



Product Overview

The Cisco 831 router and Cisco SOHO 91 Ethernet-to-Ethernet routers can connect a corporate telecommuter or small office to an Internet service provider (ISP) over a broadband or Ethernet connection to the following sites:

- Corporate LANs
- The Internet

The Cisco 831 and SOHO 91 routers are switch-capable routers that provide a 4-port Ethernet switch for the LAN. The routers are capable of bridging and multiprotocol routing between LAN and WAN ports.

Cisco 831 and SOHO 91 routers support high-speed encryption, 10/100-Mbps switching, and dial backup functionality via the auxiliary console port. The autosensing function in the routers eliminates the need for a crossover cable and allows the routers to detect the medium dependent interface in normal mode (MDI) or medium dependent interface in crossover mode (MDIX) in any other PC/hub with a straight-through cable or crossover cable.

The dial backup function allows the user to connect an analog modem to the console port as a backup link to the WAN in case the ADSL service goes down. These features give the Cisco 831 and SOHO 91 routers a high level of performance and security.

The Cisco 831 router is designed with hardware-based encryption, while the Cisco SOHO 91 supports software-based encryption. The Cisco 831 router supports the ability to add Flash memory or SDRAM, either as a factory upgrade or a field-installed option. The SOHO 91 router has a fixed memory configuration.

Features

Table 1-1 summarizes the features of these routers.

Table 1-1 Feature Summary for Cisco 831 Router and SOHO 91 Router

Feature	Description
10BASE-T/100BASE-T built-in switch ports	Provides connection to 10/100BASE-T (10/100-Mbps) Ethernet networks. Compatible with 10/100-Mbps devices.
WAN port	Provides connection to 10BASE-T. Compatible with 10-Mbps devices. Can be connected to other network devices, such as cable modem, ADSL, and router.
Flash memory	8 MB of Flash memory; up to 16 MB of expandable Flash memory on the Flash module.
Synchronous dynamic RAM (SDRAM)	32 MB of SDRAM on board.
Ease of installation	Color-coded ports and cables reduce the chance of installation error.
Cisco IOS software	Supports Cisco IOS software.
Cisco Router Web Setup application	Provides a web-based software tool for basic configurations and selected applications.
Console port	Provides a connection to the terminal or PC for software configuration or troubleshooting using the command-line interface.
Wall-mount feature	Brackets on router bottom provide a means for mounting the router on a wall or vertical surface.

Table 1-2 describes the ports on the Cisco 831 and SOHO 91 routers.

Table 1-2 Cisco 831 and SOHO 91 Router Ports

Router	Built-In Switch	WAN Ethernet Port	Console Port
Cisco 831	Four 10/100 BASE-T RJ-45	One 10BASE-T RJ-45	RJ-45
SOHO 91	Four 10/100 BASE-T RJ-45	One 10BASE-T RJ-45	RJ-45

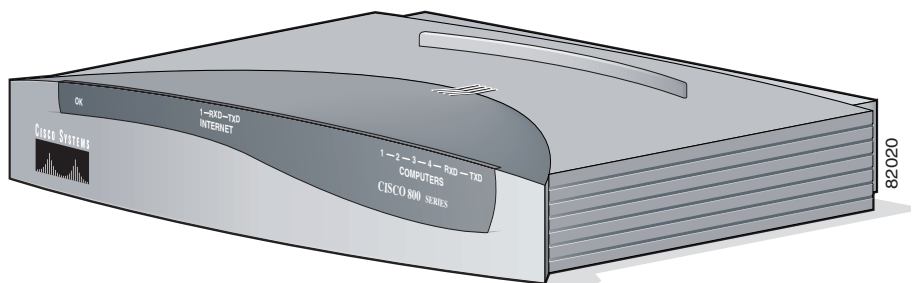
Router Overview

This section shows the front and back panels of the routers.

Front Panel

Figure 1-1 shows the front panel of the Cisco 831 router (Figure 1-1 depicts the front panel of a Cisco 831 router, but the front panel of the Cisco SOHO 91 router is the same).

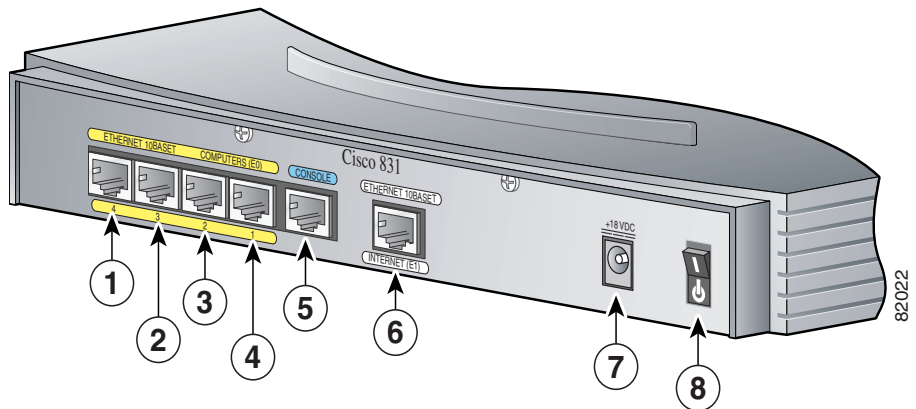
Figure 1-1 Front Panel of Cisco 831 Router



Back Panel

Figure 1-2 shows the back panel of the Cisco 831 router (Figure 1-2 depicts the back panel of a Cisco 831 router, but the back panel of the Cisco SOHO 91 router is nearly identical).

Figure 1-2 Cisco 831 Back Panel



1	Ethernet port 4 of the built-in switch connects to Ethernet network devices	5	Console port connects to PC or terminal
2	Ethernet port 3 of the built-in switch connects to Ethernet network devices	6	WAN port connects to Internet or switch
3	Ethernet port 2 of the built-in switch connects to Ethernet network devices	7	Input jack connects to power supply
4	Ethernet port 1 of the built-in switch connects to Ethernet network devices	8	Power on/off button

LED Functions

Table 1-3 summarizes the functions of the LEDs on the routers.

Table 1-3 Functions of LEDs on the Cisco 831 Router and SOHO 91 Router

LED	Color	Function
PWR_OK	Green	On when DC power is being supplied to the router. The light blinks if an error occurs during boot-up.
WAN_LED_OK	Green	On when WAN Ethernet carrier detects status and connects to the digital subscriber line access multiplexer (DSLAM) successfully.
WAN_LED_RxD	Green	Blinks when WAN Ethernet receives data.
WAN_LED_TxD	Green	Blinks when WAN Ethernet transmits data. Off when no data is being uploaded.
E1 (port 1 of built-in switch) Status	Green	On when Ethernet 1 connects to the Ethernet interface successfully. Blinks when Ethernet 1 receives or sends data, or when data passes through Ethernet 1.
E2 (port 1 of built-in switch) Status	Green	On when Ethernet 2 connects to the Ethernet interface successfully. Blinks when Ethernet 2 receives or sends data, or when data passes through Ethernet 2.
E3 (port 1 of built-in switch) Status	Green	On when Ethernet 3 connects to the Ethernet interface successfully. Blinks when Ethernet 3 receives or sends data, or when data passes through Ethernet 3.
E4 (port 1 of built-in switch) Status	Green	On when Ethernet 4 connects to the Ethernet interface successfully. Blinks when Ethernet 4 receives or sends data, or when data passes through Ethernet 4.
LAN_RxD	Green	Blinks when built-in Ethernet switch receives data from the WAN port.
LAN_TxD	Green	Blinks when built-in Ethernet switch transmits data to the WAN port.

