



## About This Guide

This section describes the objectives, audience, organization, and conventions used throughout this document.

## Document History

The versions of this guide are listed in [Table 1](#).

**Table 1** Document History

Title	Cisco IOS Release	Location
<i>Cisco Gatekeeper External Interface Reference, Version 1</i>	12.2(1)T	<a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios121/121rel/gktmp/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios121/121rel/gktmp/index.htm</a>
<i>Cisco Gatekeeper External Interface Reference, Version 2</i>	12.1(5)XM	<a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios121/121rel/gktmpv2/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios121/121rel/gktmpv2/index.htm</a>
<i>Cisco Gatekeeper External Interface Reference, Version 3</i>	12.2(2)XA	<a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/rel_docs/gktmpv3/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/rel_docs/gktmpv3/index.htm</a>
<i>Cisco Gatekeeper External Interface Reference, Version 3.1</i>	12.2(2)XB 12.2(4)T 12.2(8)T	<a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/rel_docs/gktmpv31/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/rel_docs/gktmpv31/index.htm</a>
<i>Cisco Gatekeeper External Interface Reference, Version 4.1</i>	12.2(11)T	<a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/rel_docs/gktmp4_1/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/rel_docs/gktmp4_1/index.htm</a>
<i>Cisco Gatekeeper External Interface Reference, Version 4.2</i>	12.2(15)T	<a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/rel_docs/gktmp4_2/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios122/rel_docs/gktmp4_2/index.htm</a>
<i>Cisco Gatekeeper External Interface Reference, Version 4.3</i>	12.3(4)T	<a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios123/rel_docs/gktmp4_3/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios123/rel_docs/gktmp4_3/index.htm</a>
<i>Cisco Gatekeeper External Interface Reference, Version 4.3</i>	12.3(7)T	<a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios123/rel_docs/gktmp4_3/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios123/rel_docs/gktmp4_3/index.htm</a>
<i>Cisco Gatekeeper External Interface Reference, Version 4.4</i>	12.4(4)T	<a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/rel_docs/gktmp4_4/index.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/rel_docs/gktmp4_4/index.htm</a>

## Document Objectives

This guide is designed to help you understand and implement an external interface to the Cisco IOS Gatekeeper using the Cisco Gatekeeper Transaction Message Protocol (GKTMP) and application programming interface (API).

## Audience

This guide is intended for application programmers who want to develop an application that interfaces with the Cisco IOS Gatekeeper.

## Document Organization

This document is divided into the following chapters shown in [Table 2](#):

**Table 2**    *Organization*

Chapter	Title	Description
Chapter 1	<a href="#">Overview of H.323</a>	Provides a high-level overview of H.323.
Chapter 2	<a href="#">Overview of the Cisco IOS Gatekeeper</a>	Provides an overview of the features and functions of the Cisco IOS Gatekeeper.
Chapter 3	<a href="#">Implementing an External Interface to the Cisco IOS Gatekeeper</a>	Provides information about and examples of implementing an external interface to the Cisco IOS Gatekeeper using the GKTMP and the Cisco IOS Gatekeeper API.
Chapter 4	<a href="#">GKTMP Messages</a>	Describes the messages used with the GKTMP.
Chapter 5	<a href="#">Gatekeeper API Functions and Structures</a>	Describes the functions provided with the Cisco IOS Gatekeeper API.
Chapter 6	<a href="#">GKTMP Command Reference</a>	Describes the Cisco IOS software commands used to configure triggers for a Cisco IOS Gatekeeper.

## Related Documentation

For additional information about the commands used in conjunction with the GKTMP, see the following documents:

*Cisco IOS Voice, Video, and Fax Configuration Guide*, Release 12.2

*Cisco IOS Voice, Video, and Fax Command Reference*, Release 12.2

*Cisco High Performance Gatekeeper*

*Cisco H.323 Scalability and Interoperability Enhancements*

# Syntax Conventions

Table 3 describes the syntax used with the commands in this document.

**Table 3** Command Syntax Conventions

Convention	Description
<b>boldface</b>	Commands and keywords.
<i>italic</i>	Command input that is supplied by you.
[ ]	Keywords or arguments that appear within square brackets are optional.
{ x   x   x }	A choice of keywords (represented by x) appears in braces separated by vertical bars. You must select one.
^ or Ctrl	Represent the key labeled <i>Control</i> . For example, when you read ^D or <i>Ctrl-D</i> , you should hold down the Control key while you press the D key.
screen font	Examples of information displayed on the screen.
<b>boldface screen font</b>	Examples of information that you must enter.
< >	Nonprinting characters, such as passwords, appear in angle brackets in contexts where italics are not available.
[ ]	Default responses to system prompts appear in square brackets.

## Obtaining Documentation

Cisco provides several ways to obtain documentation, 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 on the World Wide Web at this URL:

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

You can access the Cisco website at this URL:

<http://www.cisco.com>

International Cisco web sites can be accessed from this URL:

[http://www.cisco.com/public/countries\\_languages.shtml](http://www.cisco.com/public/countries_languages.shtml)

### Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which may have shipped with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual subscription.

Registered Cisco.com users can order the Documentation CD-ROM (product number DOC-CONDOCCD=) through the online Subscription Store:

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

## Ordering Documentation

You can find instructions for ordering documentation at this URL:

[http://www.cisco.com/univercd/cc/td/doc/es\\_inpk/pdi.htm](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 Networking Products MarketPlace:  
<http://www.cisco.com/en/US/partner/ordering/index.shtml>
- Registered Cisco.com users can order the Documentation CD-ROM (Customer Order Number DOC-CONDOCCD=) through the online Subscription Store:  
<http://www.cisco.com/go/subscription>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco Systems Corporate Headquarters (California, U.S.A.) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

## Documentation Feedback

You can submit comments electronically on Cisco.com. On the Cisco Documentation home page, click **Feedback** at the top of the page.

You can e-mail your comments to [bug-doc@cisco.com](mailto:bug-doc@cisco.com).

You can submit your comments by mail by using the response card 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

Cisco provides Cisco.com, which includes the Cisco Technical Assistance Center (TAC) Website, as a starting point for all technical assistance. Customers and partners can obtain online documentation, troubleshooting tips, and sample configurations from the Cisco TAC website. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC website, including TAC tools and utilities.

## Cisco.com

Cisco.com offers a suite of interactive, networked services that let you access Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com provides a broad range of features and services to help you with these tasks:

- Streamline business processes and improve productivity
- Resolve technical issues with online support
- Download and test software packages
- Order Cisco learning materials and merchandise
- Register for online skill assessment, training, and certification programs

To obtain customized information and service, you can self-register on Cisco.com at this URL:

<http://www.cisco.com>

## Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two levels of support are available: the Cisco TAC website and the Cisco TAC Escalation Center. The avenue of support that you choose depends on the priority of the problem and the conditions stated in service contracts, when applicable.

We categorize Cisco TAC inquiries according to urgency:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

## Cisco TAC Website

You can use the Cisco TAC website to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC website, go to this URL:

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

All customers, partners, and resellers who have a valid Cisco service contract have complete access to the technical support resources on the Cisco TAC website. Some services on the Cisco TAC website require a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to this URL to register:

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

If you are a Cisco.com registered user, and you cannot resolve your technical issues by using the Cisco TAC website, you can open a case online at this URL:

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

If you have Internet access, we recommend that you open P3 and P4 cases through the Cisco TAC website so that you can describe the situation in your own words and attach any necessary files.

## Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses priority level 1 or priority level 2 issues. These classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer automatically opens a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to this URL:

<http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml>

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled: for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). When you call the center, please have available your service agreement number and your product serial number.

## Obtaining Additional Publications and Information

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

- 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://www.cisco.com/en/US/products/products\\_catalog\\_links\\_launch.html](http://www.cisco.com/en/US/products/products_catalog_links_launch.html)
- Cisco Press publishes a wide range of networking publications. Cisco suggests these titles for new and experienced users: *Internetworking Terms and Acronyms Dictionary*, *Internetworking Technology Handbook*, *Internetworking Troubleshooting Guide*, and the *Internetworking Design Guide*. For current Cisco Press titles and other information, go to Cisco Press online at this URL:  
<http://www.ciscopress.com>
- *Packet* magazine is the Cisco monthly periodical that provides industry professionals with the latest information about the field of networking. You can access *Packet* magazine at this URL:  
[http://www.cisco.com/en/US/about/ac123/ac114/about\\_cisco\\_packet\\_magazine.html](http://www.cisco.com/en/US/about/ac123/ac114/about_cisco_packet_magazine.html)
- *iQ Magazine* is the Cisco monthly periodical that provides business leaders and decision makers with the latest information about the networking industry. You can access *iQ Magazine* at this URL:  
[http://business.cisco.com/prod/tree.taf%3fasset\\_id=44699&public\\_view=true&kbns=1.html](http://business.cisco.com/prod/tree.taf%3fasset_id=44699&public_view=true&kbns=1.html)
- *Internet Protocol Journal* is a quarterly journal published by Cisco Systems for engineering professionals involved in the design, development, and operation of public and private internets and intranets. You can access the *Internet Protocol Journal* at this URL:  
[http://www.cisco.com/en/US/about/ac123/ac147/about\\_cisco\\_the\\_internet\\_protocol\\_journal.html](http://www.cisco.com/en/US/about/ac123/ac147/about_cisco_the_internet_protocol_journal.html)
- Training—Cisco offers world-class networking training, with current offerings in network training listed at this URL:  
[http://www.cisco.com/en/US/learning/le31/learning\\_recommended\\_training\\_list.html](http://www.cisco.com/en/US/learning/le31/learning_recommended_training_list.html)