Overview

This chapter provides a general description of the hardware installation and software configuration process for the router. It outlines the tasks you must perform to set up your router with the features you need, including protocol translation, if your system image has this option.

With the **setup** command facility, you can start using your router quickly and without extensive background knowledge because the facility prompts you for basic configuration information.

You can use the **setup** command facility both at initial system configuration and later for basic configuration changes at any time. The facility also helps you become familiar with the command sequence as you step through the configuration process. Because of these unique characteristics, **setup** is referred to as a *command facility* rather than simply as a command.

Installation and Configuration Process

The installation and configuration process has seven phases, as shown in Figure 1-1. Each phase includes tasks that help you use your router to meet your networking needs.

You can find details about each phase of the installation and configuration process in this guide or in other referenced publications. A brief description of phase 1, "Preinstallation," and phase 2, "Router Installation," follows Figure 1-1. For detailed information about the tasks in phase 1 and phase 2, refer to the hardware and maintenance documentation for your router.

Phases 3, 4, and 5 are described in this guide, and phases 6 and 7 are described in the *Router Products Configuration Guide* and *Router Products Command Reference* publications.

For information about setting up a router for protocol translation, refer to the *Protocol Translation Configuration Guide and Command Reference* publication.

Figure 1-1 **Installation and Configuration Process**

Planning server site according to wiring, cabling, environment, equipment, and tool requirements **Preinstallation** Becoming familiar with safety measures Learning how to prevent electrostatic discharge (ESD) damage Unpacking your system Refer to this "Overview" chapter and your router's hardware documentation. Installing connectors and appliques (as necessary) Installing interface and system cards (as necessary) Installing your router Connecting an ASCII terminal to the router's system console port Refer to this "Overview" chapter and your router's hardware documentation. Filling in the Global Configuration Worksheet and Interface Configuration Worksheet Preparing for first-time - Determine global parameters startup - Determine interface parameters Refer to the "Preparing for First-Time Startup" chapter. Powering up your system Verifying your system's installed software and hardware Configuring global parameters First-time startup Configuring interface parameters Storing configuration in nonvolatile memory Refer to the "First-Time Startup" chapter. Using the setup command facility for basic configuration changes Making changes Reviewing the modifications to the configuration to the first-time startup Using the streamlined setup command facility configuration Refer to the "Where to Go from Here" chapter. Using the EXEC command interpreter Making advanced - EXEC command syntax configuration - EXEC command levels changes Using the configure command for advanced configuration changes Refer to the Router Products Configuration Guide. Booting the router Setting the configuration register Creating configuration files Miscellaneous system tasks Loading system images over the network

Reloading the operating system

Using the Flash memory card for storing and booting system software

Refer to the Router Products Configuration Guide.

Preinstallation

You must perform the following preinstallation tasks before starting actual system hardware installation:

- Plan for the location of the router. Some items you should consider are site environment, cabling requirements of planned connections, modular wiring system requirements, and tool and equipment requirements.
- Familiarize yourself with the safety precautions and specific requirements for working on electrical equipment.
- Learn about electrostatic discharge (ESD) prevention procedures to follow when removing and replacing cards.
- Unpack your system and verify that you have received everything you ordered and that shipping damage has not occurred.

Refer to your router's hardware installation and maintenance publication for more detailed information about preinstallation tasks.

Router Installation

After you complete the preinstallation tasks, you are ready to install the router components. To install the router on an A+, M, and C chassis, perform the following tasks as necessary:

- Install connectors and appliques.
- Install interface and system cards.
- Install EPROMS, if necessary.

Note For the A+, M, and C chassis, the factory installs the connectors and appliques on a new system according to customer specifications. If you have an existing system and want to change the factory preconfiguration, you need to order the card, connector, or applique separately, and consult the configuration notes that accompany the new component for installation instructions.

To install the router on a Cisco 2500 and Cisco 3000 chassis, perform the following tasks:

- Attach cables.
- Install new system software EPROMs, if necessary.
- Upgrade memory, if necessary.

To install the router on a the Cisco 7000 chassis, perform the following tasks:

- Install the power supply.
- Attach cables.

For detailed information about router installation tasks, refer to the appropriate hardware installation and maintenance publication for your router.

To work with the router, you must attach an ASCII terminal to the system console port at the back of the router. This port functions as a data communications equipment (DCE) device and requires that you use a "straight-through" RS-232 cable. Configure the terminal to operate at the following settings:

- 9600 baud
- 8 data bits
- No parity
- 1 or 2 stop bits

Note We recommend that you make network cable connections before first-time startup. Refer to the appropriate hardware installation and maintenance publication for details about cabling considerations and establishing electrical connections.

After you connect an ASCII terminal to the console port, go on to complete the Global Configuration and Interface Configuration worksheets in the "Preparing for First-Time Startup" chapter.