Connecting the Router

This chapter describes how to connect the Cisco C841M-4X/K9 and Cisco C841M-8X/K9 ISR to Ethernet devices and a network. The section contains the following topics:

- Preparing to Connect the Router, page 3-1
- Connecting a PC, Server, or Workstation, page 3-2
- Connecting an External Ethernet Switch, page 3-3
- Connecting a Terminal or PC to the Console Port, page 3-4
- Verifying Connections, page 3-5

Note For compliance and safety information, see *Regulatory Compliance and Safety Information for Cisco 800 Series Routers.*

Preparing to Connect the Router

Before you connect the router to the devices, install the router according to the instructions in the "Installing the Router" section on page 2-3.

Preventing Damage to the Router

To prevent damage to your router, follow these guidelines when connecting devices to your router:

- Turn off power to the devices and to the router until all connections are completed.

Caution Do not turn on the devices until after you have completed all connections to the router.

- If you must supply your own cable, see the "Router Specifications" section on page A-1 for cabling specifications. If this appendix does not provide specifications for a particular cable, we strongly recommend ordering the cable from Cisco.
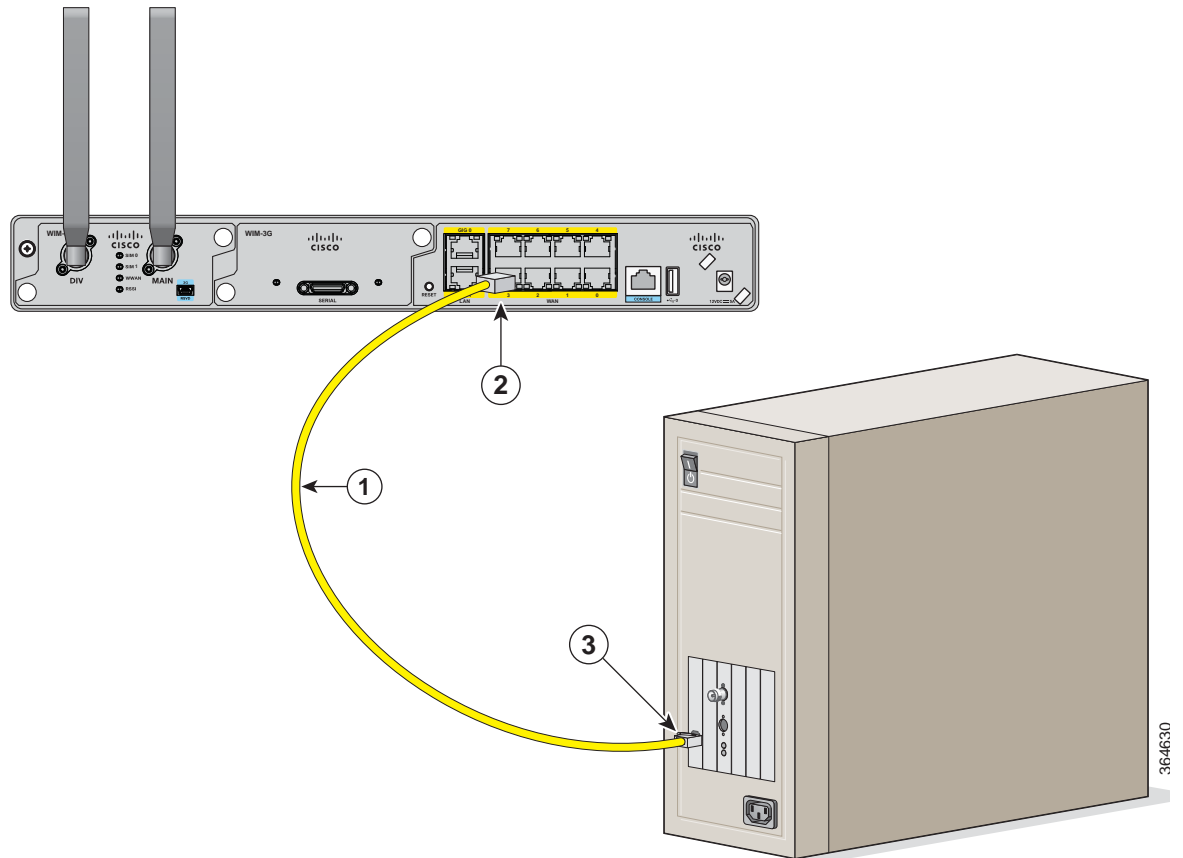
Connecting a PC, Server, or Workstation

To connect a PC (or other Ethernet devices) to an Ethernet switch port, follow these steps:

Step 1   Connect one end of the Ethernet cable to an Ethernet switch port on the router, as shown in Figure 3-1.

Note   The connections remain the same for a 4 port module.

Figure 3-1   *Connecting a Server, PC, or Workstation*

1	Ethernet cable	3	RJ-45 port on the network interface card
2	Ethernet switch port on the router		

Step 2   Connect the other end of the cable to the RJ-45 port on the network interface card (NIC) that is installed in the PC, server, or workstation.

Step 3   (Optional) Connect additional servers, PCs, or workstations to the other Ethernet switch ports.

✎
Note   Use the Cisco Configuration Express to configure the Internet connection settings. See
Cisco Configuration Professional Quick Start Guide for more information.

Connecting an External Ethernet Switch

Cisco C841M-4X/K9 ISR has four LAN ports and Cisco C841M-8X/K9 ISR has eight LAN ports. If you are using Cisco C841M-4X/K9 ISR, you can connect four PCs to the router. If you need to connect more than four PCs, you can add Ethernet connections to the router by connecting an external Ethernet switch to the Ethernet switch on the router. Similarly, if you are using Cisco C841M-8X/K9 ISR, use an external Ethernet switch to connect more than eight PCs.

To connect an external Ethernet switch to an Ethernet switch port on the router, perform these steps:
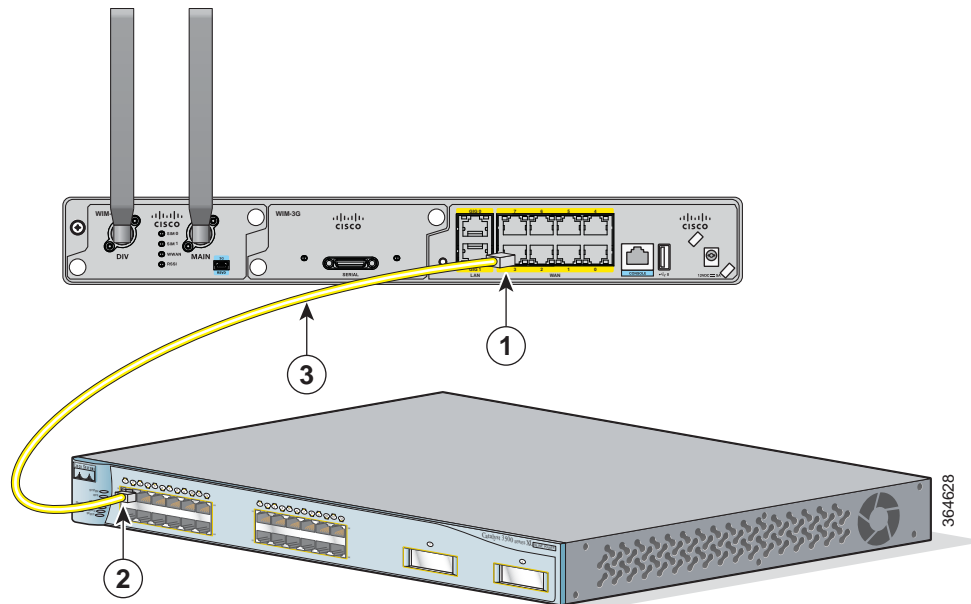
Step 1   Connect one end of the Ethernet cable to an Ethernet switch port on the router, as shown in Figure 3-2.

✎
Note   The connections remain the same for a 4 port module.

Figure 3-2   Connecting to an Ethernet Switch

1	Ethernet switch port on the router	3	CAT5 Ethernet cable, RJ-45–to–RJ-45, connecting to an external Ethernet switch port
2	Available port on the external Ethernet switch		

Step 2   Connect the other end of the cable to the available port on the Ethernet switch to add additional Ethernet connections.

Step 3   Turn on the Ethernet switch.

Connecting a Terminal or PC to the Console Port

Connect a terminal or PC to the Console port either to configure the software by using the CLI or to troubleshoot problems with the router.

To connect a terminal or PC to the console port on the router and access the CLI, follow these steps:
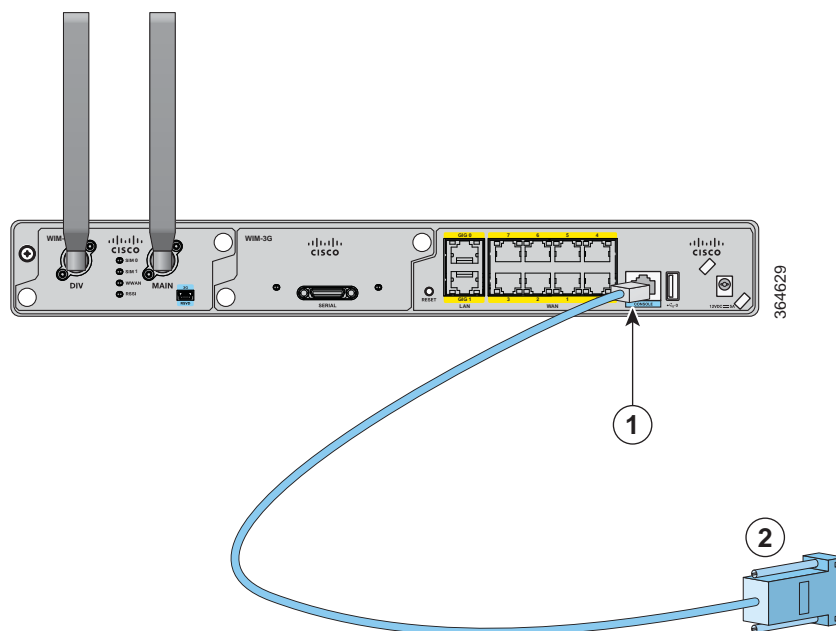
Step 1   Connect the RJ-45 end of a DB-9-to-RJ-45 serial cable to the RJ-45 Console port on the router.

Note   The connections remain the same for a 4 port module.

Figure 3-3 shows the RJ-45 end of the serial cable connected to the Console port on the router.

Figure 3-3   Connecting a Terminal or PC to the Console Port

1	RJ-45 connector to the Console port on the router	2	DB-9 connector

Step 2   Connect the DB-9 end of the DB-9-to-RJ-45 serial cable to the COM port on your laptop or PC.

Note   Some laptops and PCs do not come with DB-9 serial port connectors and may require a USB-to-serial port adapter.

Step 3   To communicate with the router, start a terminal emulator application.

Verifying Connections

To verify that all devices are properly connected to the router, first turn on all the connected devices, and then check the LEDs. For more information on LEDs on the Cisco 800M Series ISR, see LEDs, page 1-5.