



Preface

This preface describes the objectives and organization of this document and explains how to find additional information on related products and services. This preface contains the following sections:

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Document Revision History

Table 1 records technical changes to this document.

Table 1 Document Revision History

Release No.	Revision	Date	Change Summary
12.2(33)SCB	OL-10707-04	December 2008	Added information related to the following: <ul style="list-style-type: none"> • Cisco 10000 Series SPA Interface Processor-600 • 1-Port 10-Gigabit Ethernet Shared Port Adapter • 5-Port Gigabit Ethernet Shared Port Adapter • Field-programmable devices
12.3(23)BC	OL-10707-03	December 2007	Added configuration information for the following: <ul style="list-style-type: none"> • Configuring SPA RF channels for narrowband modem support. • Configuring SPA RF channels for wideband modem support. • Configuring Channel Grouping Domain. • Selecting primary downstream channels.
12.3(21a)BC3	OL-10707-02	August 2007	Added information related to the Linksys WCM300-NA, WCM300-EURO, and WCM300-JP modems.
12.3(21)BC	OL-10707-01	February 2007	First release.

Objectives

This document describes the configuration and troubleshooting of SPA interface processors (SIPs) and shared port adapters (SPAs) that are supported on the Cisco uBR10012 router.



Note

The information provided in this document is specific to Cisco IOS Releases 12.3(23)BC and 12.2(33)SCB. For information that is specific to Cisco IOS Releases 12.3(21)BC and 12.3(21a)BC3, refer to the *Cisco uBR10012 Universal Broadband Router SIP and SPA Software Configuration Guide - For Cisco IOS Releases 12.3(21)BC, 12.3(21a)BC3 and Later 12.3(21a)BCx Releases*.

Document Organization

This publication is organized as follows:

Chapter	Title	Description
Chapter 1	Using Cisco IOS Software	Provides information to prepare you to configure a SPA interface processor (SIP) or shared port adapter (SPA) using the Cisco IOS software.
Chapter 2	SIP and SPA Product Overview	Provides an introduction to SPA interface processors (SIPs) and shared port adapters (SPAs).
Chapter 3	Overview of Cisco uBR10012 Router SIPs	Provides an overview of the SIPs and Management Information Base (MIB) support for the SIPs.
Chapter 4	Configuring a SIP	Provides information about configuring SIPs on the Cisco uBR10012 router.
Chapter 5	Troubleshooting the SIPs	Describes techniques that you can use to troubleshoot the operation of the SIPs.
Chapter 6	Command Summary for the SIPs	Provides an alphabetical list of some of the commands to monitor and maintain the Cisco Wideband SIP.
Chapter 7	Overview of the Cisco Wideband SPA	Provides an overview of the release history, and feature and Management Information Base (MIB) support for the Cisco Wideband SPA on the Cisco uBR10012 router.
Chapter 8	Configuring the Cisco Wideband SPA	Provides information about configuring the Cisco Wideband SPA.
Chapter 9	Troubleshooting the Cisco Wideband SPA	Describes techniques that you can use to troubleshoot the operation of the Cisco Wideband SPA.
Chapter 10	Command Summary for the Cisco Wideband SPA	Provides an alphabetical list of some of the most significant commands that are needed to configure, monitor, and maintain the Cisco Wideband SPA.
Chapter 11	Gigabit Ethernet SPA Overview	Provides an overview of the release history, and feature and Management Information Base (MIB) support for the Gigabit Ethernet SPAs.
Chapter 12	Configuring Gigabit Ethernet SPAs	Provides information about configuring the Gigabit Ethernet SPAs.
Chapter 13	Troubleshooting Gigabit Ethernet SPAs	Describes techniques that you can use to troubleshoot the operation of the Gigabit Ethernet SPAs.
Chapter 14	Command Summary for Gigabit Ethernet SPAs	Provides an alphabetical list of some of the most significant commands that are needed to configure, monitor, and maintain the Gigabit Ethernet SPAs.
Chapter 15	Upgrading Field-Programmable Devices	Provides an overview of field-programmable devices supported on the Cisco uBR10012 router.
Chapter 16	Command Summary for Field-Programmable Devices	Provides an alphabetical list of some of the most significant commands that are needed to configure, monitor, and maintain the field-programmable devices.

Related Documentation

The following is a list of documents and URLs for the Cisco uBR10012 router:

- *Cisco uBR10012 Universal Broadband Router Documentation Roadmap*
http://www.cisco.com/en/US/products/hw/cable/ps2209/products_documentation_roadmaps_list.htm
- *Cisco uBR10012 Universal Broadband Router Hardware Installation Guide*
<http://www.cisco.com/en/US/docs/cable/cmts/ubr10012/installation/guide/hig.html>
- *Cisco uBR10012 Universal Broadband Router SIP and SPA Hardware Installation Guide*
http://www.cisco.com/en/US/docs/interfaces_modules/shared_port_adapters/installup-grade/ubr10012/hwsipspa.html
- *Regulatory Compliance and Safety Information for the Cisco uBR10012 Universal Broadband Router*
<http://www.cisco.com/en/US/docs/cable/cmts/ubr10012/regulatory/compliance/ub10rcsi.html>
- *Cisco Cable Wideband Solution Design and Implementation Guide, Release 1.0*
http://www.cisco.com/en/US/docs/cable/cmts/wideband/solution/guide/release_1.0/wb_solu.html
- *Cross-Platform Release Notes for Cisco Universal Broadband Routers in Cisco IOS Release 12.2SC*
http://www.cisco.com/en/US/docs/cable/cmts/release/notes/12_2sc/122sc_cmts_rn.html
- *Cisco uBR10012 Universal Broadband Router Software Configuration Guide*
http://www.cisco.com/en/US/docs/interfaces_modules/shared_port_adapters/configuration/ubr10012/12.3_23_bc/sipsp_d3.html
- *Cisco IOS CMTS Cable Command Reference*
http://www.cisco.com/en/US/docs/ios/cable/command/reference/cbl_book.html
- *Cisco IOS CMTS Cable System Messages Guide*
<http://www.cisco.com/en/US/docs/cable/cmts/system/message/uberrmes.html>
- *Cisco CMTS Universal Broadband Router MIB Specifications Guide*
http://www.cisco.com/en/US/products/hw/cable/ps2209/prod_technical_reference_list.html

Conventions

This guide uses the following conventions for command syntax descriptions and textual emphasis:

Table 2 *Command Syntax and Emphasis Conventions*

Convention	Description
boldface font	Commands and keywords are in boldface .
<i>italic</i> font	Arguments for which you supply values are in <i>italics</i> .
[]	Elements in square brackets are optional.
{x y z}	Alternative, mutually exclusive, 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 <code>screen</code> font.

Table 2 *Command Syntax and Emphasis Conventions*

Convention	Description
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> .
^	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 in contexts where italics are not available.
[]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

**Note**

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

**Tip**

This symbol means *the following are useful tips*.

**Caution**

This symbol means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

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>

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