



Preface

Use this document with Cisco CallManager 4.1(2) to develop and deploy customized client services for the Cisco IP Phone 7940 and 7960 models, which support Cisco IP Phone services.



Note

Developers using this guide should join the Cisco Developer Support Program because standard Cisco TAC support is limited to the Cisco AVVID installation, configuration, and Cisco-developed applications. This program provides a consistent level of dependable support while leveraging Cisco interfaces in your development projects. For more information about the program and how to join, contact us at developer-support@cisco.com.

Contents

This document covers the following topics:

- [Audience](#)
- [Organization](#)
- [Related Documentation](#)
- [Obtaining Documentation](#)
- [Documentation Feedback](#)
- [Obtaining Technical Assistance](#)
- [Obtaining Additional Publications and Information](#)

Audience

This document provides the information needed for eXtensible Markup Language (XML) and X/Open System Interface (XSI) programmers and system administrators to develop and deploy new services.

Organization

This document comprises the following sections.

Chapter	Description
Chapter 1, "Overview"	Provides an overview of the Cisco IP Phone services for developers.
Chapter 2, "CiscoIPPhone XML Objects"	Describes the general behavior and usage of each XML object.
Chapter 3, "Custom Softkeys"	Describes how Cisco IP Phones can receive custom softkeys with the CiscoIPPhone objects.
Chapter 4, "Cisco IP Services Software Development Kit (SDK)"	Provides a list of the components used in the Cisco IP Services Software Development Kit (SDK) and the sample services requirements.
Chapter 5, "HTTP Client Requests and Header Settings"	Provides a procedure on handling HTTP client requests, definitions for HTTP header elements, identifies the capabilities of the requesting IP phone client, and defines the Accept header.
Chapter 6, "IP Phone Service Administration and Subscription"	Describes how to add and administer Cisco IP Phone services through Cisco CallManager Administration.
Chapter 7, "Troubleshooting Cisco IP Phone Service Applications"	Provides troubleshooting tips, XML parsing errors, and error messages.

Chapter	Description
Chapter 8, “DeviceListX Report”	Describes how the report provides a list of the services-capable devices along with basic information about the device to identify or classify the devices based on specific criteria
Appendix A, “CiscoIPPhone XML Object Quick Reference”	Provides a quick reference of the CiscoIPPhone XML objects and the definitions that are associated with each.
Appendix B, “Cisco IP Phone XML Schema File”	Provides the CiscoIPPhone.xsd file.

Related Documentation

The following documents provide further information:

- *Cisco CallManager Administration Guide* (also available in the online help). Refer to the chapter on configuring Cisco IP Phone services.
- *Cisco CallManager System Guide* (also available in the online help).
- *Cisco IP Phone 7960/7940 Quick Start Guide*
Provides instructions for users on subscribing to phone services.
- *Cisco IP Phone Administration Guide for Cisco CallManager*
Provides administration information for Cisco IP Phones.
- *CiscoURLProxy ActiveX Component*
Provided with the Cisco IP Services SDK.
- *LDAP Search COM Server Programming Guide*
Provided with the Cisco IP Services SDK.
- *CipImage Release Notes*
Provided with the Cisco IP Services SDK.

Obtaining Documentation

Cisco documentation and additional literature are available on Cisco.com. Cisco also provides several ways to obtain technical assistance and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

Cisco.com

You can access the most current Cisco documentation at this URL:

<http://www.cisco.com/univercd/home/home.htm>

You can access the Cisco website at this URL:

<http://www.cisco.com>

You can access international Cisco websites at this URL:

http://www.cisco.com/public/countries_languages.shtml

Ordering Documentation

You can find instructions for ordering documentation at this URL:

http://www.cisco.com/univercd/cc/td/doc/es_inpk/pdi.htm

You can order Cisco documentation in these ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Ordering tool:

<http://www.cisco.com/en/US/partner/ordering/index.shtml>

- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

You can send comments about technical documentation to bug-doc@cisco.com.

You can submit comments by using the response card (if present) behind the front cover of your document or by writing to the following address:

Cisco Systems
Attn: Customer Document Ordering
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

For all customers, partners, resellers, and distributors who hold valid Cisco service contracts, Cisco Technical Support provides 24-hour-a-day, award-winning technical assistance. The Cisco Technical Support Website on Cisco.com features extensive online support resources. In addition, Cisco Technical Assistance Center (TAC) engineers provide telephone support. If you do not hold a valid Cisco service contract, contact your reseller.

Cisco Technical Support Website

The Cisco Technical Support Website provides online documents and tools for troubleshooting and resolving technical issues with Cisco products and technologies. The website is available 24 hours a day, 365 days a year at this URL:

<http://www.cisco.com/techsupport>

Access to all tools on the Cisco Technical Support Website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a user ID or password, you can register at this URL:

<http://tools.cisco.com/RPF/register/register.do>

Submitting a Service Request

Using the online TAC Service Request Tool is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool automatically provides recommended solutions. If your issue is not resolved using the recommended resources, your service request will be assigned to a Cisco TAC engineer. The TAC Service Request Tool is located at this URL:

<http://www.cisco.com/techsupport/servicerequest>

For S1 or S2 service requests or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco TAC engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553 2447

For a complete list of Cisco TAC contacts, go to this URL:

<http://www.cisco.com/techsupport/contacts>

Definitions of Service Request Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—Your network is “down,” or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Severity 2 (S2)—Operation of an existing network is severely degraded, or significant aspects of your business operation are negatively affected by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.

Severity 3 (S3)—Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- Cisco Marketplace provides a variety of Cisco books, reference guides, and logo merchandise. Visit Cisco Marketplace, the company store, at this URL:
<http://www.cisco.com/go/marketplace/>
- The Cisco *Product Catalog* describes the networking products offered by Cisco Systems, as well as ordering and customer support services. Access the Cisco Product Catalog at this URL:
<http://cisco.com/univercd/cc/td/doc/pcat/>
- *Cisco Press* publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press at this URL:
<http://www.ciscopress.com>
- *Packet* magazine is the Cisco Systems technical user magazine for maximizing Internet and networking investments. Each quarter, Packet delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources. You can access Packet magazine at this URL:
<http://www.cisco.com/packet>
- *iQ Magazine* is the quarterly publication from Cisco Systems designed to help growing companies learn how they can use technology to increase revenue, streamline their business, and expand services. The publication

identifies the challenges facing these companies and the technologies to help solve them, using real-world case studies and business strategies to help readers make sound technology investment decisions. You can access iQ Magazine at this URL:

<http://www.cisco.com/go/iqmagazine>

- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:

<http://www.cisco.com/ipj>

- World-class networking training is available from Cisco. You can view current offerings at this URL:

<http://www.cisco.com/en/US/learning/index.html>