Installing a Cisco Internet Junction Gateway

This chapter describes how to install the Windows NT version of Cisco Internet Junction gateway software and includes the following sections:

- Prerequisites for Installation
- Configuring NWLINK IPX/SPX
- Installing the SAP Agent
- Verifying Network Services
- Running the Setup Program
- Checking the Gateway's Status
- Moving On

Installing IJ gateway software before moving on to the IJ client simplifies verification and troubleshooting.

Prerequisites for Installation

To install IJ gateway software, you need the following:

- 80x86-based computer
- Windows NT operating system version 3.5 or 3.51 or higher, configured either as a workstation or as a server
- TCP/IP services, configured and running

For Internet access, make the following additional preparations:

- Obtain an Internet connection from an Internet service provider.
- Set up and test hardware and software for accessing the service provider.
- Configure and test TCP/IP for connection with the service provider.

Configuring NWLINK IPX/SPX

NWLINK is the Windows NT implementation of IPX. If you have not already done so, take the following steps to configure NWLINK:

- **Step 1** In the Main group, open Control Panel and click on the Network icon. The Network Settings window appears.
- **Step 2** If NWLINK IPX/SPX Compatible Transport appears in the Installed Network Software list, skip to Step 4. If NWLINK IPX/SPX Compatible Transport does not appear in the Installed Network Software List, click Add Software....
- Step 3 Select NWLink IPX/SPX Compatible Transport from the Network Software list. Click Continue to return to the Network Settings window.
- **Step 4** Select NWLink IPX/SPX Compatible Transport and click Configure....
- **Step 5** Configure IPX/SPX for your network adapter and frame type.
- **Step 6** Click OK to return to the Network Settings Menu.
- **Step 7** Click OK to save the configuration.

Installing the SAP Agent

Take the following steps to enable the IJ gateway computer to broadcast SAP messages so that IJ clients can find it:

- Step 1 Open the Network Settings window and look at the Installed Network Software
- **Step 2** If SAP Agent is included in the Installed Network Software list, click Cancel to close the window. Skip to the following section, "Verifying Network Services."

- Step 3 If SAP Agent is not included in the Installed Network Software list, click Add Software....
- Step 4 Select SAP Agent from the Add Network Software window and click Continue to return to the Network Settings window.
- **Step 5** Click OK to save the configuration.

Verifying Network Services

Before you install the IJ gateway, you need to verify that TCP/IP and IPX network services are running.

Verifying TCP/IP

To verify that TCP/IP is running, go to an MS-DOS window and ping a host. The PING command attempts to connect with a specified computer and return information to you about its status. It accepts a host name, IP address, or domain name as an argument. With a connection to the Internet, you can check your connection to any external domain name.

For example, to check the connection to cisco.com, enter the following command at the MS-DOS prompt:

ping cisco.com

If TCP/IP is running, PING responds with the status of your connection to the Cisco host computer.

Verifying NWLINK IPX/SPX

If there is a NetWare server on the network, take the following steps to verify that NWLINK IPX/SPX is running:

- Step 1 Open the Control Panel and double click on the CSNW (Client Services for NetWare) or GSNW (Gateway Services for NetWare) icon.
- **Step 2** In the new window, view the servers listed under Select Preferred Server.

If one or more NetWare servers are listed, NWLINK IPX/SPX is working.

Running the Setup Program

From the Windows File Manager, run A:SETUP to install IJ gateway software. The Setup program asks whether you want to run Express Setup or Custom Setup.

Both Express Setup and Custom Setup ask for your license key, which can be found on the floppy disk envelope. Entering an invalid key causes the license to default to two users.

Express Setup

If you choose Express Setup, the Setup program takes the following actions:

- Copies the IJ gateway files IJGATE.EXE and IJDNSD.EXE from the floppy disk to the \WINDOWS\SYSTEM32 directory.
- Creates a Cisco Internet Junction program group and icons.
- Creates a Windows NT service called Cisco Internet Junction.

Custom Setup

If you choose Custom Setup, the Setup program takes the following actions:

- Allows you to install IJ gateway files without creating and starting the gateway as an NT service.
- Copies the IJ gateway files IJGATE.EXE and IJDNSD.EXE from the Cisco Internet Junction floppy disk to the \WINDOWS\SYSTEM32 directory.

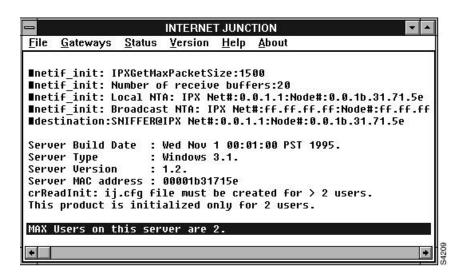
- Creates a Cisco Internet Junction program group and icons.
- Creates a Windows NT service called Cisco Internet Junction, unless you chose not to install the gateway as a service.

If you do not install the gateway as a Windows NT service, you can start the gateway manually by double-clicking the IJ gateway icon.

Checking the Gateway's Status

To check the status of the IJ gateway, double-click on the gateway icon. The window shown in Figure 2-1 appears.

Figure 2-1 **Gateway Status Window**



Click on the Status menu item. A line similar to the following appears:

```
IPX bcast packet counts: in:0, out:4
```

This line displays the count of inbound and outbound IPX broadcast packets. A gateway regularly broadcasts SAP messages, so if the count of outbound packets is greater than zero, the IJ gateway is broadcasting its presence.

Moving On

You have now installed IJ gateway software. To proceed with your installation, see the chapter "Installing a Cisco Internet Junction Client."

 $See the \ chapter ``Advanced \ Configuration \ of \ Cisco \ Internet \ Junction" for information \ about$ additional software features.