



Preface

This chapter describes the objectives, organization, and audience of this guide, as well as conventions and related documentation.

Document Objectives

The purpose of this guide is to help you set up your Cisco 6400 carrier-class broadband aggregator with a basic configuration and connectivity among the Cisco 6400 components. For external connectivity and information on deploying the many features supported by the Cisco 6400, see the *Cisco 6400 Feature Guide* for your software release.

Related Documentation

To complement the software information provided in this guide, refer to the following documents:

Document	Description
<i>Cisco 6400 Feature Guide</i>	Lists the features supported by the Cisco 6400, provides references to cross-platform feature documentation, and describes deployment of features that are unique to the Cisco 6400.
<i>Cisco 6400 Command Reference</i>	Describes commands that are unique to the Cisco 6400 command-line interface (CLI).
<i>ATM Switch Router Software Configuration Guide</i>	Describes additional ATM features and functionality that are supported by the Cisco 6400 node switch processor (NSP).
<i>ATM and Layer 3 Switch Router Command Reference</i>	Describes additional commands supported by the Cisco 6400 NSP.
Cisco IOS Configuration Guides and Command References	Describes extensive Cisco IOS features and commands that apply to the Cisco 6400.

Audience

This guide is designed for the system administrator who will be responsible for setting up the Cisco IOS software on the Cisco 6400. The system administrator should be familiar with the installation of high-end networking equipment.

This guide is intended primarily for the following audiences:

- Customers with technical networking background and experience
- Customers who support dial-in users
- System administrators who are familiar with the fundamentals of router-based internetworking, but who may not be familiar with Cisco IOS software
- System administrators who are responsible for installing and configuring internetworking equipment, and who are familiar with Cisco IOS software

Organization

The *Cisco 6400 Software Setup Guide* is organized into the following chapters and appendixes:

Chapter 1	Product Overview	Describes the Cisco 6400 system and network management options.
Chapter 2	Basic NSP Configuration	Describes how to perform basic configuration for the NSP.
Chapter 3	Basic NRP Configuration	Describes how to perform basic configuration for the NRP-1, NRP-2, and NRP-2SV.
Chapter 4	Node Line Card Interface Configuration	Describes how to manually configure the ATM interfaces for the NLCs.
Chapter 5	Redundancy and SONET APS Configuration	Describes how to configure redundancy among the NSP, NRP, and NLC components.
Chapter 6	SNMP, RMON, and Alarm Configuration	Describes how to use SNMP, RMON, and alarms on the Cisco 6400.
Appendix A	Web Console	Describes how to install and use the Web Console application.
Appendix B	Upgrading Software on the Cisco 6400	Describes how to upgrade software images on the Cisco 6400.
Appendix C	Optimizing the Number of Virtual Connections on the Cisco 6400	Describes how to optimize the number of virtual connections on the Cisco 6400.
Glossary	—	Defines the acronyms and terms used in this guide.

Conventions

This section describes the following conventions used by this guide:

- [Command Syntax](#)
- [Examples](#)
- [Keyboard](#)
- [Notes, Timesavers, Tips, Cautions, and Warnings](#)

Command Syntax

Descriptions of command syntax use the following conventions:

Convention	Description
boldface	Indicates commands and keywords that are entered literally as shown.
<i>italics</i>	Indicates arguments for which you supply values; in contexts that do not allow italics, arguments are enclosed in angle brackets (<>).
[x]	Keywords or arguments that appear within square brackets are optional.
{x y z}	A choice of required keywords (represented by x , y , and z) appears in braces separated by vertical bars. You must select one.
[x {y z}]	Braces and vertical bars within square brackets indicate a required choice within an optional element. You do not need to enter the optional element. If you do, you have some required choices.

Examples

Examples use the following conventions:

Convention	Description
screen	Shows an example of information displayed on the screen.
boldface screen	Shows an example of information that you must enter.
< >	Nonprinting characters, such as passwords, appear in angled brackets.
!	Exclamation points at the beginning of a line indicate a comment line. Exclamation points are also displayed by the Cisco IOS software for certain processes.
[]	Default responses to system prompts appear in square brackets.
prompt> prompt#	Examples that contain system prompts denote interactive sessions, indicating the commands that you should enter at the prompt. The system prompt indicates the current level of the EXEC command interpreter. For example, the prompt <code>router></code> indicates that you should be at the user level, and the prompt <code>router#</code> indicates that you should be at the privileged level. Access to the privileged level usually requires a password.

Keyboard

This guide uses the following conventions for typing keys:

Convention	Description
Z	Keys are indicated in capital letters but are not case sensitive.
^ or Ctrl	Represents the Control key. For example, when you read <i>^D</i> or <i>Ctrl-D</i> , you should hold down the Control key while you press the D key.

Notes, Timesavers, Tips, Cautions, and Warnings

The following conventions are used to attract the reader's attention:



Note

Means *reader take note*. Notes contain helpful suggestions or references to materials not contained in this manual.



Timesaver

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



Tip

Means *the following information might help you solve a problem*.



Caution

Means *reader be careful*. You are capable of doing something that might result in equipment damage or loss of data.



Warning

This warning symbol means *danger*. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. To see translations of the warnings that appear in this publication, refer to the *Regulatory Compliance and Safety Information* document that accompanied this device.

Obtaining Documentation

The following sections provide sources for obtaining documentation from Cisco Systems.

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following sites:

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

- <http://www-china.cisco.com>
- <http://www-europe.cisco.com>

Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships 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 as an annual subscription.

Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco Direct Customers can order Cisco Product documentation from the Networking Products MarketPlace:
http://www.cisco.com/cgi-bin/order/order_root.pl
- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:
<http://www.cisco.com/go/subscription>
- Nonregistered CCO users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, in North America, by calling 800 553-NETS(6387).

Documentation Feedback

If you are reading Cisco product documentation on the World Wide Web, you can submit technical comments electronically. Click **Feedback** in the toolbar and select **Documentation**. After you complete the form, click **Submit** to send it to Cisco.

You can e-mail your comments to bug-doc@cisco.com.

To submit your comments by mail, for your convenience many documents contain a response card behind the front cover. Otherwise, you can mail your comments to the following address:

Cisco Systems, Inc.
Document Resource Connection
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools. For Cisco.com registered users, additional troubleshooting tools are available from the TAC website.

Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information and resources at anytime, from anywhere in the world. This highly integrated Internet application is a powerful, easy-to-use tool for doing business with Cisco.

Cisco.com provides a broad range of features and services to help customers and partners streamline business processes and improve productivity. Through Cisco.com, you can find information about Cisco and our networking solutions, services, and programs. In addition, you can resolve technical issues with online technical support, download and test software packages, and order Cisco learning materials and merchandise. Valuable online skill assessment, training, and certification programs are also available.

Customers and partners can self-register on Cisco.com to obtain additional personalized information and services. Registered users can order products, check on the status of an order, access technical support, and view benefits specific to their relationships with Cisco.

To access Cisco.com, go to the following website:

<http://www.cisco.com>

Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

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

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

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

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:

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

Contacting TAC by Telephone

If you have a priority level 1 (P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

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

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.

