Accessing the ERX System 5

This chapter provides information on the various ways you can access the system to manage it. Managing your router includes both configuring and monitoring it. For basic information on the management of the system, see *ERX System Basics Configuration Guide, Chapter 4, Managing the System*.

Setting Up Management Access

Before you power up the system, you must set up a management console. The console allows you to communicate with the system during the power-up process and to manage the system using the command line interface (CLI).

You can manage and monitor the system by accessing it in the following ways:

- Connect a console (PC, Macintosh, or UNIX workstation) directly to the system's RS-232 serial port (DTE).
- Connect the system's 10/100Base-T port on the SRP I/O module to an Ethernet network, and run Telnet from a remote console.

For initial access to the system, you need to physically connect your console directly to the system's RS-232 port. This connection allows you to use the CLI to set an IP address on the system. Once you configure the IP address, you can access the system remotely (for example, via Telnet).

Console Port Setup

You can connect a console (PC, Macintosh, or UNIX workstation) directly to the system via the RS-232 terminal port on the SRP I/O module. When you connect a console directly to the system, you can configure the system without an IP address.

To communicate with the system, you must have a terminal emulation program running on your PC or Macintosh. You can use any terminal emulation program (such as HyperTerminal). A UNIX workstation can use the emulator TIP.

Using HyperTerminal

If your console uses a version of Microsoft Windows (such as Windows 95 or Windows NT 4.0) that supports the HyperTerminal application, you can access the system via Hyperterminal.

1. Click the Start button and select Programs, Accessories, and HyperTerminal.
2. In the HyperTerminal window, select HyperTerminal.
3. In the Connection Description window, enter a name for your router (for example, erx1400) in the Name field.
4. Select any icon to represent your terminal emulation, and click OK.
5. In the Connect To dialog screen, in the Connect using field, select the appropriate COM port to use (for example, COM1), and click OK.
6. In the COM1 Properties screen, select the following settings:
   - Bits per second: 9600
   - Data bits: 8
   - Parity: None
   - Stop bits: 1
   - Flow control: Xon/Xoff
7. Click OK.

Connecting Directly to the ERX System

When you connect a console directly to the system, use a cable appropriate for your terminal connector. The cable must have a female DB-9 connector to attach to the RS-232 port on the system. To connect a console directly to the system:

1 Connect the female DB-9 connector to the RS-232 port on the system's SRP I/O module. See Figure 5-1.

2 Connect the crossover adapter connector to your PC's serial port.

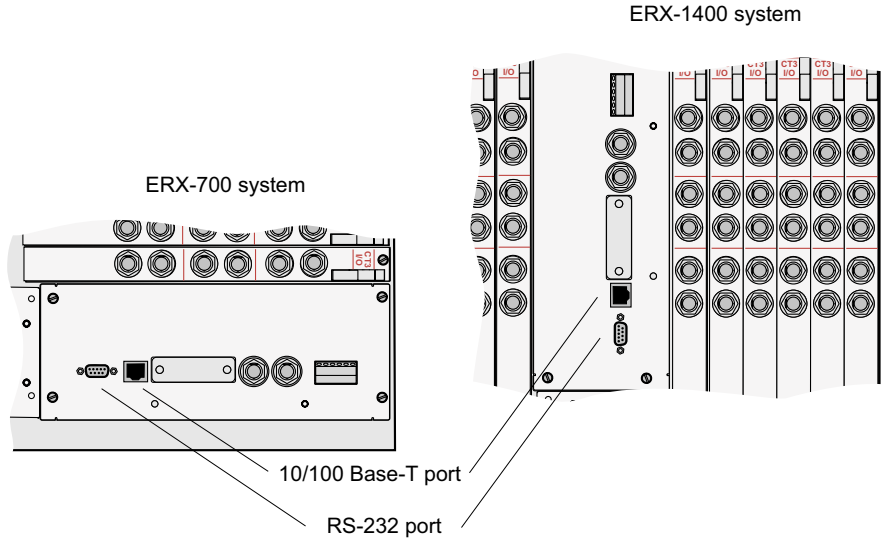

Figure 5-1 ERX-700 series and ERX-1400 series management ports

3 Power up the system.

When you power up the system, the CLI appears on your console's screen. The system is now in User Exec mode, and you can begin configuration. For more information on using the CLI and configuring the system, see the *ERX System Basics Configuration Guide*.

Note: *Direct access through the RS-232 serial port allows you to monitor the system as it boots.*

Assigning an IP Address

When your console is ready to communicate with the system, power up the system (see *Chapter 6, Powering Up the System*), and set an IP

address for the system. The system powers up in User Exec mode. To assign an IP address:

1 Enter the **enable** command at the User Exec prompt.

```
host1>enable
host1#
```

The system is now in Privileged Exec mode.

2 Set an IP address on the Ethernet interface:

- Substitute the slot number where the SRP module is located for the *slotnumber* variable.
- Use an IP address valid for the system.

```
host1#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
host1(config)#interface FastEthernet slotnumber/0
host1(config-if)#ip address 10.10.7.3 255.255.255.0
```

3 Continue to configure the system's parameters as needed.

After you have assigned an IP address to the system, you can communicate remotely by running Telnet over an Ethernet network. See the next section, *Telnet Setup*.

Telnet Setup

When you have configured an IP address for the system, you can run Telnet on your console to access the system through its Ethernet port. To connect the console to the system:

1 Connect an Ethernet cable (RJ-45) to the system's 10/100Base-T (RJ-45) port on the SRP I/O module.

2 Connect the other end of the cable to the appropriate Ethernet network for an out-of-band connection.

Before you can access the system with Telnet, you must either configure a password for Telnet access or disable the password requirement from the management console. In the following example, you disable the password.

1 Enter the **enable** command.

```
host1>enable
host1#
```

The system is now in Privileged Exec mode.

2 Enter the **configure** command.

```
host1#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
host1(config)#
```

The system is now in Global Configuration mode.

3 Enter the **line** command.

```
host1(config)#line vty 0 4
host1(config-line)#
```

The system is now in Line Configuration mode.

4 Disable the password.

```
host1(config-line)#no login
```

Note: *In this example, you disabled the password requirement, but you can choose to set a password instead. See the ERX System Basics Configuration Guide, Chapter 6, Passwords and Security for information on setting a password.*

5 Run Telnet from the management console (on the same Ethernet network as the system).

6 Enter the IP address of the system to open the Telnet session.

The User Exec prompt appears when the Telnet session to the system is established.

```
host1>
```

7 Enter the **enable** command.

```
host1>enable
host1#
```

The system is now in Privileged Exec mode.

8 Enter the **configure** command.

```
host1#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
host1(config)#
```

The system is now in Global Configuration mode, from which you can configure the system. See *ERX System Basics Configuration Guide, Chapter 2, Command Line Interface.*

Caution: *Do not change the IP address for the Ethernet interface that you are using to communicate with the system. If you change the address, you will lose the Telnet session.*

SNMP

The system supports Simple Network Management Protocol (SNMP), a standard management protocol for IP networks. You can configure the system as an SNMP agent.

As an SNMP agent, the system provides access to management information that it maintains. See the *ERX System Basics Configuration Guide, Chapter 3, Configuring SNMP* for information on SNMP. See the *ERX Command Reference Guide* for the commands that are available for configuring the system as an SNMP agent.

The Next Step

Go to *Chapter 6, Powering Up the System*.