



Preface

This preface describes the audience, organization, and conventions of this guide, and describes related documents that have additional information. It contains the following sections:

- [Audience, page i](#)
- [Document Organization, page i](#)
- [Document Conventions, page iii](#)
- [Related Documentation, page iv](#)
- [Obtaining Documentation and Submitting a Service Request, page v](#)

Audience

This guide provides an overview and explains how to configure the various features for the Cisco 810, Cisco 860, Cisco 880, and Cisco 890 series Integrated Services Routers (ISRs). Some information may not apply to your particular router model.

This guide is intended for Cisco equipment providers who are technically knowledgeable and familiar with Cisco routers and Cisco IOS software and features.

For warranty, service, and support information, see the “Cisco One-Year Limited Hardware Warranty Terms” section in the Readme First for the Cisco 800 Series Integrated Services Routers that was shipped with your router.

Document Organization

This document is organized into the following chapters:

Chapter	Description
Product Overview	Provides a brief description of the router models and the available software features.
Basic Router Configuration	Provides procedures for configuring the basic parameters of the router.

Chapter	Description
Configuring Ethernet CFM and Y.1731 Performance Monitoring on Layer 3 Interfaces	Provides procedures for configuring the network interface device functionality, Ethernet data plane loopback, IEEE connectivity fault management, and Y.1731 performance monitoring.
Configuring Power Management	Provides the configuration of power management and Power-over-Ethernet (PoE).
Configuring Security Features	Provides procedures for implementing the security features that can be configured on the router.
Configuring Backup Data Lines and Remote Management	Provides procedures for configuring remote management functions and a backup data line connection.
Configuring Ethernet Switches	Provides an overview of the configuration tasks for the 4-port Fast Ethernet switch on the router.
Configuring Voice Functionality	Provides references to the procedures for voice configuration.
Configuring the Serial Interface	Provides information about WAN access and aggregation, Legacy protocol transport, and Dial Access Server.
Configuring Wireless Devices	Provides procedures for initial configuration of the wireless device, radio settings, WLAN, and administration of the wireless device. Also provides information about 4G LTE and 3G cellular networks.
Configuring PPP over Ethernet with NAT	Provides an overview of Point-to-Point Protocol over Ethernet (PPPoE) clients and network address translation (NAT)s that can be configured on the Cisco 860 and Cisco 880 series Integrated Services Routers (ISRs).
Configuring PPP over ATM with NAT	Provides an overview of Point-to-Point Protocol over Asynchronous Transfer Mode (PPPoA) clients and network address translation (NAT) that can be configured on the Cisco 860 and Cisco 880 series Integrated Services Routers (ISRs).
Configuring a LAN with DHCP and VLANs	Describes how the routers can use the Dynamic Host Configuration Protocol (DHCP) to enable automatic assignment of IP configurations for nodes on these networks.
Configuring a VPN Using Easy VPN and an IPSec Tunnel	Provides an overview of the creation of Virtual Private Networks (VPNs) that can be configured on the Cisco 860 and Cisco 880 series Integrated Services Routers (ISRs).
Configuring Cisco Multimode G.SHDSL EFM/ATM	Describes the configuration of the Cisco Multimode 4-pair G.SHDSL.
Deployment Scenarios	Shows some typical deployment scenarios for the Cisco 860, Cisco 880, and Cisco 890 series ISRs.
Troubleshooting	Provides information to help isolate problems you might encounter.

Chapter	Description
Cisco IOS Software Basic Skills	Provides information for how to use Cisco IOS software to configure your router.
Concepts	Provides conceptual information that may be useful to Internet service providers or network administrators when they configure Cisco routers.
ROM Monitor	Provides information on how to use Cisco's ROM Monitor firmware.

Document Conventions

This document uses the following conventions:

Convention	Description
^ or Ctrl	Both the ^ symbol and Ctrl represent the Control (Ctrl) key on a keyboard. For example, the key combination ^D or Ctrl-D means that you hold down the Control key while you press the D key. (Keys are indicated in capital letters but are not case sensitive.)
bold font	Commands and keywords and user-entered text appear in bold font .
<i>Italic font</i>	Document titles, new or emphasized terms, and arguments for which you supply values are in <i>italic font</i> .
Courier font	Terminal sessions and information the system displays appear in <i>courier font</i> .
Bold Courier font	Bold Courier font indicates text that the user must enter.
[x]	Elements in square brackets are optional.
...	An ellipsis (three consecutive nonbolded periods without spaces) after a syntax element indicates that the element can be repeated.
	A vertical line, called a pipe, indicates a choice within a set of keywords or arguments.
[x y]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
{x y}	Required alternative keywords are grouped in braces and separated by vertical bars.

Convention	Description
[x {y z}]	Nested set of square brackets or braces indicate optional or required choices within optional or required elements. Braces and a vertical bar within square brackets indicate a required choice within an optional element.
string	A nonquoted set of characters. Do not use quotation marks around the string or the string will include the quotation marks.
<>	Nonprinting characters such as passwords are in angle brackets.
[]	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.

Reader Alert Conventions

This document uses the following conventions for reader alerts:



Note

Means *reader take note*. Notes contain helpful suggestions or references to material not covered in the manual.



Tip

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



Caution

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



Timesaver

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



Warning

Means *reader be warned*. In this situation, you might perform an action that could result in bodily injury.

Related Documentation

In addition to this document, the Cisco 810, Cisco 860, Cisco 880, and Cisco 890 series ISR documentation set includes the following documents:

- *Readme First for the Cisco 800 Series Integrated Services Routers.*
- [Cisco 860, Cisco 880, and Cisco 890 Series Integrated Services Routers Hardware Installation Guide](#)
- [Regulatory Compliance and Safety Information for Cisco 800 Series and SOHO Series Routers](#)
- [Declarations of Conformity and Regulatory Information for Cisco Access Products with 802.11n Radios](#)
- [Software Activation on Cisco Integrated Services Routers and Cisco Integrated Service Routers G2](#)

You might also need to refer to the following documents:

- *Cisco System Manager Quick Start Guide*
- *Cisco IOS Release 12.4 Quality of Service Solutions Configuration Guide*
- *Cisco IOS Security Configuration Guide, Release 12.4*
- *Cisco IOS Security Configuration Guide, Release 12.4T*
- *Cisco IOS Security Command Reference, Release 12.4*
- *Cisco IOS Security Command Reference, Release 12.4T*
- *Cisco IOS Command Reference for Cisco Aironet Access Points and Bridges, versions 12.4(10b) JA and 12.3(8) JEC*
- *Cisco Aironet 1240AG Access Point Support Documentation*
- *Cisco 4400 Series Wireless LAN Controllers Support Documentation*
- *LWAPP Wireless LAN Controllers*
- *LWAPP Wireless LAN Access Points*
- *Cisco IOS Release 12.4 Voice Port Configuration Guide*
- *SCCP Controlled Analog (FXS) Ports with Supplementary Features in Cisco IOS Gateways*
- *Cisco Software Activation Conceptual Overview*
- *Cisco Software Activation Tasks and Commands*

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>

Subscribe to the What's New in Cisco Product Documentation as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.

