Interface Configuration Overview

Use the information in this chapter to understand the types of interfaces supported on Cisco routers and access servers and to locate configuration information for various types of interfaces.

For a complete description of the interface commands used in this and other chapters that describe interface configuration, see the *Cisco IOS Interface and Hardware Component Command Reference*. To locate documentation of other commands that appear in this chapter, use the master commands list or search online.

For a list of interface types supported on Cisco routers, see the "Interface Types Supported on Cisco Routers" section on page 2.

For information about a specific type of interface, see the chapter or publication indicated in Table 3.

Table 3 Locating Information About Interface Types

For this interface type...	And these tasks...	See this chapter or publication...
Dialed interfaces	• Configuring channelized E1, channelized T1, or channelized T1 on the Cisco AS5200 • Configuring a dialer interface • Configuring an ISDN BRI, MBRI, or PRI interface • Managing Dial Shelves	*Cisco IOS Dial Technologies Configuration Guide* and *Cisco IOS Dial Technologies Command Reference.* "Managing Dial Shelves" in the *Cisco IOS Interface and Hardware Component Configuration Guide*
LAN interfaces	• Configuring Ethernet, Fast Ethernet, or Gigabit Ethernet interfaces • Configuring Fast EtherChannel • Configuring a FDDI interface • Configuring a hub interface • Configuring a Token Ring interface	"Configuring LAN Interfaces" in the *Cisco IOS Interface and Hardware Component Configuration Guide*

Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

Table 3 Locating Information About Interface Types (continued)

For this interface type...	And these tasks...	See this chapter or publication...
Serial interfaces	• Configuring a high-speed serial interface • Configuring a synchronous serial interface • Configuring a channelized T3 interface processor • Configuring PA-E3 and PA-2E3 serial port adapters • Configuring PA-T3 and PA-2T3 serial port adapters • Configuring a packet OC-3 interface • Configuring a DPT OC-12c interface • Configuring automatic protection switching of Packet-over-SONET (POS) circuits • Configuring serial interfaces for CSU/DSU service modules • Configuring low-speed serial interfaces	"Configuring Serial Interfaces" in the *Cisco IOS Interface and Hardware Component Configuration Guide*
Virtual or logical interfaces	• Configuring a loopback interface • Configuring a null interface	"Configuring Virtual Interfaces" in the *Cisco IOS Interface and Hardware Component Configuration Guide*
Tunnel interfaces	• Configuring a tunnel interface	"Implementing Tunnels" in the *Cisco IOS Interface and Hardware Component Configuration Guide*
Cisco Mainframe Channel Connection (CMCC) adapters	• Configuring a Channel Interface Processor (CIP) • Configuring a Channel Port Adapter (CPA)	"Configuring Cisco Mainframe Channel Connection Adapters" in the *Cisco IOS Bridging and IBM Networking Configuration Guide*

Interface Types Supported on Cisco Routers

Two types of interfaces are supported: physical and virtual interfaces. The types of physical interfaces on a device depend on its interface processors or port adapters. The virtual interfaces that Cisco routers and access servers support include subinterfaces and IP tunnels.

Cisco routers and access servers support numerous types of interfaces including, but not limited, to the following:

- Asynchronous serial
- ATM
- Automatic protection switching of Packet-over-SONET
- Channelized E1
- Channelized T1
- Channelized T3
- Dialer
- Ethernet
- Fast Ethernet
- FDDI
- Fractional T1/T1
- Gigabit Ethernet
- High-Speed Serial Interface (HSSI)
- ISDN BRI
- ISDN Multiple Basic Rate Interface (MBRI)
- ISDN PRI
- Loopback
- Low-speed serial
- Null
- Packet OC-3
- OC-12c Dynamic Packet Transport (DPT)
- OC-12c Dynamic Packet Transport Interface Processor (DPTIP)
- PA-E3 and PA-2E3
- PA-T3 and PA-2T3
- Synchronous serial
- Token Ring
- Tunnel

In addition, the Cisco IOS software supports subinterfaces, see the *Cisco IOS Wide-Area Networking Configuration Guide* and the protocol chapters in the Cisco IOS software configuration guides for specific information on how to configure a subinterface for a particular protocol.

For hardware technical descriptions and information about installing interfaces, see the hardware installation and maintenance publication for your product. For command descriptions and usage information, see the *Cisco IOS Interface and Hardware Component Command Reference*.

Any Internet Protocol (IP) addresses used in this document are not intended to be actual addresses. Any examples, command display output, and figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses in illustrative content is unintentional and coincidental.