



## Preface

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This preface explains 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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- [Organization, page vi](#)
- [Related Documentation, page vi](#)
- [Obtaining Documentation, page vii](#)
- [Obtaining Technical Assistance, page viii](#)

## Objectives

This document describes how to install and configure the PA-F/FD-SM and PA-F/FD-MM full-duplex Fiber Distributed Data Interface (FDDI) port adapters, hereafter referred to as the PA-F/FD, which can be used in the following platforms:

- Versatile Interface Processor (VIP) in all Cisco 7500 series routers and in Cisco 7000 series routers with the 7000 Series Route Switch Processor (RSP7000) and 7000 Series Chassis Interface (RSP7000CI)
- Catalyst Route Switch Module (RSM)/VIP2 in the Catalyst 5000 family switches
- Cisco 7200 series routers—which consist of the two-slot Cisco 7202, the four-slot Cisco 7204 and Cisco 7204VXR, and the six-slot Cisco 7206 and Cisco 7206VXR



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**Note** The PA-F/FD-SM and PA-F/FD-MM are not supported in Cisco 7200 VXR routers.

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For complete descriptions of interface subcommands and the configuration options available for interfaces, and which ones support PA-F/FD functionality, refer to the appropriate software configuration publication listed in the [“Related Documentation” section on page vi](#).



**Note**

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The Cisco 7206 can be used as a router shelf in a Cisco AS5800 Universal Access Server. The steps for installing and configuring a port adapter or service adapter in a Cisco 7200 series router and a Cisco 7206 router shelf are the same; therefore, the procedures in this document that reference the Cisco 7200 series also apply to the Cisco 7206 router shelf, unless noted otherwise.

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# Organization

This document is organized into the following sections:

Section	Title	Description
Chapter 1	<a href="#">Overview</a>	Describes the PA-F/FD and describes its LEDs, cables, and receptacles.
Chapter 2	<a href="#">Preparing for Installation</a>	Describes safety considerations, tools required, and procedures you should perform before the actual installation.
Chapter 3	<a href="#">Removing and Installing Port Adapters</a>	Provides instructions for installing the PA-F/FD.
Chapter 4	<a href="#">Attaching the PA-F/FD Port Adapter Cables</a>	Provides instructions for installing port adapter cables on the supported platforms.
Chapter 5	<a href="#">Configuring the PA-F/FD</a>	Provides instructions for configuring your port adapter on the supported platforms.

## Related Documentation

Your router and the Cisco IOS software running on it contain extensive features and functionality, which are documented in the following resources:

- For Cisco IOS software configuration information and support, refer to the modular configuration and modular command reference publications in the Cisco IOS software configuration documentation set that corresponds to the software release installed on your Cisco hardware.



**Note** You can access Cisco IOS software configuration and hardware installation and maintenance documentation on the World Wide Web at <http://www.cisco.com>, <http://www-china.cisco.com>, or <http://www-europe.cisco.com>.

- For hardware installation and maintenance information and software configuration information on the Cisco AS5800 Universal Access Server, refer to the following publications:
  - Cisco AS5800 Universal Access Server Hardware Installation and Configuration Guide
  - Cisco AS5800 Universal Access Server Software Installation and Configuration Guide
- For hardware installation and maintenance information on Cisco 7000 series and Cisco 7500 series routers, and the VIP, refer to the following publications:
  - The installation and configuration guide that shipped with your Cisco 7000 series or Cisco 7500 series router
  - *Second-Generation Versatile Interface Processor (VIP2) Installation, Configuration and Maintenance*
  - *Fourth-Generation Versatile Interface Processor (VIP4) Installation, Configuration and Maintenance*
  - *Versatile Interface Processor (VIP6-80) Installation and Configuration*

- For hardware installation and maintenance information on the Catalyst 5000 family switches, and the Catalyst RSM/VIP2, refer to the following publications:
  - The installation and configuration guide that shipped with your Catalyst 5000 family switch
  - *Route Switch Module Catalyst VIP2-15 and VIP2-40 Installation and Configuration Note* (Document Number 78-4780-01) which shipped with your Catalyst RSM/VIP2.
- For hardware installation and maintenance information on Cisco 7200 series routers, refer to the *Cisco 72xx Installation and Configuration Guide* publication that shipped with your router.
- For port adapter hardware and memory configuration guidelines for Cisco 7200 series routers (including a Cisco 7206 as a router shelf in a Cisco AS5800 Universal Access Server), refer to the document *Cisco 7200 Series Port Adapter Hardware Configuration Guidelines*.
- For hardware installation and maintenance information on Cisco 7200 VXR routers, refer to the *Cisco 7200 VXR Installation and Configuration Guide* publication that shipped with your Cisco 7200 VXR router.
- For international agency compliance, safety, and statutory information for interfaces for the Cisco AS5800 Universal Access Server, Cisco 7000 series routers, Cisco 7200 series routers, and Cisco 7500 series routers, refer to the following publications:
  - Cisco AS5800 Universal Access Server Regulatory Compliance and Safety Information.
  - Regulatory Compliance and Safety Information for the Cisco 7000 Series Routers
  - Regulatory Compliance and Safety Information for the Cisco 7200 Series Routers
  - Regulatory Compliance and Safety Information for the Cisco 7500 Series Routers

**Note**

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The regulatory and safety information documentation listed above applies to the Catalyst 5000 family switches and the Catalyst RSM/VIP2.

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- To view Cisco documentation or obtain general information about the documentation, see the “[Obtaining Documentation](#)” section on page vii, the “[Obtaining Technical Assistance](#)” section on page viii, or call customer service at 800 553-6387 or 408 526-7208. Customer service hours are 5:00 a.m. to 6:00 p.m. Pacific time, Monday through Friday (excluding company holidays). You can also send e-mail to [cs-rep@cisco.com](mailto:cs-rep@cisco.com), or refer to the *Cisco Information Packet* that shipped with your router.

## Obtaining Documentation

These sections explain how to obtain documentation from Cisco Systems.

### World Wide Web

You can access the most current Cisco documentation on the World Wide Web at this URL:

<http://www.cisco.com>

Translated documentation is available at 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 is 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.

## Ordering Documentation

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/cgi-bin/order/order\\_root.pl](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 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. In the Cisco Documentation home page, click the **Fax** or **Email** option in the “Leave Feedback” section at the bottom 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: 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 online documentation, troubleshooting tips, and sample configurations from online tools by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

## Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com is a highly integrated Internet application and a powerful, easy-to-use tool that 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

If you want to obtain customized information and service, you can self-register on Cisco.com. To access Cisco.com, go to this URL:

<http://www.cisco.com>

## Technical Assistance Center

The Cisco Technical Assistance Center (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 Web Site and the Cisco TAC Escalation Center.

Cisco TAC inquiries are categorized according to the urgency of the issue:

- 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.

The Cisco TAC resource that you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

## Cisco TAC Web Site

You can use the Cisco TAC Web Site 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 Web Site, 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 Web Site. The Cisco TAC Web Site requires 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://www.cisco.com/register/>

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

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

If you have Internet access, we recommend that you open P3 and P4 cases through the Cisco TAC Web Site.

## 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.