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Purpose

This guide shows how to use the CTI Protocol to access Cisco Unified CCX (Unified CCX) as a client.

The goal of this guide is twofold:

- First, to provide descriptions of how to use the Unified CCX CTI protocol messages.
- Second, to provide the Unified CCX CTI protocol message definitions.

Audience

This guide is for third-party client developers writing applications that need to use the Cisco Unified CCX CTI Protocol. The guide is intended to contain all of the information needed by Cisco Unified CCX CTI client developers.

Organization

Chapter	Describes
Part I: How To Use the Messages	
Overview	The general environment in which a CTI client operates and a brief description of the Unified CCX CTI Protocol with its uses.

Chapter	Describes
Defining Unified CCX CTI Messages	How to define a Unified CCX CTI message using the required message format, syntax, and structure.
Managing Sessions	How a client/server CTI connection is initialized, maintained, and managed, and what can cause failures.
Managing Configuration Data	The configuration messages and how the sever shares configuration data with a client and how the client can maintain that data.
Managing Agent States	Agent states, agent state transitions, agent state messages, agent authentication, and how agent state information is shared and updated between a client and the server.
Communicating Call Events	What call events are and how information about them is shared between the client and the server.
Managing Client Control of Calls	How client applications through client-control (“call-control”) messages can request changes or establish, answer, control, or terminate calls on behalf of a specified agent phone number, and manipulate the telephone features associated with the agent’s IP phone.
Part II: Reference Section	
Message Type Definitions	Reference definitions of each Unified CCX CTI Protocol message, and the masks, values, and constants used in the messages.
Data Types and Message Constants	Miscellaneous message constant values
Part III: System Level Information	
Client Application Development Guidelines	Guidelines for developing a client application.
Document History	Changes/ updates made to each chapter in the document

Related Documentation

Refer to the following documents for further information about Unified CCX applications and products:

- Cisco Unified Contact Center Express Scripting and Development Series: Volume 1, Getting Started with Scripts
- Cisco Unified Contact Center Express Scripting and Development Series: Volume 2, Editor Step Reference

- Cisco Unified Contact Center Express Scripting and Development Series: Volume 3, Expression Language Reference
- Cisco Unified Contact Center Express Administration Guide
- Cisco Unified Contact Center Express Installation Guide
- Cisco Unified Contact Center Express Servicing and Troubleshooting Guide
- Cisco Unified Communications Manager Administration Guide
- Cisco Unified Communications Manager Extended Services Administrator Guide
- Cisco Unified Communications Manager System Guide
- Cisco IP Telephony Network Design Guide
- IEEE Standard for Binary Floating-Point Arithmetic, ANSI/IEEE Standard 754-1985 (IEEE, New York)
- Cisco Unified Contact Center Express Gateway Deployment Guide ICM/IPCC Enterprise Edition Release 8.0(0), IPCC Express Release 4.0(0)
- Getting Started with Cisco Unified Contact Center Express, Release 4.1
- Getting Started with Cisco Unified IP IVR, Release 4.1

Obtaining Documentation, Obtaining Support, and Submitting a Service Request

For information on obtaining documentation, obtaining support, 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>

Documentation Feedback

You can provide comments about this document by sending an e-mail to the following address:

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We appreciate your comments.

