallManager TFTP issues in large scale Cisco 7900 Series Unified IP Phone deployments (CSCdv21481)

**Symptom:**

If a large number of Cisco Unified 7900 series IP phones simultaneously request configuration files, their TFTP server may return a DISKFULL, RETRY, or other TFTP error. Some errors cause phones to continue to boot and log the error, while others cause phones to constantly reset. The current implementation defaults to the last saved settings if there is a TFTP timeout. Since Cisco Unified IP phones rely heavily on the TFTP configuration files received for configuration, softkeys, dial plans, and so forth, there is a possibility for the phones to be out of date with the TFTP server.

**Conditions:**

This issue can occur when all Cisco Unified 7900 series IP phones in a cluster are upgraded or restarted following a power outage. This problem may also occur on SIP phones after a complete Unified CallManager cluster restart on a medium size cluster when the phones lose connection to all Unified CallManager nodes and try to re-register on an interval. While the cluster is restarting, the Unified CallManager service may initialize faster than TFTP service can rebuild all the configuration files and return to service. This leads to a problem with SIP TNP phones that must download their Softkey template files. If the TFTP service is not ready, their attempts to download these files time out but they continue to register with the Unified CallManager node. In this case, the SIP TNP phones no longer support KPML events and only send enbloc SIP Invite messages to their Unified CallManager node.

**Workaround:**

None.

### Unified CallManager in call throttling mode still accepts incoming calls (CSCea82559)

**Symptom:**

If an IP phone is registered with a Unified CallManager that is operating in call throttling mode, and a second IP phone registered with another Unified CallManager dials that first phone, the call is successfully established. The same scenario applies for any call destined for the first IP phone and placed through MGCP gateways or intercluster trunks (ICTs).

**Condition:**

Normal Unified CallManager operation.

**Workaround:**

None.

### Archive .tar command from FTP/TFTP server gives a directory error message (CSCek63178)

**Symptom:**

When extracting a .tar file via the command line from a TFTP or FTP server the following error may occur: *Router#archive tar /xtract ftp://X.X.X.X/XXXX.tar flash:*  
%Error, "ftp://X.X.X.X/XXXX.tar" is a directory.

**Condition:**

This problem is seen when executing the command: *<CmdBold>archive <CmdArg>tar /xtract<noCmdArg><noCmdBold>*

When the source .tar file comes from an TFTP or FTP serve, it results in an error message indicating that the source file is a directory.

**Workaround:**

None.

### Cisco Unified CallManager does not support static codec G.726r32 on a SIP trunk (CSCsb92419)

**Symptom:**

Calls made to Unified CallManager fail if the audio codec type selected is G.726r16, G.726r24, or G.726r32.

**Conditions:**

This can happen when G.726 is selected as the codec type in the *voip dial-peer* for the following gateways: H.323, SIP, or MGCP.

**Workaround:**

Select another codec type such as G.711ulaw, G.711alaw, G.729, or G.723.

### BAT.xlt Device and Line fields should match the Cisco Unified CallManager phone fields (CSCsb96065)

**Symptom:**

*BAT.xlt* does not exactly match the Device and Line fields that are listed on the Cisco Unified CallManager Administration page.

**Conditions:**

This occurs when you have to add multiple phone devices using the Bulk Administration Tool (BAT).

**Workaround:**

When adding phones using BAT, check the Cisco Unified CallManager Administration page to verify that you are adding the correct data to the appropriate fields.

**Job Configuration Page does not automatically update (CSCsb96526)**

**Symptom:**

When verifying the status of a scheduled BAT job, the Job configuration status page does not automatically get updated.

**Conditions:**

Whenever the Bulk Administration Tool is used to schedule a BAT job.

**Workaround:**

Press the Refresh button on the web browser page.

**Real-Time Monitoring Tool Graphs do not have the capability to highlight nodes and counters (CSCsc12008)**

**Symptom:**

Real-Time Monitoring Tool (RTMT) graph line color codes are not easily distinguishable on large clusters with more than ten nodes, especially when some of them overlap with each other.

**Conditions:**

When using RTMT to monitor a Unified CallManager cluster or analyzing a performance log saved by the Alert Manager and Collector (AMC) or Real-Time information System Data Collector (RISDC), you cannot highlight a node or a counter to distinguish it clearly from other color-coded lines. This problem applies to all graphs that display multiple nodes or counters with color codes.

**Workaround:**

None.

**Multicast Music-On-Hold not supported by SIP gateway (CSCsc30731)**

**Symptom:**

In the current release of IOS, the SIP gateway does not support multicast music- on-hold (MOH). The SIP gateway cannot stream RTP traffic when MOH is configured to multicast. When examining the traffic, it is observed that the SIP gateway receives the pre-allocated MTP information, but does not create a new MediaConnect to connect with the MOH server.

**Conditions:**

Call Flow: PSTN > SIP Gateway (Multicast MOH and MTP enabled) > IP Phone > Hold

When the call flow is as above and:

1. Multicast MOH is enabled on the Unified CallManager and the call is placed on hold; after a period of silence, the call is terminated.

- Media Termination Point (MTP) is enabled and the MTP receives an ICMP (port unreachable) error from the SIP gateway; the RTP stream is terminated on the MTP.

**Workaround:**

None. The multicast feature for IOS will be supported in a future release.

**Migration of Cisco Unified IP 7960 Phones from SCCP to SIP requires phone power cycle (CSCsc67031)****Symptom:**

When SCCP Unified 7960 IP Phones are converted to SIP, the phones do not register properly and do not migrate from SCCP to SIP. The phones cannot locate the *SEPmac.CNF.XML* file and get stuck in a loop and their registration as SIP phones is rejected.

**Conditions:**

This happens when SCCP Unified 7960 IP Phones (running the 8.0(0.21) software load) are converted to SIP using the BAT and the Unified CallManager cluster is rebooted.

**Workaround:**

Power down and then power up the SCCP Unified IP 7960 Phones. Once the phones are power cycled, they successfully register as SIP phones.

**Resetting CFwdALL on Cisco Unified IP Phones does not produce correct tone (CSCsd56104)****Symptom:**

When the CFwdALL setting on the Cisco Unified IP Phone is reset, the two short beeps that indicate that the redirected number has been released are not heard. However, the redirected number correctly disappears from the phone display.

**Conditions:**

This happens with the current release of SIP Cisco Unified IP Phones 7941, 7961, and 7971.

**Workaround:**

None.

**Certificate Authority Proxy Function (CAPF) logging requires service restart (CSCsd62658)****Symptom:**

Certificate Authority Proxy Function (CAPF) detailed trace is not available.

**Conditions:**

Platform serviceability logging level is set to "Detailed" for troubleshooting purposes.

**Workaround:**

Stop and restart the CAPF service via the Platform Serviceability interface.

**Bulk Administration Tool (BAT) should support more than 12,000 records per transaction (CSCsd64029)****Symptom:**

The Bulk Administration Tool (BAT) recommends limiting any transaction for inserts/updates/deletes to a maximum of 12,000 records. This limit should be removed. BAT should support over 12,000 record changes reliably.

**Conditions:**

This limitation applies to BAT transactions with over 12,000 records only.

**Workaround:**

In the case of a query-based transaction, if the selected number of records exceed 12,000, then the administrator should refine the query to select fewer records. In the case of comma-separated value (CSV) based transactions, the administrator must split records across CSV files such that each file contains less than 12,000 records and schedule multiple transactions.

**Workaround:**

Resetting the SIP trunks that have failed to initialize will restore the service on these trunks.

**No protection for limiting number of active nailed up callers (CSCse06753)****Symptom:**

Cisco Unified CallManager service runs out of memory and unexpectedly restarts.

**Conditions:**

Under certain stress conditions when there are very large number of concurrent active calls present on a single call processing node, Unified CallManager service could run out of memory even on a Cisco MCS-7845-based Unified CallManager server equipped with 4 GB of RAM.

**Workaround:**

None.

**Large-scale phone unregistrations leads to Cisco Unified CallManager Code Yellow entry (CSCse26225)****Symptom:**

Cisco Unified CallManager service goes in to Code Yellow state unexpectedly and starts rejecting new calls from all devices.

**Conditions:**

When a large number of phones unregister from their primary Unified CallManager node, that particular node could go in to Code Yellow state for a period of time. During this time, all new calls are rejected. This situation could occur in centralized call processing deployment models with large SRST remote sites. If the connectivity between the remote and central sites is lost, Unified CallManager servers in the central site could go into Code Yellow state.

**Workaround:**

None.

### No counters to track call throttling over an H.323 trunk (CSCsf10917)

**Symptom:**

When ICT call throttling occurs, Unified CallManager raises an alarm and logs it in the Unified CallManager traces; but does not display the number of H.323 calls being throttled.

**Conditions:**

Unified CallManager has an ICT call throttling mechanism that enables it to reject additional H.323 calls. However, there is no performance counter associated with the throttling mechanism that records and displays the number of calls it throttles.

**Workaround:**

None.

### Real-Time Monitoring Tool Performance Log Viewer does not display sorted remote log files (CSCsf20296)

**Symptom:**

The Real-Time Monitoring Tool (RTMT) Performance Log Viewer does not display sorted remote log files.

**Conditions:**

When viewing remote performance log files (either Alert Manager and Collector (AMC) or Real-Time information System Data Collector (RISDC)) using RTMT Performance Log Viewer, the list of files displayed is not sorted.

**Workaround:**

Manually sort the listed files and choose the log file that you need.

### Disaster Recovery restore attempt on a first node fails (CSCsf28239)

**Symptom:**

Restoring data on a first node using the Disaster Recovery System (DRS) tool fails and an error in the Unified CallManager database displays.

**Conditions:**

The Unified CallManager multi-node cluster is running the same version as the DRS backup file. The restore attempt fails when trying to restore the first node or the Unified CallManager database to the previously saved version using the DRS tool. The DRS log files on the Unified CallManager database indicate the following error:

*CCMDB Restore failed, installdb failed*

*425: Database is currently opened by another user*

**Workaround:**

Shut down all the subsequent nodes in the Unified CallManager cluster and then attempt to restore the first node.

**Default view should be given the option to enable or disable (CSCsg14500)**

**Symptom:**

In the Cisco Unified Operations Manager, users are allowed to define their own views, logical groupings of devices that appear in the Monitoring Dashboard displays. However, the All IP Communications Devices view is enabled by default and automatically included in the user’s Service Level View, and there is no method for turning off this view.

**Conditions:**

In the Manage Views page, there is no option to disable the All IP Communications Devices view in the Service Level View. Users can select which customized views will appear in Service Level View by placing a checkmark next to each view name in the Topology column. However, the Service Level View display automatically includes the All IP Communications Devices view showing the entire network topology, in addition to the views selected by the user. Users may find this behavior unexpected.

**Workaround:**

None.

**MGCP service restart required to apply configuration changes (CSCsg62087)**

**Symptom:**

Voice security on MGCP gateways is enabled but not applied. For instance, running the voice gateway command *show rtpspi call* reveals that the SRTP column displays a zero (0) value.

**Conditions:**

This situation occurs when configuring voice security features on a Cisco IOS MGCP gateway. The Configuring Voice Security Features on Cisco IOS MGCP Gateways topic in the *Media and Signaling Authentication and Encryption Feature on Cisco IOS MGCP Gateways* document is missing information in the configuration procedures.

**Workaround:**

To ensure that voice security configuration changes are applied, you should first stop and restart the MGCP service before you exit the configuration mode. Listed below is a summary of the configuration steps required to enable and apply the voice security features:

- 
- Step 1** Enable
  - Step 2** Configure terminal
  - Step 3** mgcp package-capability srtp-package
  - Step 4** mgcp validate call-agent source-ipaddr (optional command)
  - Step 5** no mgcp (this command stops the mgcp service)
  - Step 6** mgcp (this command restarts the mgcp service)
  - Step 7** Exit
-

### Unified Operations Manager fails to properly alert on Unified CallManager related service outage (CSCsg96469)

**Symptom:**

Cisco Unified CallManager related service outages are not properly identified by the Unified Operations Manager.

**Conditions:**

This has been observed in normal operating conditions. Currently when a Unified CallManager service outage occurs the event generated by Unified Operations Manager indicates a HeartBeat Threshold value has been exceeded. This is the same event if the heart beat actually falls below the configured threshold of 24 ticks per minute. The event details do not specify that the heart beat actually dropped to 0.

**Workaround:**

None.

### Issuing a Show Cluster command displays the initial subsequent node in the cluster as a first node (CSCsh81228)

**Symptom:**

From the Unified CallManager Operating System CLI Administration web page, issuing a *Show Cluster* command displays the initial subsequent node in the cluster as a first node.

**Conditions:**

This problem is observed on a freshly installed or upgraded Unified CallManager system.

**Workaround:**

None.

### Call status is displayed incorrectly when mobile agent places outbound call on hold (CSCsi16072)

**Symptom:**

When a mobile agent using the Unified Outbound Dialer agent desktop in the Preview\_Direct\_Blended/Personal Callback mode places an outbound call on hold, the Call Status displays correctly as being "On Hold", but the Agent Status displays incorrectly as "Talking".

**Condition:**

This occurs after the customer call is connected to the agent.

**Workaround:**

None.

## Resolved Caveats

This section lists severity 1, 2, and selected 3 caveats that are resolved now but are *not* included in the recommended component versions of Cisco Unified Communications System Release 5.1(2) 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 3](#) to go to the Bug Toolkit.

**Table 3 Resolved Caveats Not Included in Cisco Unified Communications System Release 5.1(2)**

Identifier	Headline
<a href="#">CSCej28100</a>	Outgoing call fails with error message: Ux_BadMsg:Invalid Mesg for call state 3, event 0x83
<a href="#">CSCsb99980</a>	Unified CallManager may try to insert extra unnecessary Media Termination Point (MTP) for DTMF due to Music-on-Hold (MoH) connection
<a href="#">CSCse23371</a>	Real-Time Monitoring Tool (RTMT) device search results timestamps do not match server logs if the servers are located in a different time zone
<a href="#">CSCse38169</a>	Unified ICM database distributor real-time client process crashes due to transaction log filling up
<a href="#">CSCsf10917</a>	No counter to track call throttling over an H.323 trunk
<a href="#">CSCsf27257</a>	Unified CallManager installation should not allow setting Network Interface Card (NIC) speed to 1000BaseT
<a href="#">CSCsg36739</a>	Cisco AS5850 gateway crashes while querying ifDescr object
<a href="#">CSCsg39825</a>	Unified CallManager calls to registered SIP phones immediately generate reorder DMPidErr error message
<a href="#">CSCsg46679</a>	Cannot delete administrator-created folders in the Unified CallManager TFTP folder
<a href="#">CSCsg67610</a>	Unified CallManager auto configuration attempt does not fail when enough DSP resources are not available

## Open Caveats

This section lists known severity 1, 2, and selected 3 caveats related to the testing of contact center components in Cisco Unified Communications System Release 5.1(2) 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 4](#) to go to the Bug Toolkit.

**Table 4 Open Caveats in Cisco Unified Communications System Release 5.1(2)**

Identifier	Headline
<a href="#">CSCsb71648</a>	Upgrade from Cisco CallManager 4.1(3) to Unified CallManager 5.x requires excessive database migration time
<a href="#">CSCsg07605</a>	Unified CallManager Disaster Recovery System (DRS) backup puts Unified CallManager database in read-only mode
<a href="#">CSCsg65683</a>	High CPU usage due to voice conferencing on Cisco 2600XM used as SIP gateway
<a href="#">CSCsg98070</a>	Unified CallManager service parameter Asynchronous SDL Logging Enabled should be left at default disabled setting

**Table 4** Open Caveats in Cisco Unified Communications System Release 5.1(2) (continued)

Identifier	Headline
<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

## Troubleshooting

The features and functionality tested in Cisco Unified Communications System Release 5.1(2) were the same as in Cisco Unified Communications System Release 5.1(1). For important troubleshooting information, tips, and recommendations related to the testing of Cisco Unified Communications System Release 5.1(2) for Contact Center, see Troubleshooting information at: [http://www.cisco.com/iam/unified/ipcc3/Introduction\\_to\\_Troubleshooting.htm](http://www.cisco.com/iam/unified/ipcc3/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 features and functionality tested in Cisco Unified Communications System Release 5.1(2) were the same as in Cisco Unified Communications System Release 5.1(1). The information sites specific to IP telephony and contact center system applications for Cisco Unified Communications System Release 5.1(1) are:

- Cisco Unified Communications System for Contact Center Release 5.1(1) at: <http://www.cisco.com/iam/unified/ipcc3/index.htm>
- Cisco Unified Communications System for IP Telephony Release 5.1(1) at: <http://www.cisco.com/iam/unified/ipt3/index.htm>
- Test results of the contact center system testing are available at:
  - *System Test Results for Contact Center: Cisco Unified Communications System Release 5.1(2)*: <http://www.cisco.com/univercd/cc/td/doc/systems/unified/uc512/results/tripc512.pdf>

## 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 5.1(2)*

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