



Preface

This chapter describes the objectives, intended audience, and organization of this document and describes the conventions that convey instructions and other information. It contains the following sections:

- [Purpose, page xxxix](#)
- [Audience, page xxxix](#)
- [Organization, page xl](#)
- [Related Documentation, page xli](#)
- [Developer Support, page xli](#)
- [Conventions, page xlii](#)
- [Obtaining Documentation and Submitting a Service Request, page xliii](#)
- [Cisco Product Security Overview, page xliii](#)
- [OpenSSL Notice, page xliii](#)

Purpose

This document describes the Cisco Unified Communications Manager (formerly Cisco Unified CallManager) Java Telephony Application Programming Interface (JTAPI). Cisco Unified JTAPI enables programming interfaces to support different implementations. This document outlines basic Cisco Unified JTAPI concepts including extensions, classes and interfaces.

To implement JTAPI for Cisco Unified Communications Manager, Cisco conforms to the JTAPI Specification v1.2 while providing extensions that enhance JTAPI with the advanced features of Cisco Unified Communications Manager.

As new versions of Cisco Unified Communications Manager and the Cisco Unified JTAPI implementation are released, Cisco maintains stable and reliable API extensions, and as new Cisco Unified Communication Manager features become available, additional extensions are provided.

Audience

This document is for developers who write applications that extend the functionality of the APIs that are described in this document.

This document assumes that you have knowledge of the Java language and the Sun JTAPI v 1.2 specification. You must also have knowledge or experience in the following areas:

- [Extensible Markup Language \(XML\)](#)
- [Hypertext Markup Language \(HTML\)](#)
- [Hypertext Transport Protocol \(HTTP\)](#)
- [Socket programming](#)
- [TCP/IP Protocol](#)
- [Web Service Definition Language \(WSDL\) 1.1](#)
- [Secure Sockets Layer \(SSL\)](#)

In addition, as a user of the Cisco Unified Communications Manager APIs, you must have a firm understanding of XML Schema. For more information about XML Schema, refer to <http://www.w3.org/TR/xmlschema-0/>.

You must have an understanding of Cisco Unified Communications Manager and its applications. See the “[Related Documentation](#)” section on page xli for Cisco Unified Communications Manager documents and other related technologies.

Organization

The following table provides an outline of the chapters in this document.

Chapter	Description
Chapter 1, “Overview”	This chapter introduces the major concepts with which you need to be familiar before creating JTAPI applications for Cisco IP Telephony Solutions.
Chapter 2, “New and Changed Information”	This chapter describes the new and changed features in Cisco Unified Communications Manager releases that are supported by Cisco Unified JTAPI.
Chapter 3, “Features Supported by Cisco Unified JTAPI”	This chapter describes additional features that are supported by Cisco Unified JTAPI.
Chapter 4, “Cisco Unified JTAPI Installation”	This chapter describes the Cisco Unified JTAPI installation process.
Chapter 5, “Hierarchy for All Cisco Unified JTAPI Packages”	This chapter provides the Hierarchy for All Cisco Unified JTAPI Packages.
Chapter 6, “Cisco Unified JTAPI Extensions”	This chapter describes the extensions (interfaces and classes) that are available for implementation in a Cisco Unified Communications Manager.
Chapter 7, “Cisco Unified JTAPI Alarms and Services”	This chapter describes the alarms and services that are available for implementation in a Cisco Unified Communications Manager.
Chapter 8, “Cisco Unified JTAPI Examples”	This chapter provides the examples of source code for makecall, the Cisco Unified JTAPI program that is used to test the JTAPI installation.
Appendix A, “Message Sequence Charts”	This appendix contains message flow diagrams.

Chapter	Description
Appendix B, “Cisco Unified JTAPI Classes and Interfaces”	This appendix contains a listing of all the classes and interfaces that are available in Cisco Unified JTAPI.
Appendix C, “Troubleshooting Cisco Unified JTAPI”	This appendix contains CTI Error Codes, CiscoEvent IDs, and other troubleshooting information.
Appendix D, “Cisco Unified JTAPI Operations-by-Release”	This appendix contains a list of supported, unsupported, changed, and “under consideration or review” by Cisco Unified Communications Manager release.
Appendix E, “CTI Supported Devices”	This appendix contains a list of CTI supported devices.
Appendix F, “Constant Field Values”	This appendix lists the static final fields and their values.
Appendix G, “Deprecated API”	This appendix lists lists the APIs, fields, and methods that have been deprecated.

Related Documentation

This section lists documents and URLs that provide information on Cisco Unified Communications Manager, Cisco Unified IP Phones, and the technologies that are required to develop applications.

- **Cisco Unified Communications Manager Release 7.1(2)**—A suite of documents that relate to the installation and configuration of Cisco Unified Communications Manager. Refer to the *Cisco Unified Communications Manager Documentation Guide for Release 7.1(2)* for a list of documents on installing and configuring Cisco Unified Communications Manager 7.1(2), including:
 - *Cisco Unified Communications Manager Administration Guide, Release 7.1(2)*.
 - *Cisco Unified Communications Manager System Guide, Release 7.1(2)*.
 - *Cisco Unified Communications Manager Features and Services Guide, Release 7.1(2)*.
- **Cisco Unified IP Phones and Services**—A suite of documents that relate to the installation and configuration of Cisco Unified IP Phones.
- **Cisco Distributed Director**—A suite of documents that relate to the installation and configuration of Cisco DistributedDirector.

Related Information

To obtain the latest version of the complete Sun Microsystems JTAPI specification files, go directly to <http://java.sun.com/products/jtapi>.

Developer Support

The Developer Support Program provides formalized support for Cisco Systems interfaces to enable developers, customers, and partners in the Cisco Service Provider solutions Ecosystem and Cisco AVVID Partner programs to accelerate their delivery of compatible solutions.

The Developer Support Engineers are an extension of the product technology engineering teams. They have direct access to the resources necessary to provide expert support in a timely manner.

For additional information on this program, refer to the Developer Support Program web site at <http://developer.cisco.com>.

Developers using the *Cisco Unified Communications Manager Release 5.0(1) Extension Mobility API Developer Guide* are encouraged to join the Cisco Developer Support Program. This program provides a consistent level of support while leveraging Cisco interfaces in development projects.

**Note**

Cisco Technical Assistance Center (TAC) support does not include Extension Mobility API developer support and is limited to Cisco AVVID installation/configuration and Cisco-developed applications. For more information about the Developer Support Program, please contact Cisco at developer-support@cisco.com.

Conventions

This document uses the following conventions:

Convention	Description
boldface font	Commands and keywords are in boldface .
<i>italic font</i>	Arguments for which you supply values are in <i>italics</i> .
[]	Elements in square brackets are optional.
{ x y z }	Alternative keywords are grouped in braces and separated by vertical bars.
[x y z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
screen font	Terminal sessions and information the system displays are in screen font.
boldface screen font	Information you must enter is in boldface screen font .
<i>italic screen font</i>	Arguments for which you supply values are in <i>italic screen font</i> .
→	This pointer highlights an important line of text in an example.
^	The symbol ^ represents the key labeled Control—for example, the key combination ^D in a screen display means hold down the Control key while you press the D key.
< >	Nonprinting characters, such as passwords are in angle brackets.

Notes use the following conventions:

**Note**

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the publication.

Timesavers use the following conventions:

**Timesaver**

Means *the described action saves time*. You can save time by performing the action described in the paragraph.

**Tip**

Means *the following are useful tips*.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, 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>

Subscribe to the What's New in Cisco Product Documentation as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

Cisco Product Security Overview

This product contains cryptographic features and is subject to United States and local country laws governing import, export, transfer and use. Delivery of Cisco cryptographic products does not imply third-party authority to import, export, distribute or use encryption. Importers, exporters, distributors and users are responsible for compliance with U.S. and local country laws. By using this product you agree to comply with applicable laws and regulations. If you are unable to comply with U.S. and local laws, return this product immediately.

A summary of U.S. laws governing Cisco cryptographic products may be found at:

<http://www.cisco.com/wwl/export/crypto/tool/stqrg.html>.

If you require further assistance please contact us by sending email to export@cisco.com.

OpenSSL Notice

The following link provides information about the OpenSSL notice:

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

