



About This Guide

This section covers these topics:

- [How to Use This Document, page 1-1](#)
- [New and Changed Information for Release 5.1\(1\), page 1-2](#)
- [Release 5.0\(4\) Documentation Guide, page 1-5](#)

How to Use This Document

The *Cisco Unified CallManager New and Changed Information Guide* provides new or changed information for Cisco Unified CallManager Release 5.1(1) software components. Much of the functionality and feature content for this release remains the same as Cisco Unified CallManager Release 5.0(4).

This document acts as a supplement to the Cisco Unified CallManager Release 5.0(4) document set. Content in this guide supersedes information that the Cisco Unified CallManager Release 5.0(4) documents contain; however, chapters in this guide may contain references to Cisco Unified CallManager 5.0(4) documents for additional information.



Note

This document may not represent the latest Cisco product information that is available. You can obtain the most current documentation by accessing Cisco product documentation page at this URL:

http://www.cisco.com/en/US/products/sw/voicesw/ps556/tsd_products_support_series_home.html

You can find both PDF versions of entire chapters and PDF versions of entire books at this URL. PDF versions of entire chapters may contain later information than whole-book PDFs.

The 5.0(4) release online help provides the basis for the online help that was provided with your system for this release.

New and Changed Information for Release 5.1(1)

This section provides new and changed information for Release 5.1(1).

Cisco Unified CallManager Administration Guide

The chapters in this part include the following new and changed information:

- Release 5.1(1) of Cisco Unified CallManager adds support for the Advanced Audio Codec (AAC) when configuring regions (see the [“Region Configuration”](#) chapter for more information).
- The System menu in Cisco Unified CallManager Administration include the License Capabilities option (see the [“License Capabilities Assignment Configuration”](#) chapter for more information).
- The Basic and Advanced Third-Party SIP Phone Configuration windows includes a check box called Require DTMF Reception (see the [Configuring Non-Cisco SIP Phones, page 4-1](#) chapter for more information).
- The TFTP Service Parameter no longer offers the Enable Caching of Configuration Files option (see the [“Cisco TFTP”](#) chapter for more information).
- Release 5.1(1) of Cisco Unified CallManager adds support for the DirSync service to synchronize information from additional types of corporate directories to the Cisco Unified CallManager database (see the [“DirSync Service”](#) section on page 9-3 in the [“Understanding the Directory”](#) chapter for more information).

Cisco Unified CallManager System Guide

The chapters in this part include the following new and changed information:

- Release 5.1(1) of Cisco Unified CallManager adds support for the Advanced Audio Codec (AAC) for calls between SIP phones (see the [“System-Level Configuration Settings”](#) chapter for more information).
- Release 5.1(1) of Cisco Unified CallManager adds Enhanced Immediate Divert feature (see the [“Cisco Unified IP Phones”](#) chapter for more information).
- Release 5.1(1) of Cisco Unified CallManager adds Call Forward All (CFA) override feature (see the [“Cisco Unified IP Phones”](#) and [“Understanding Directory Numbers”](#) chapters for more information).
- Directory/LDAP supports Sun Java Directory Server 5.2 (see the [“Understanding the Directory”](#) chapter for more information).
- This chapter provides supported voice gateways, protocols, trunk interfaces, and port updates (see the [“Understanding Cisco Unified CallManager Voice Gateways”](#) chapter for more information).

Cisco Unified CallManager Features and Services Guide

The chapters in this part include the following new and changed information:

- The enhanced Immediate Divert (iDivert) feature adds these new service parameters: Use Legacy iDivert, Allow QSIG During iDivert, iDivert User Response Timer (see the [“Setting the Service Parameters for Immediate Divert”](#) section on page 13-10 of the [“Immediate Divert”](#) chapter for more information). The chapter also describes the changed functionality of the Immediate Divert feature in the enhanced and legacy modes.
- The Music On Hold feature adds the following service parameter: Multicast MOH Direction Mode for SIP (see the [“Multicast and Unicast Audio Sources”](#) section on page 12-10 for more information).
- Checking the Allow Control of Device from CTI check box on the Phone Configuration window ensures call control comes up for the attendant console (see the [“Cisco Unified CallManager Attendant Console”](#) chapter for more information).

Cisco Unified CallManager Serviceability Administration Guide

The chapters in this part include the following new and changed information:

- An updated procedure on how to configure troubleshooting trace settings in Cisco Unified CallManager Serviceability (see the [“Troubleshooting Trace Setting Configuration”](#) chapter for more information).
- New information on how to zoom in on an area of a chart for a predefined object in RTMT (see the [“Real-Time Monitoring Configuration”](#) chapter for more information).
- An updated procedure on how to install the Cisco Unified CallManager Real-Time Monitoring Tool plug-ins; that is, Cisco Unified CallManager Real-Time Monitoring Tool-Linux or Cisco Unified CallManager Real-Time Monitoring Tool-Windows (see the [“Real-Time Monitoring Configuration”](#) chapter for more information).
- Updated information on viewing the Database Summary window in the Cisco Unified CallManager Real-Time Monitoring Tool (see the [“Real-Time Monitoring Configuration”](#) chapter for more information).
- Updated multiserver service activation recommendations for the Cisco SOAP-CDRonDemand Service, Cisco CAR Scheduler service, Cisco CAR Web Service, and Cisco TAPS Service (see the [“Managing Services”](#) chapter for more information).
- Updated information on configuring a remote syslog server as the alarm destination (see the [“Alarm Configuration”](#) chapter for more information).

Cisco Unified CallManager Serviceability System Guide

The chapters in this part include the following new and changed information:

- Updated information on how troubleshooting trace works (see the [“Trace”](#) chapter for more information).
- Updated information on configuring a remote syslog server as the alarm destination (see the [“Alarms”](#) chapter for more information).

- New information on the Cisco SOAP-CDRonDemand Service, Cisco TAPS Service, and A Cisco DB Replicator service; updated information on the Cisco CAR Scheduler service and the Cisco CAR Web Service (see the [“Service Management”](#) chapter for more information).
- Updated information on viewing the Database Summary window in the Cisco Unified CallManager Real-Time Monitoring Tool (see the [“Real-Time Monitoring Tool”](#) chapter for more information).
- Updated information on accessing log files through the Cisco Unified CallManager Real-Time Monitoring Tool (see the [“Real-Time Monitoring Tool”](#) chapter for more information).
- New information on the performance counter, ThreadsBusy, which supports the Cisco Tomcat Connector object (see the [“Performance Objects and Counters”](#) chapter for more information).
- Updated information on the performance counter, CallsInProgress, which supports the Cisco CallManager object (see the [“Performance Objects and Counters”](#) chapter for more information).
- Updated information on the performance counter, Process Status, which supports the Process object (see the [“Performance Objects and Counters”](#) chapter for more information).

Cisco Unified CallManager CDR Analysis and Reporting Administration Guide

The chapters in this part include the following new and changed information:

- Updated information on how CAR database purging works (see the [“CDR Analysis and Reporting Overview”](#) and the [“CAR System Configuration”](#) chapters for more information).
- Updated information on how CDR search works (see the [“CDR Analysis and Reporting Overview”](#) and the [“CDR Search Configuration”](#) chapters for more information).
- New information on how CAR generates e-mail addresses when it sends automatically generated reports to CAR administrators (see the [“CAR Report Configuration”](#) chapter for more information).
- New information on when _unspecifieduser displays in CAR reports (see the [“CAR Report Results”](#) chapter for more information).

Cisco Unified CallManager Call Detail Record Definitions

Cisco Unified CallManager Release 5.1(1) adds a single new codec type, Media_Payload_AAC = 42 (see the [“Call Detail Record Definitions”](#) chapter for more information). This chapter contains an updated table only; it is not replacement chapter.

Cisco Unified CallManager Security Guide

The chapters in this part include the following new and changed information:

- Securing a Cisco PIX Firewall as part of a secure Cisco Unified CallManager system (see the [“Configuring the Cisco CTL Client”](#) chapter for more information).
- Updated information for Cisco Unified IP SIP Phone support for the Exclude Digest Credentials option for encrypted files (see the [“Configuring Encrypted Phone Configuration Files”](#) chapter for more information).
- Upgrading Cisco Unified IP Phones to use LSCs for TLS connection to Cisco Unified CallManager and removing MIC root certificates from the CallManager trust store to avoid possible future compatibility issues (see the [“Security Overview”](#) and [“Configuring a Phone Security Profile”](#) chapters for more information).

Cisco Unified CallManager Bulk Administration Guide

The chapters in this part include the following new and changed information:

- New menus in BAT: CUPS menu to update and export licenses (see the [“Working with Licenses”](#) chapter for more information).
- New menu in BAT: Region Matrix menu to populate and depopulate the region matrix (see the [“Updating the Region Matrix”](#) chapter for more information).

Cisco Unified CallManager Developers Guide

The chapters in this part include the following new and changed information:

- WebDialer requires HTTPS (see the [“WebDialer API Programming”](#) chapter for more information).
- See [“AXL Programming”](#) for new AXL API calls, a new AXL service parameter, and an updated C / C++ example.

Cisco Unified IP Phones Information

The chapters in this part include the following new and changed information:

- Transfer to voicemail with iDivert softkey (see the [“Enhanced Immediate Divert Behavior”](#) chapter for more information)
- Arabic support (see the [“Arabic Support”](#) chapter for more information)

These chapters contain only introductory information for these features. The Cisco Unified IP Phone administration and user guides provide more information.

Release 5.0(4) Documentation Guide

The documentation that supports Cisco Unified CallManager Release 5.1(1) comprises existing release 5.0(4) documentation that is listed in this documentation guide, as well as the following new release 5.1(1) documents (also listed in this documentation guide):

- *Cisco Unified CallManager New and Changed Information Guide, Release 5.1(1)*
- *Release 5.1(1) Release Notes for Cisco Unified CallManager*
- *Upgrading Cisco Unified CallManager, Release 5.1(1)*
- *Installing Cisco Unified CallManager, Release 5.1(1)*
- *Data Migration Assistant Administration Guide, Release 5.1(1)*
- *Cisco Unified Communications Operating System Administration Guide, Release 5.1(1)*
- *Cisco Unified Communications Locale Installer Release Notes for Cisco Unified CallManager, Release 5.1*

The *Cisco Unified CallManager New and Changed Information Guide, Release 5.1(1)* is a new document that is specific to release 5.1(1). See the [“Cisco Unified CallManager New and Changed Information Guide, Release 5.1\(1\)”](#) section on page 1-8 for more information.

This document lists and describes the documents that make up the Cisco Unified CallManager suite of installation and configuration documents. It contains the following sections:

- [Cisco Unified CallManager Installation Documentation, page 1-7](#)
- [Cisco Unified CallManager Configuration Documentation, page 1-8](#)
- [Cisco Unified CallManager Developer Guides, page 1-10](#)
- [Related Product Documentation, page 1-11](#)

**Note**

This documentation guide represents the only printed document that ships with Cisco Unified CallManager Release 5.1(1). Because all the available documentation is online, this document provides the online URLs.

Cisco Unified CallManager Installation Documentation

This section lists Cisco Unified CallManager install-related documentation.



Tip

The documents in this section post to www.cisco.com and Cisco Connection Online (CCO).

Data Migration Assistant (DMA) User Guide, Release 5.1(1)

This document describes the data migration tool that you must install and run on your existing Cisco Unified CallManager system prior to upgrading to Cisco Unified CallManager 5.1.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/dma/5_1_x/dmaug511.html

Disaster Recovery System Administration Guide, Release 5.0(4)

This document provides an overview of the Disaster Recovery System and provides procedures for performing various backup- and restore-related tasks.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/drs/5_0_4/drsag504.html

Installing Cisco Unified CallManager, Release 5.1(1)

This document provides procedures for installing Cisco Unified CallManager on the publisher database and subscriber servers.

To obtain copies of this document, refer to the URL

http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/5_1/install/instcall/index.htm

Installing Cisco Security Agent for Unified CallManager

This document provides installation instructions and information about Cisco Security Agent (CSA) for Cisco Unified CallManager Release 4.1, 4.2, 5.0, and 5.1.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/csa_token_ids/csaccm50.html

Upgrading Cisco Unified CallManager, Release 5.1(1)

This document provides procedures for upgrading from previous versions of Cisco Unified CallManager to Cisco Unified CallManager 5.1(1).

This document also provides information on replacing hardware while you perform the upgrade.

To obtain copies of this document, refer to the URL

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/upgrade/5_1/upgrd511.html

Cisco Unified CallManager Configuration Documentation

This section lists Cisco Unified CallManager configuration documentation that is available only on www.cisco.com and CCO. Cisco does not print the documentation that is in this section, and you cannot order the documentation through Manufacturing.

Cisco Unified CallManager CDR Analysis and Reporting Administration Guide, Release 5.0(4)

This document describes how to configure and use Cisco Unified CallManager CDR Analysis and Reporting (CAR), a tool that is used to create user, system, device, and billing reports.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/service/5_0_4/car/car.html

Cisco Unified CallManager Administration Guide, Release 5.0(4)

This document provides step-by-step instructions for configuring, maintaining, and administering the Cisco Unified CallManager voice over IP network.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/admin/5_0_4/ccmcfg/ccmcfg.html

Cisco Unified CallManager Attendant Console User Guide, Release 5.0(4)

This document provides reference and procedural information for users who are operating the Cisco Unified CallManager Attendant Console. This release provides localized versions of the *Cisco Unified CallManager Attendant Console User Guide* in multiple languages.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/admin/5_0_4/ccmfeat/fscmac.html

Cisco Unified CallManager Bulk Administration Guide, Release 5.0(4)

This document provides step-by-step instructions for adding, updating, or deleting large numbers of users, devices, and ports on specific devices.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/bat/5_0_4/5_0_4.html

Cisco Unified CallManager Features and Services Guide, Release 5.0(4)

This document provides key concepts, terminology, and descriptive information about features and high-level administrative tasks that involve Cisco Unified CallManager.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/admin/5_0_4/ccmfeat/ccmfeat.html

Cisco Unified CallManager New and Changed Information Guide, Release 5.1(1)

The *Cisco Unified CallManager New and Changed Information Guide* provides new or changed information for Cisco Unified CallManager Release 5.1(1) software components. Much of the functionality and feature content for this release remains the same as Cisco Unified CallManager Release 5.0(4).

This document acts as a supplement to the Cisco Unified CallManager Release 5.0(4) document set. Content in this guide supersedes information that the Cisco Unified CallManager Release 5.0(4) documents contain; however, chapters in this guide may contain references to Cisco Unified CallManager 5.0(4) documents for additional information.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/admin/5_1_1/nci/nci.html

Cisco Unified CallManager Security Guide, Release 5.0(4)

This document provides step-by-step instructions on how to configure authentication and encryption for Cisco Unified CallManager, Cisco Unified IP Phones, SRST references, Cisco MGCP gateways, and Cisco Unity voice-messaging ports. This guide also discusses authorization for SIP trunk messages.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/security/5_0_4/sec504.html

Cisco Unified CallManager Serviceability Administration Guide, Release 5.0(4)

This document provides step-by-step instructions for configuring alarms, traces, and other reporting for Cisco Unified CallManager serviceability and remote serviceability.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/service/5_0_4/ccmsrva/ccmsrva.html

Cisco Unified CallManager Serviceability System Guide, Release 5.0(4)

This document provides descriptions of Cisco Unified CallManager serviceability and remote serviceability as well as links to associated *Cisco Unified CallManager Serviceability Administration Guide* procedures.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/service/5_0_4/ccmsrvs/ccmsrvs.html

Cisco Unified CallManager System Guide, Release 5.0(4)

This document provides descriptions of the Cisco Unified CallManager system and its components, configuration checklists, and links to associated *Cisco Unified CallManager Administration Guide* and *Cisco Unified CallManager Features and Service Guide* procedures.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/admin/5_0_4/ccmsys/ccmsys.html

Cisco Unified Communications Locale Installer Release Notes for Cisco Unified CallManager, Release 5.1

The *Cisco Unified Communications Locale Installer Release Notes for Cisco Unified CallManager* is used in conjunction with the *Cisco Unified Communications Operating System Administration Guide* and the readme document that accompanies the Locale Installer on cisco.com.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/loc_inst/rel_notes/li_rn51.html

Cisco Unified Communications Operating System Administration Guide, Release 5.1(1)

The *Cisco Unified Communications Operating System Guide* provides information about using the Cisco Unified Communications Platform graphical user interface (GUI) and the command line interface (CLI) to perform many common system- and network-related tasks.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/cucos/5_1_1/511.html

Release Notes for Cisco Unified CallManager Release 5.1(1)

This document lists and describes the system requirements, new features, changed information, documentation updates, and open caveats for Cisco Unified CallManager Release 5.1(1).

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/rel_notes/5_1_1/511ccmrn.html

Troubleshooting Guide for Cisco Unified CallManager, Release 5.0(4)

This document provides troubleshooting procedures for solving Cisco Unified CallManager system and configuration problems.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/trouble/5_0_4/trbl_504.html

Cisco Unified CallManager Developer Guides

This section lists Cisco Unified CallManager third-party developer documentation that is available only on www.cisco.com and CCO. Cisco does not print the documentation that is in this section, and you cannot order the documentation through Manufacturing.

Cisco Unified CallManager JTAPI Developers Guide, Release 5.0(4)

This guide describes the Cisco implementation of JTAPI for the Cisco Unified CallManager platform. Cisco conforms as closely as possible to the JTAPI specification while providing extensions that enhance JTAPI and expose the advanced features of Cisco Unified CallManager to applications.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/jtapi_dev/5_0_4/jtapi.html

Cisco Unified CallManager TAPI Developers Guide, Release 5.0(4)

This guide describes the Cisco TAPI Service Provider (TSP), which allows developers to create customized IP telephony applications for Cisco users. The Cisco TAPI implementation uses the Microsoft TAPI v2.1 specification and supplies extension functions to support Cisco Unified Communications Solutions.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/tapi_dev/5_0_4/developer/tapi.html

Cisco Unified CallManager Call Detail Record Definitions, Release 5.0(4)

This document describes the format and logic of the call detail records (CDRs) and call management records (CMRs) that the Cisco Unified CallManager Release 5.0(4) system generates.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/cdr_defs/5_x/cdr504.html

Cisco Unified CallManager Data Dictionary, Release 5.1(1)

This document describes the data that the primary Cisco Unified CallManager database stores for Release 5.1(1). This document automatically generates from the actual development data dictionary that is used to create the SQL scripts for installing the Cisco Unified CallManager database.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/datadict/5_0_4/dd504.pdf

Cisco Unified CallManager Developers Guide, Release 5.0(4)

This guide includes the AXL, AXL Serviceability, Extension Mobility, and WebDialer APIs.

The Cisco Unified CallManager AXL implementation allows applications to modify the Cisco Unified CallManager system database.

Cisco Unified CallManager Real-Time information, Performance Counters, and Database information exposure occurs through the AXL Serviceability API.

The Cisco Extension Mobility Service provides a rich API, which enables extension mobility on IP phones and allows application control over authentication, scheduling, and availability.

The Cisco WebDialer application enables click-to-dial functionality by creating hyperlinked telephone numbers in a company directory.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/devguide/5_0_4/ccmdev.html

Cisco Unified IP Phone Service Application Development Notes for Cisco Unified CallManager 5.0(4)

This document provides the information that is needed for programmers and system administrators to develop and deploy new Cisco Unified IP Phone services with Cisco Unified CallManager 5.0, using eXtensible Markup Language (XML) objects and the Hypertext Transfer Protocol (HTTP) with standard web servers. Cisco conforms as closely as possible to the XML and HTTP standards while providing maximum service functionality for Cisco Unified IP Phones.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/sip_msg/line_std/5_0_4/siplmgst.pdf

Related Product Documentation

This section lists additional documentation that is available on the World Wide Web at www.cisco.com.



Note

For voice product documentation that is not specified in this section, refer to

http://www.cisco.com/en/US/products/ps6884/products_white_paper09186a008081f7af.shtml

Cisco Unified CallManager 5.1 TCP and UDP Port Usage

This document provides a list of the TCP and UDP ports that Cisco Unified CallManager 5.1 uses for intracluster connections and for communications with external applications or devices. It provides important information for the configuration of firewalls, Access Control Lists (ACLs), and quality of service (QoS) on a network when an IP Communications solution is implemented.

http://www.cisco.com/univercd/cc/td/doc/product/voice/c_callmg/sec_vir/udp_tcp/index.htm

Cisco Unified CallManager Attendant Console Keyboard Shortcuts

This quick-reference guide lists keyboard shortcuts that are used with the Cisco Unified CallManager Attendant Console. The attendant can attach this document to the monitor or place it on the keyboard.

To access copies of this document online, refer to the URL

http://www.cisco.com/en/US/docs/voice_ip_comm/cucmac/key/ackey_501.pdf

You can order copies of this document by using the following customer order number:
DOC-7817425=

Cisco Unified CallManager Compatibility Matrix

You can find which application versions and third-party components are compatible with Cisco Unified CallManager release 5.1(1) by referring to the *System Release Notes for IP Telephony: Cisco Unified Communications Release 5.1* at

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/compat/ccmcompmatr1.pdf

Cisco Unified CallManager Security Token Advisory

This document describes the purpose of the Cisco System Administrator Security Token.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/csa_token_ids/sec_tkn.html

Cisco Unified Communications SRND Based on Cisco Unified CallManager 5.0

This Solution Reference Network Design (SRND) document provides design considerations and guidelines for deploying the following components of the Cisco Unified Communications System: Cisco Unified CallManager, Cisco Unified MeetingPlace, Cisco Unity, and Cisco Unified Video Advantage.

http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/srnd/5x/uc5_0.html

Cisco Unified IP Phones and Services

The following location provides documentation for administering and using the Cisco IP Phones and services:

http://www.cisco.com/en/US/products/hw/phones/ps379/tsd_products_support_series_home.html
