**C H A P T E R   2**

# Configure the IPeXchange Internet Gateway Software

This chapter describes how to configure the IPeXchange Internet Gateway software, which runs on Cisco IOS software on the Cisco router. This router is also sometimes referred to as a *gateway*.

This chapter contains the following sections:

- Prerequisites

- Configure Novell IPX and the IPeXchange Gateway

- Check the Status of the Router

- For More Information

## Prerequisites

Before you configure the IPeXchange Internet Gateway software, you need to configure your router as described in your Cisco router documentation. Be sure to perform the following tasks:

- Enable TCP/IP.

- Bind IP to the appropriate LAN and WAN interfaces.

# Configure Novell IPX and the IPeXchange Gateway

To configure the router Ethernet port for Novell IPX and the IPeXchange gateway, perform these steps:

**Step 1**  Enter enabled mode:

```
router> enable
password: enable-password
router#
```

**Note**  The username and password must match the username and password already set on the router. The username and password are case sensitive, so make sure you use the correct case.

**Step 2**  Start the configure terminal program, then enable IPX routing:

```
router# configure terminal
router (config)# ipx routing
```

**Step 3**  Define a unique IPX internal network number:

```
router (config)# ipx internal-network number
```

If your IPX network does not already have an internal network number, it is common to use the lower 4 bytes of the gateway's MAC address. You can find this address on the printed label attached to the outside of the gateway's shipping container.

**Step 4**  Bind IPX to your Ethernet interface:

```
router (config)# interface ethernet 0
```

**Step 5**  Define a 4-byte Ethernet interface network number, then exit the current mode:

```
router (config-if)# ipx network number
router (config-if)# exit
```

**Step 6** Activate the IPX-to-IP gateway function on the router:

```
router (config)# ipx ip-gateway interface
```

*interface* is the interface name and number of the interface on the gateway that is connected to the Internet or other TCP/IP-based network.

**Step 7** Optionally, add new TCP or UDP services to the services file on the router:

```
router (config)# ip service [tcp | udp] service-name port-number
```

The services files is similar to the /etc/services file commonly found on a UNIX workstation. This file defines the TCP or UDP services that the IPeXchange gateway provides and the port on which that service is provided. This file is required so that the IPeXchange gateway can respond to requests for services from clients on the TCP/IP network to which the gateway is connected. The services file on the IPeXchange gateway contains default mappings of well-known services to their port numbers.

**Step 8** Write the configuration to NVRAM:

```
router (config)# write memory
```

# Check the Status of the Router

To check the status of the IPeXchange Internet Gateway router, use the following command:

**show ipx ip-gateway status**

To display the entries in the services files, which defines the mapping between services and their port numbers, use the following command:

**show ip services**

# For More Information

For more information about IPeXchange gateway software configuration, refer to the following publications:

- *Internetworking Technology Overview*
- Cisco IOS configuration guides
- Cisco IOS command references
- *Router Products Getting Started Guide*
- *Configuration Builder Getting Started Guide*
- *CiscoWorks for Windows Getting Started Guide*
- *Troubleshooting Internetworking Systems* (as needed)

These publications are available on the Cisco Connection CD-ROM, Cisco's online library of product information. To order the Cisco Connection CD or paper documentation, refer to the Cisco Information Packet that accompanied your IPeXchange Internet Gateway.