



# Configuring Support for NASI Clients to Access Network Resources

This chapter describes how to allow your router to function as a NetWare Asynchronous Support Interface (NASI) server. It includes the following main sections:

- [NASI Server Overview](#)
- [Configuring the Router as a NASI Server](#)

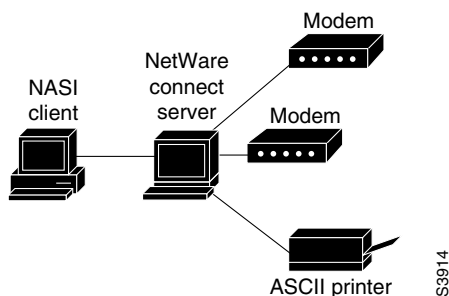
For a complete description of the commands mentioned in this chapter, refer to the *Cisco IOS Terminal Services Command Reference*, Release 12.2. To locate documentation of other commands that appear in this chapter, use the command reference master index or search online.

To identify the hardware platform or software image information associated with a feature, use the Feature Navigator on Cisco.com to search for information about the feature or refer to the software release notes for a specific release. For more information, see the “Identifying Supported Platforms” section in the “Using Cisco IOS Software” chapter.

## NASI Server Overview

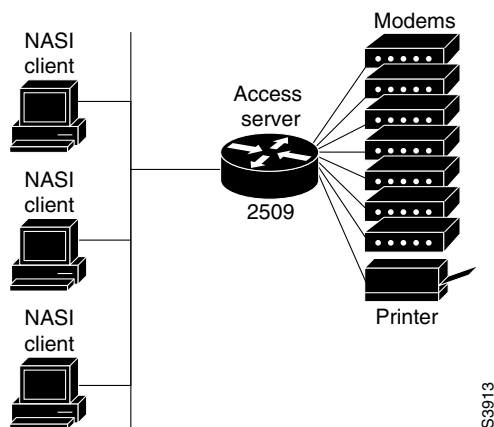
A NASI server enables a NASI client to connect to asynchronous network resources (such as modems) without the need for these resources to be located on the desktop of the client. (See [Figure 1](#).)

**Figure 1** NASI Setup in a NetWare Environment



You can configure the Cisco IOS software to enable NASI clients to connect to asynchronous resources attached to your router. The NASI client can connect to any port on the router other than the console port to access network resources (see [Figure 2](#)). The NASI clients are connected to the Ethernet interface 0 on the router. When the user on the NASI client uses the Windows or DOS application to connect to the router, a list of available terminal and virtual terminal lines appears, beginning with tty1. The user selects the desired outgoing terminal and virtual terminal port. TACACS+ security also can be configured on the router so that after the user selects a terminal and virtual terminal port, a username and password prompt appear for authentication, authorization, and accounting (AAA).

**Figure 2** NASI Clients Accessing Asynchronous Resources Through an Access Server



**Note**

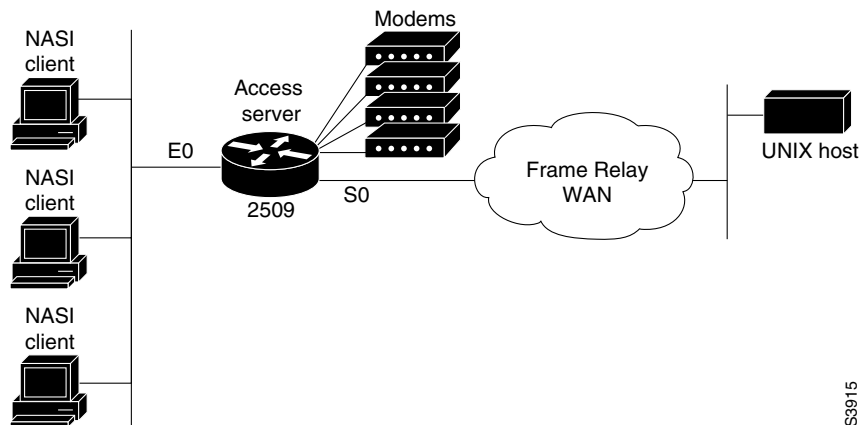
The Cisco IOS implementation of NASI functions best with NASI client software version 2.0 and later versions.

The NASI client can be on a local LAN or can be on a remote LAN. If it is on a remote LAN, the following two requirements must be met:

- A router routing Internet Protocol Exchange (IPX) forwards NetWare Connect Server Service Advertising Protocol (SAP) advertisements from the remote LAN to the LAN to which the local router is connected.
- The same router routing IPX spoofs Get Nearest Server (GNS) replies for the GNS requests that the client sends out.

The fact that you can connect to many different ports on the router means that you can provide access to more than one asynchronous device. When the user accesses the vty, the user can connect to the user EXEC facility and issue a Telnet or NASI command to access a remote network (see [Figure 3](#)). Only the first available vty appears in the list of available ports on the router (and it is named RCONSOLE).

**Figure 3** NASI Clients Gaining Access to IP Hosts on a Remote Network



## Configuring the Router as a NASI Server

To configure your router as a NASI server, use the following commands beginning in global configuration mode:

	Command	Purpose
Step 1	Router(config)# <b>ipx routing</b>	Enables IPX routing on the router.
Step 2	Router(config)# <b>ipx internal-network</b>	Defines an internal IPX network number.
Step 3	Router(config)# <b>interface</b> <i>type number</i>	Enters interface configuration mode.
Step 4	Router(config-if)# <b>ipx network</b> [ <i>network</i>   <b>unnumbered</b> ]	Enables IPX routing on an interface.
Step 5	Router(config-if)# <b>exit</b>	Exits to global configuration mode.
Step 6	Router(config)# <b>ipx nasi-server enable</b>	Enables NASI.
Step 7	Router(config)# <b>aaa authentication nasi</b> { <i>list-name</i>   <b>default</b> } { <i>methods list</i> }	(Optional) Configures TACACS+ security on all lines on the router.
Step 8	Router(config)# <b>line</b> [ <i>aux</i>   <i>tty</i>   <i>vty</i> ] <i>line-number</i> [ <i>ending-line-number</i> ]	Enters line configuration mode.
Step 9	Router(config-line)# <b>login authentication nasi</b> { <i>list-name</i>   <b>default</b> }	(Optional) Configures TACACS+ security on a per-line basis.

You also can configure SAP filters to filter SAP updates, and access lists to filter NASI traffic between interfaces on the router.



### Note

If a NASI server is already on the LAN segment connected to the router, the router cannot respond to GNS requests for NASI services.

If you have configured NASI on your router, you can use IPX client applications to make IPX dial-out connections to a shared pool of asynchronous devices. For example, a NASI client on the LAN can connect to a serial (synchronous or asynchronous) port on the router, which provides access to remote modems, printers, and networks. The command the user issues depends on the application being used to connect to the NASI server. NASI relies on Sequenced Packet Exchange (SPX).

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