

Gateway Service for NetWare Help

▼ Expand

How To...

- [Configure the Gateway Service for NetWare](#)
- [Use NetWare Resources](#)
- [Use a Windows NT Server Computer as a NetWare Gateway](#)
- [Manage User Environments](#)
- [Configure NetWare Link \(NWLink\)](#)
- [Run 16-Bit Utilities and NetWare-Aware Applications](#)
- [Troubleshoot Gateway Service](#)

Gateway Service for NetWare Help

▼ Expand













How To...

- [Configure the Gateway Service for NetWare](#)
- [Overview](#)
- [Removing Existing Redirector Installations](#)
- [Setting a Preferred Server](#)
- [Setting Printing Options](#)
- [Use NetWare Resources](#)
- [Use a Windows NT Server Computer as a NetWare Gateway](#)
- [Manage User Environments](#)
- [Configure NetWare Link \(NWLink\)](#)
- [Run 16-Bit Utilities and NetWare-Aware Applications](#)
- [Troubleshoot Gateway Service](#)

Gateway Service for NetWare Help

▼ Expand

How To...

-  [Configure the Gateway Service for NetWare](#)
-  [Use NetWare Resources](#)
 -  [Using File Manager to Connect to NetWare Resources](#)
 -  [Using Print Manager to Connect to a NetWare Print Queue](#)
 -  [Using the Command Prompt to Connect to a NetWare Print Queue](#)
 -  [Using the Command Prompt to Connect to NetWare File Resources](#)
 -  [Using the Command Prompt to View NetWare Resources](#)
 -  [Using the Command Prompt to View Current Network Connections](#)
 -  [Changing Your NetWare Password](#)
-  [Use a Windows NT Server Computer as a NetWare Gateway](#)
-  [Manage User Environments](#)
-  [Configure NetWare Link \(NWLink\)](#)
-  [Run 16-Bit Utilities and NetWare-Aware Applications](#)
-  [Troubleshoot Gateway Service](#)

Gateway Service for NetWare Help

▼ Expand

How To...

- [Configure the Gateway Service for NetWare](#)
- [Use NetWare Resources](#)
- [Use a Windows NT Server Computer as a NetWare Gateway](#)
- [Manage User Environments](#)
- [Setting Windows NT Logon Scripts](#)
- [Configure NetWare Link \(NWLink\)](#)
- [Run 16-Bit Utilities and NetWare-Aware Applications](#)
- [Troubleshoot Gateway Service](#)

Gateway Service for NetWare Help

▼ Expand

How To...

- [Configure the Gateway Service for NetWare](#)
- [Use NetWare Resources](#)
- [Use a Windows NT Server Computer as a NetWare Gateway](#)
- [Manage User Environments](#)
- [Configure NetWare Link \(NWLink\)](#)
- [Run 16-Bit Utilities and NetWare-Aware Applications](#)
- [Supported 16-Bit Utilities and NetWare-Aware Applications](#)
- [MS-DOS 16-Bit NetWare Utilities](#)
- [MS-DOS NetWare-Aware Applications](#)
- [Troubleshoot Gateway Service](#)

Gateway Service for NetWare Help

▼ Expand

How To...

- [Configure the Gateway Service for NetWare](#)
- [Use NetWare Resources](#)
- [Use a Windows NT Server Computer as a NetWare Gateway](#)
- [Manage User Environments](#)
- [Configure NetWare Link \(NWLink\)](#)
- [Configuring NWLink](#)
- [Routing on a Token Ring Network](#)
- [Run 16-Bit Utilities and NetWare-Aware Applications](#)
- [Troubleshoot Gateway Service](#)

Gateway Service for NetWare



How To...

- [Configure the Gateway Service for NetWare](#)
- [Use NetWare Resources](#)
- [Use a Windows NT Server Computer as a NetWare Gateway](#)
- [Enabling a Gateway on a Windows NT Server Computer](#)
- [Setting Permissions for a Gateway Share](#)
- [Using the Gateway Service to Share NetWare File Resources](#)
- [Using the Gateway Service to Share NetWare Print Resources](#)
- [Manage User Environments](#)
- [Configure NetWare Link \(NWLink\)](#)
- [Run 16-Bit Utilities and NetWare-Aware Applications](#)
- [Troubleshoot Gateway Service](#)

Gateway Service for NetWare Help



How To...

- [Configure the Gateway Service for NetWare](#)
- [Use NetWare Resources](#)
- [Use a Windows NT Server Computer as a NetWare Gateway](#)
- [Manage User Environments](#)
- [Configure NetWare Link \(NWLink\)](#)
- [Run 16-Bit Utilities and NetWare-Aware Applications](#)
- [Troubleshoot Gateway Service](#)
- [Troubleshooting Gateway Service](#)
- [Gateway Service Won't Start](#)
- [Gateway Service Starts But Servers Can't Be Found](#)
- [Gateway Service Starts But NetWare 4.x Servers Can't Be Seen](#)
- [Gateway Service Prompts You For a Password Each Time You Log On](#)
- [Access Denied to NetWare Servers from File Manager](#)
- [Access Denied to NetWare Servers from the Command Prompt](#)
- [NetWare Print Queues Are Not Shown in Print Manager](#)
- [NetWare-Aware Applications Are Not Working Correctly](#)
- [NetWare Login Scripts Are Not Running](#)
- [NetWare Map Utility Fails with a Memory Allocation Error](#)

Gateway Service for NetWare Help

▲ Collapse

How To...

- [!\[\]\(38441ceaa711016e0bf2ad46ad394ff4_img.jpg\) Configure the Gateway Service for NetWare](#)
- [!\[\]\(6e027340d4263908f264926b1ad81c5e_img.jpg\) Overview](#)
- [!\[\]\(781510d64f329bf3c880acf086e884d6_img.jpg\) Removing Existing Redirector Installations](#)
- [!\[\]\(93cdf5b84f2bfec404f7441e84b6ba5c_img.jpg\) Setting a Preferred Server](#)
- [!\[\]\(0f0f932ce3b5577a82f34ad23239a6e5_img.jpg\) Setting Printing Options](#)
- [!\[\]\(eae2be0f6c865f0a2febc97c99fc2475_img.jpg\) Use NetWare Resources](#)
- [!\[\]\(beb73fa08c38b910d1745a8873b27d81_img.jpg\) Using File Manager to Connect to NetWare Resources](#)
- [!\[\]\(b5401e964162c76526213b8e70b40c2e_img.jpg\) Using Print Manager to Connect to a NetWare Print Queue](#)
- [!\[\]\(865f2722fc1818c7fea1a14e09a6e1a6_img.jpg\) Using the Command Prompt to Connect to a NetWare Print Queue](#)
- [!\[\]\(40e8be9c7fbc03824b9e3a0db89df497_img.jpg\) Using the Command Prompt to Connect to NetWare File Resources](#)
- [!\[\]\(ac93afa5970ce35aafca08e0a61927af_img.jpg\) Using the Command Prompt to View NetWare Resources](#)
- [!\[\]\(6fb00ad0732ae3dfa896698634b50717_img.jpg\) Using the Command Prompt to View Current Network Connections](#)
- [!\[\]\(22235084dab0713ac70cf171d18425be_img.jpg\) Changing Your NetWare Password](#)
- [!\[\]\(d50fea8160273b969121a93b7ba374ef_img.jpg\) Use a Windows NT Server Computer as a NetWare Gateway](#)
- [!\[\]\(6af89cd01b53efeedefbf5953ae4aec4_img.jpg\) Enabling a Gateway on a Windows NT Server Computer](#)
- [!\[\]\(83e21a3690b10b41c737b9c9c0795d96_img.jpg\) Setting Permissions for a Gateway Share](#)
- [!\[\]\(93b24a6fc41b894824aa0f8775d45ba9_img.jpg\) Using the Gateway Service to Share NetWare File Resources](#)
- [!\[\]\(e3bcd1f6c7a1b9beb7b41726c375572f_img.jpg\) Using the Gateway Service to Share NetWare Print Resources](#)
- [!\[\]\(b672c38b74dfe91ae67992e9dd7f4375_img.jpg\) Manage User Environments](#)
- [!\[\]\(16f92e693d235f63ab0e7db688a7763e_img.jpg\) Setting Windows NT Logon Scripts](#)
- [!\[\]\(c3aef8261fdf1d76a6eab8695d2d7aba_img.jpg\) Configure NetWare Link \(NWLink\)](#)
- [!\[\]\(0f5d98f96ba77e96d7476999767c6b00_img.jpg\) Configuring NWLink](#)
- [!\[\]\(a5652c9e3ea4e8979a8828d39ab957eb_img.jpg\) Routing on a Token Ring Network](#)
- [!\[\]\(d056e9e699dae27d11e0213a2c095156_img.jpg\) Run 16-Bit Utilities and NetWare-Aware Applications](#)
- [!\[\]\(ac61303e73dfa08ee67037af88409067_img.jpg\) Supported 16-Bit Utilities and NetWare-Aware Applications](#)
- [!\[\]\(dddc3914bc09830ad3f55c1d4ac2712c_img.jpg\) MS-DOS 16-Bit NetWare Utilities](#)
- [!\[\]\(8cec84d32eed0ce08e33159d90347dcd_img.jpg\) MS-DOS NetWare-Aware Applications](#)
- [!\[\]\(39dbaeed583edf6bfd50956975d280b1_img.jpg\) Troubleshoot Gateway Service](#)
- [!\[\]\(52f4fd68fb42fcda792601f3abc901ae_img.jpg\) Troubleshooting Gateway Service](#)
- [!\[\]\(84ae8eb86f1cde3e511b99c87d044c3a_img.jpg\) Gateway Service Won't Start](#)
- [!\[\]\(52fbef7ca5386b95213d931f0586a85b_img.jpg\) Gateway Service Starts But Servers Can't Be Found](#)
- [!\[\]\(8f2e3cff6fdb17196797a2458b4372a7_img.jpg\) Gateway Service Starts But NetWare 4.x Servers Can't Be Seen](#)
- [!\[\]\(99ec497b7f75cc3357574fdc8633ef27_img.jpg\) Gateway Service Prompts You For a Password Each Time You Log On](#)
- [!\[\]\(58ce38713aa66311a32b4e1d6e1212cd_img.jpg\) Access Denied to NetWare Servers from File Manager](#)
- [!\[\]\(21d2b7e3ea2206dd46866bd4bac2867c_img.jpg\) Access Denied to NetWare Servers from the Command Prompt](#)
- [!\[\]\(7f34cd6fb81f206ff876b1645a946e00_img.jpg\) NetWare Print Queues Are Not Shown in Print Manager](#)
- [!\[\]\(a1b8bae2638f4fcdace3e8df1b55dd00_img.jpg\) NetWare-Aware Applications Are Not Working Correctly](#)
- [!\[\]\(3141a7df346dffa83e41ff1a1469da6a_img.jpg\) NetWare Login Scripts Are Not Running](#)
- [!\[\]\(eee7406bd8451a4c677816a86cad8712_img.jpg\) NetWare Map Utility Fails with a Memory Allocation Error](#)

Troubleshooting Gateway Service

Many common problems with the Gateway Service are caused by improper installation of the network adapter card or the Gateway Service itself. The first things to check are that the network card is installed and configured correctly and that any existing installations of NetWare redirectors, such as Novell's NetWare Services for Windows NT, have been removed.

To correct the configuration of your network card or to remove a NetWare redirector, use the Network option in Control Panel. For more information, see the topic [Installing Network Adapter Cards and Software](#), in Control Panel Help.

If you have any of the specific problems listed below, choose the corresponding item for detailed help:

- [+ Gateway Service Won't Start](#)
- [+ Gateway Service Starts, but Servers Can't Be Found](#)
- [+ Gateway Starts But NetWare 4.x Servers Can't Be Seen](#)
- [+ Gateway Service Prompts You For a Password Each Time You Log On](#)
- [+ Access Denied to NetWare Servers from File Manager](#)
- [+ Access Denied to NetWare Servers from the Command Prompt](#)
- [+ NetWare Print Queues Are Not Shown in Print Manager](#)
- [+ NetWare-Aware Applications Are Not Working Correctly](#)
- [+ NetWare Login Scripts Are Not Running](#)
- [+ NetWare Map Utility Fails with a Memory Allocation Error](#)

See Also

[Removing Existing Redirector Installations](#)

Gateway Service Won't Start

Gateway Service uses NWLink to communicate with NetWare file and print servers. If you have installed NWLink and you have removed any other NetWare redirector installations, verify that NWLink is started.

To verify that NWLink has started

- ▶ In Control Panel, choose the Services option.
A list of services appears. If the status of Gateway Service for NetWare is not Started, select it and choose the Start button. If the Gateway Service is already started, check the System Log in Event Viewer for an event from Service Control Manager.

To check the System Log

1. In the Administrative Tools group of Program Manager, choose Event Viewer.
2. In the Source column of the Event Viewer System Log dialog box, look for Service Control Manager or NWLinksys.
3. Double-click the appropriate log entry for more details about the event.
4. In the Event Details dialog box, look for one of the following messages. If you find the message, choose its text in this Help window for additional information:

The NWLink service depends on the NWLinksys services which failed to start because of the following error: The system cannot find the file specified.

Error binding to adapter card *adapter card name*.

Gateway Service for NetWare terminated with the following error: The system cannot find the specified file.

5. In the Event Details dialog box, choose the Close button.
6. From the Log menu, choose Exit.

See Also

Removing Existing Redirector Installations

Configuring NWLink

System Log

The System Log is part of the Event Viewer application in the Administrative Tools group of Program Manager. System, security, and application events are logged in Event Viewer.

System Log Error Message: Service Control Manager

The NWLink IPX/SPX Compatible Transport Protocol was not installed properly.

Use the Network option in Control Panel to reinstall NWLink. For more information about installing transports, see the topic Installing Network Adapter Cards and Software in Control Panel online Help.

System Log Error Message: NWLinksys

Your adapter card may be malfunctioning, or its settings may be incorrect.

If your adapter card is not malfunctioning, use the Network option in Control Panel to verify the adapter card settings. The correct adapter card might not be bound to NWLink. Or the adapter card may be bound to an ODI driver if NetWare Services for Windows NT was previously installed on your computer. In this case, the adapter card must be unbound from the ODI driver and bound to the NDIS driver. For more information about bindings, see the topic Network Bindings in Control Panel online Help.

System Log Error Message: Service Control Manager

Gateway Service was not installed properly.

Use the Network option in Control Panel to remove and reinstall Gateway Service. Be sure to restart your computer between removing and reinstalling Gateway Service.

Gateway Service Starts, but Servers Can't Be Found

If Gateway Service starts but you cannot see any NetWare servers, you may be using an incorrect frame type for the servers.

The frame type is specified in the network adapter load line of the NetWare servers AUTOEXEC.NCF file. Check this file to verify that you are using the correct frame type for the server.

For example, suppose a servers AUTOEXEC.NCF file network adapter load line is:

```
load 3C503 FRAME=ETHERNET_802.3 NAME=ETH
```

In this example, the server is bound to a 3Com 503 ethernet adapter that will accept the raw 802.3 frame type.

To view the frame type set for the network adapter card on your Windows NT computer, use the Network option in Control Panel. For more information, see the topic Installing Network Adapter Cards and Software, in Control Panel Help.

See Also

[Configuring NWLink](#)

Gateway Service Starts, but NetWare 4.x Servers Can't Be Seen

Gateway Service supports NetWare 4.x bindery emulation. Be sure that the bindery context you have set for your 4.x server directory includes the users that you want to have access to the servers.

You can view and set your bindery context on NetWare 4.x servers by loading the SERVMAN NetWare Loadable Module (NLM) and then viewing and setting the SET BINDERY CONTEXT parameter. Or you can type **set** at the console and view the Miscellaneous SET parameters. For more information, see your NetWare 4.x server documentation.

Gateway Service Prompts You For a Password Each Time You Log On

The Gateway Service prompts you for a password for your preferred server after you have entered your credentials to log on to Windows NT because your password for your NetWare preferred server differs from your Windows NT password.

If you dont want to be prompted for your preferred server password, make your NetWare preferred server and Windows NT passwords the same. You can change your password using the **setpass** command at the command prompt.

See Also

[Changing Your NetWare Password](#)

Access Denied to NetWare Servers from File Manager

By default, the Gateway Service uses the credentials used for preferred server authentication to access other NetWare servers. In order to see files on NetWare servers for which you have access, synchronize your credentials on all the NetWare servers. You can synchronize your credentials using the **setpass** command at the command prompt.

If you do not want to use the same credentials for each NetWare server, type your username for the NetWare server in the Connect As box in the Connect Network Drive dialog box in File Manager. You will be prompted for your password for the server.

See Also

[Changing Your NetWare Password](#)

Access Denied to NetWare Servers from the Command Prompt

By default, the Gateway Service uses the credentials used for preferred server authentication to access other NetWare servers. In order to see files on NetWare servers for which you have access, synchronize your credentials on all the NetWare servers. You can synchronize your credentials using the **setpass** command at the command prompt.

If you do not want to synchronize your NetWare file server credentials with your preferred server credentials, at the command prompt type:

```
net use drive: \\nwserver_name\volume_name /user:username password
```

See Also

[Changing Your NetWare Password](#)

NetWare Print Queues Are Not Shown in Print Manager

In Print Manager, when you click the NetWare server where your print queues are located, no queues are shown because your credentials on the print server do not match those on your preferred server. The Gateway Service uses your preferred server credentials to access the print queue server.

If you do not see any NetWare print queues in Print Manager, verify that you can see NetWare file servers in File Manager. If you cannot, verify that Gateway Service is started.

In order to see the print queues on NetWare servers to which you have access, you must create an authenticated connection to the server. Synchronize your credentials on all the NetWare servers using the **setpass** command at the command prompt.

If you do not want to synchronize your NetWare file server credentials with your preferred server credentials, at the command prompt type:

```
net use port: \\nwserver_name\volume_name /user:username password
```

See Also

[Gateway Service Won't Start](#)

[Changing Your NetWare Password](#)

[Using Print Manager to Connect to a NetWare Print Queue](#)

NetWare-Aware Applications Are Not Working Correctly

Gateway Service does not support all NetWare-aware applications. Make sure the application you are using is supported in this release. Supported applications include some MS-DOS and Windows 16-bit NetWare-aware applications. Some of the 16-bit utilities that ship with NetWare 2.2, 3.11, or 3.12 are also supported.

In rare instances, an application might need files to be opened in compatibility mode. Client Service for NetWare normally opens files in exclusive mode because opening them in compatibility mode can make some applications very slow. To cause files to be opened in compatibility mode, edit your AUTOEXEC.NT file, adding **-c** to the line that loads **NW16.EXE**. Then log off and log back on again.

See Also

[Supported 16-Bit Utilities and NetWare-Aware Applications](#)

NetWare Login Scripts Are Not Running

Gateway Service does not support the NetWare scripting language. However, Windows NT does have its own logon scripts.

See Also

[Setting Windows NT Logon Scripts](#)

NetWare Map Utility Fails with a Memory Allocation Error

The default environment for 16-bit programs is too small to accommodate the mapping table created by the NetWare **map** utility. You need to designate COMMAND.COM as the permanent command interpreter for the Command Prompt window and reset the default environment size allocated to the window. An environment of 4,096 bytes is large enough to accommodate the NetWare utility, the mapping table, and the command interpreter.

To make these changes to the environment, enter this command in CONFIG.NT:

```
shell=%systemroot%\system32\command.com /e:4096
```

This command causes COMMAND.COM to be the command interpreter for the window as long as it remains open or until you issue another **shell** command, and it permanently allocates 4,096 bytes to programs you run in the window.

NWLink

NetWare Link IPX/SPX Compatible Transport Protocol, an implementation of the internetworking packet exchange (IPX) and sequenced packet exchange (SPX) protocols used in Novell networks.

TDI

Transport Driver Interface, a 32-bit interface used by Windows NT transports that isolates networking applications from the specifics of a transport.

NDIS

Network Driver Interface Specification, a standard interface used by network adapter drivers and transports that isolates them from the specifics of the network adapter card or the transport protocol. NDIS 3.0 is implemented on Windows NT.

Microsoft Networking Clients

Computers that function on a Microsoft network as clients. Microsoft networking clients include computers running Windows NT Workstation, Windows for Workgroups, and LAN Manager 2.x.

Overview: Gateway Service for NetWare

With Gateway Service for NetWare (Gateway Service), you can access file and print resources on NetWare servers from your Windows NT computer. In addition, you can create a gateway so you can share NetWare resources with Microsoft networking clients whose computers do not have NetWare client software. You can also run some NetWare utilities and NetWare-aware applications from your Windows NT computer.

Gateway

A mechanism for giving Microsoft networking clients to access file and print resources that reside on NetWare servers. To a Microsoft networking client, a NetWare volume or directory accessed over the file gateway appears like any disk or directory shared by a Windows NT computer, and a NetWare print queue accessed over the print gateway appears like any other printer shared by a Windows NT computer.

Setting a Preferred Server

The preferred server is the NetWare server that you log onto by default when you log onto Windows NT, and the one that checks your default credentials against your NetWare user account. The preferred server is also the one that is queried about resources available on the network when you browse resources using File Manager and Print Manager.

If you do not want to set a preferred server, you can select the <None> option. In this case, you are logged onto the nearest available NetWare server, and your interaction with the NetWare network is through that server. In general, you should specify a preferred server to avoid using a connection on a server that may allow only a limited number of users.

To set or change a preferred server

1. In Control Panel, choose the Gateway Service for NetWare option.
2. In the Select Preferred Server box, select the name of your preferred NetWare server, or select the <None> option, and then choose OK.

Windows NT sends your username and password to the NetWare server that you select for authentication.

Setting Printing Options

You can set printing options for form feeds, print notification, and banner pages. By default, the form feed is suppressed, you are notified after your print job is completed, and an initial banner page is printed.

When you are logged on to Windows NT, the printing options you set affect only your user account. Settings affect all NetWare print queues you access from your Windows NT computer. The options are equivalent to those available directly on the NetWare server using the **capture** utility.

To set printing options

1. In Control Panel, choose the Gateway Service for NetWare option.
2. In the Print Options box:
 - Select the Add Form Feed check box to eject a page at the end of each print job.
 - Clear the Notify When Printed check box to prevent a notice from being displayed on your Windows NT computer when your document has been printed.
 - Clear the Print Banner check box to prevent a banner page from being printed before each print job.
3. When the printing options are as you want them, choose OK.

See Also

[Using Print Manager to Connect to a NetWare Print Queue](#)

[Using the Gateway Service to Share NetWare Print Resources](#)

[Setting The Refresh Interval](#)

Preferred Server

The preferred server is the NetWare server that you connect to by default when you log onto Windows NT. The preferred server validates your user credentials and is queried for information you request about resources available on the NetWare network.

Frame Type

The format of IPX/SPX packets on your network. Network topologies supported by the Gateway Service include Ethernet, Token Ring, ArcNet, and FDDI. Frame types supported include Ethernet II, Ethernet 802.3, 802.2, SNAP, and ArcNet.

Windows NT Registry

A database that stores configuration and system information for a Windows NT computer. The Registry replaces the CONFIG.SYS, AUTOEXEC.BAT, and *.INI files that are used on MS-DOS and Windows-based workstations.

Routing on a Token Ring Network

When a computer using NWLink receives an IPX/SPX broadcast packet or an IPX/SPX packet whose node address is not in its source routing table, by default the computer forwards the packet as a Single Route Broadcast frame.

NWLink parameters that affect routing in a Token Ring environment can be modified for the current Windows NT session with the command line utility IPXROUTE.EXE (**IPXRoute**). **IPXRoute** provides the same functionality as the ROUTE.EXE command line utility supplied by Novell for its MS-DOSbased clients.

IPXRoute manages the source routing variables of NWLink on a token ring network. It is installed only if the NWLink transport protocol is bound to a token-ring network adapter card.

IPXRoute parameters are equivalent to the ROUTE.EXE utility parameters supplied by Novell. Complete syntax is described below and in the Command Reference online Help.

Iproute Syntax

ipxroute board=*n* [clear] [def] [gbr] [mbr] [remove=*xxxxxx*]

board=*n*

Specifies the network adapter card whose parameters you want to change.

clear

Clears the source routing table.

def

Forwards packets as All Routes Broadcast frames if their media access control (MAC) address is not in the source routing table.

gbr

Forwards general broadcast packetsthose addressed to the broadcast address (FFFFFFFFFFFF)as All Routes Broadcast frames.

mbr

Forwards multicast broadcast packetsthose addressed to a multicast address (C000xxxxxxx)as All Routes Broadcast frames.

remove=*xxxxxx*

Removes the given node address from the source routing table.

Note: The **IPXRoute** utility changes these parameters only for the current Windows NT session. When you log off, the settings are lost. To permanently change NWLink parameters, you must set them in the Registry.

Source routing table

A table that contains the address of each node on a token ring network.

Configuring NWLink

You can select the adapter to which the NWLink transport is bound and the frame type the network uses. By default, NWLink automatically detects the frame type used by the network adapter card to which it is bound. If NWLink detects any frames of type 802.2 or it detects no network traffic at all, it sets the frame type to 802.2. Otherwise, it sets the frame type to match the frames it detects.

There is usually no need to change the defaults. If after installation you want to bind NWLink to a different network adapter card, manually change the frame type, or use more than one frame type on the same network card, use the following procedure.

To configure NWLink

1. In Control Panel, choose the Network option.
2. In the Installed Network Software box, select NWLink IPX/SPX Compatible Transport, and then choose the Configure button.
3. In the Adapter box of the NWLink IPX/SPX Protocol Configuration dialog box, select the name of the adapter card to which you want to bind the transport.
4. Select Auto Frame Type Detection (the default), or Manual Frame Type Detection if you want to manually specify the frame type or types for IPX/SPX packets on your network.
5. If you choose Manual Frame Type Detection, the box on the left lists the frame types NWLink is using, and the box on the right lists the frame types that are available but not in use. To remove a frame type that is now in use, select it from the box on the left, and then choose the Remove button. To add a frame type, select it from the box on the right, and then choose the Add button.
6. Choose OK to close the NWLink Configuration dialog box, and then choose OK to close the Network Settings dialog box.
7. Windows NT prompts you to restart the computer so that the changes take effect. Choose the Yes button to restart the computer.


Additional tunable parameters for NWLink are stored in the Registry. In most situations, you should not have to modify the defaults.

See Also

[Routing on a Token Ring Network](#)

Using File Manager to Connect to NetWare Resources

With File Manager, you can browse and connect to shared resources on both the Microsoft and NetWare networks. If the NetWare network is first in the network search order (the default), the list of servers on the NetWare network is displayed automatically in the Shared Directories box.

 When you select a NetWare volume, the NetWare server authenticates your username and password before giving you access to its directories. If the server cannot authenticate your account credentials, you must type a username and password in the Enter Network Credentials dialog box when it appears, and then choose OK.

To connect to a NetWare drive using File Manager

1. Choose Connect Network Drive from the Disk menu, or choose the Connect Drive button on the toolbar.
2. In the Drive box of the Connect Network Drive dialog box, accept the displayed drive letter to be used for the connection, or choose another.
3. Select a network path in the Path box in one of the following ways:
 - If the directory you want to connect to is among the ten most recent connections you have made from your Windows NT computer, choose it from the list in the Path box.
 - Browse the Shared Directories box to select a network path. On NetWare networks, the servers, volumes, and directories are organized in a tree structure. Both volumes and directories are represented by the shared directory icon. Choose an item to expand the list. For example, choose a directory to display its subdirectories.
 - Type the name of a shared directory directly in the Path box. For NetWare servers, you can type the name using either UNC or NetWare syntax. If you know the name of a NetWare server but not the name of the volume you want, in the Path box type two backslashes followed immediately by the server name, and then choose OK. Windows NT adds the name of the server's first volume directory to the Path box and displays all the server's volumes in the Shared Directories box. Choose the volume you want.
4. By default, you are connected under the username and password you used to log on. To connect under a different username, type it in the Connect As box.
5. In the Choose the OK button. If a password is required, Windows NT displays the Enter Network Password dialog box where you can type the password.

See Also

[Sharing NetWare Printing Resources Using the Gateway Service](#)

[Enabling a Gateway on a Windows NT Server Computer](#)

Default Credentials

The username and password that you use to connect to the preferred server. When you connect to resources on a different NetWare server, your default credentials are passed to that server unless you specify a different username or password.

UNC

Universal Naming Convention, a standard syntax for specifying resources on a remote computer. UNC names begin with a double backslash, followed immediately by the server name, and then the names of the volume or directory points on the server separated by backslashes. For example, if the file server NW4 contains the THOR volume on which there is a directory WINAPPS\WORD, the UNC name is: \\NW4\THOR\WINAPPS\WORD

Using the Command Prompt to View NetWare Resources

You can use the **net view** command to display file servers and volumes on a NetWare network. To display a list of NetWare files servers, use the following syntax at the command prompt:

```
net view /network:nw
```

To display volumes on a specific NetWare file server, type:

```
net view \\<nwservername> /network:nw
```

For example, to view the volumes on the NetWare server, NW4, type:

```
net view \\nw4 /network:nw
```

See Also

[Using File Manager to Connect to NetWare Resources](#)

[Using the Command Prompt to Connect to NetWare File Resources](#)

[Using the Command Prompt to View Current Network Connections](#)

[Using Print Manager to Connect to a NetWare Print Queue](#)

Using the Command Prompt to Connect to NetWare File Resources

You can use the **net use** command to connect to NetWare file servers and print queues. NetWare server volumes, directories, and print queues are represented by their UNC names. To connect, use the same command syntax as for connecting to shares on a Microsoft Windows-based network.

To connect to NetWare volumes using the Command Prompt

The **net use** command for connecting to NetWare file servers is equivalent to the **map** NetWare command on MS-DOSbased NetWare workstations. The syntax for the **net use** command is:

```
net use <drive>: <UNCname or NetWarename>
```

For example, to redirect the G drive to the directory \data\mydata of the THOR volume on a server called NW4 using UNC naming syntax, type:

```
net use G: \\nw4\thor\data\mydata
```

To use the next available drive letter when connecting, you can replace the drive letter with an asterisk (*) in the syntax.

The error message: "The password is invalid for \\<server name>\<volume name>\<directory name>..." indicates that your username and password could not be authenticated. To connect under a valid username and password, you can add these to the command using the following syntax:

```
/user: <username> <password>
```

For example, to connect as anniep with the password marshmallow to the directory \data\mydata within the THOR volume on a server called NW4 using the G drive, type:

```
net use G: \\nw4\thor\data\mydata /user:anniep marshmallow
```

If you prefer to be prompted for a password, replace the password with an asterisk (*). When you type your password at the prompt, it is not displayed on the screen.

See Also

[Using File Manager to Connect to NetWare Resources](#)

[Using the Command Prompt to View NetWare Resources](#)

[Using the Command Prompt to View Current Network Connections](#)

[Using Print Manager to Connect to a NetWare Print Queue](#)

Using the Command Prompt to View Current Network Connections

By executing the command **net use** without any parameters you can list the current network connections. The display format is shown below.

<u>Statu</u> <u>s</u>	<u>Local</u>	<u>Remote</u>	<u>Network</u>
	E:	\\nw4\sys	Novell
OK	F:	\\win_nt\droot	Microsoft Windows
	H:	\\netware40\thor\ apps	Novell

See Also

[Using File Manager to Connect to NetWare Resources](#)

[Using the Command Prompt to Connect to NetWare File Resources](#)

[Using the Command Prompt to View NetWare Resources](#)


[Using Print Manager to Connect to a NetWare Print Queue](#)

Enabling a Gateway on a Windows NT Server Computer

When you enable a gateway on a Windows NT Server computer, Microsoft networking clients can access files and print queues that reside on NetWare servers without loading NetWare connectivity software. NetWare resources shared over the gateway appear to Microsoft networking clients like shared resources located on the Windows NT Server computer itself.

The Gateway Service creates an authenticated connection to the preferred NetWare server by logging on with a user account from the Windows NT Server computer. All access to NetWare resources is in the context of this connection. Once a gateway connection is enabled, it remains enabled until you shut down Windows NT, disconnect the shared resource, or disable the gateway. Logging off of the Windows NT Server computer does not, by itself, disable the gateway or disconnect its shared resources.

Note: The user account you use to connect to the preferred NetWare server must be a member of the NetWare NTGATEWAY group. Access to resources on the NetWare network is subject to trustee rights for both the user account and the NTGATEWAY group.

 To enable the gateway or set permissions, you must be logged on to the Windows NT Server computer as a member of the Administrators or Power Users group.

To activate a gateway

1. In Control Panel, choose the Gateway Service for NetWare option.

The Gateway Service for NetWare dialog box appears.

2. In the Gateway Service for NetWare dialog box, choose the Gateway button.
3. In the Gateway Configuration dialog box, check the Enable Gateway box.
4. In the Gateway Account box, type the name of your gateway account on the preferred NetWare server. Type and confirm a password for the gateway account.

You can now share NetWare file and printing resources over the Microsoft network.

See also

[Using the Gateway Service to Share NetWare File Resources](#)

[Using the Gateway Service to Share NetWare Print Resources](#)

Using the Gateway Service to Share NetWare File Resources

Once you have activated a gateway, you can share NetWare volumes and directories with Microsoft networking clients, who see the NetWare resources as a shared directory on your Windows NT Server computer. You can share NetWare resources on any NetWare server on which your credentials match those you used to enable the gateway.

To share resources on NetWare servers on which your credentials don't match those you used to enable the gateway, you must first establish a connection to the NetWare server using File Manager or the **net use** command.

Note: To share NetWare file resources on your Windows NT Server computer, a gateway must be enabled.

To share NetWare file resources using the Gateway Service

1. In Control Panel, choose the Gateway Service for NetWare option.
2. In the Gateway Service for NetWare dialog box, choose the Gateway button.
3. In the Gateway Configuration dialog box, choose the Add button.
4. In the New Share dialog box:
 - Type a share name that users will see when they connect to your computer.
 - Type the network path of the NetWare volume or directory you want to share.
 - In the Use Drive box, accept the default drive shown, or choose another one.
5. Choose OK.

Windows NT creates a connection to the NetWare volume. Other users can now connect to the share and use NetWare resources. To users, NetWare resources appear to reside on your computer instead of on the NetWare server.

If you want to control user access, set permissions for the share when you create it.

See also

[Enabling a Gateway on a Windows NT Server Computer](#)

[Setting Permissions for a Gateway Share](#)

[Using the Gateway Service to Share NetWare Print Resources](#)

Setting Permissions for a Gateway Share

Once you have shared a NetWare volume or directory using the Gateway Service, you can set permissions for the gateway share using File Manager, as you would any other shared directory on your Windows NT Server computer. You can also set permissions using the Gateway Service.

To set permissions on a gateway share using the Gateway Service

1. In Control Panel, choose the Gateway Service for NetWare option.
2. In the Gateway Service for NetWare dialog box, choose the Gateway button.
3. In the Gateway Configuration dialog box, select the share whose permissions you want to set, and then choose the Permissions button.

4. In the NWC Gateway dialog box, choose the Permissions button to limit access to the gateway to specific groups.

The Access Through Share Permissions dialog box displays the users and groups who have access to the gateway share and the kind of access each has.

5. To remove a user or group from the list of authorized users, select the user or group from the list, and then choose the Remove button.
6. To modify a user or group's permissions, select the user or group from the list, and then in the Type of Access box select the appropriate permission.
7. To add a user or group to the list of authorized users, choose the Add button.

The Add Users And Groups dialog box displays the local groups on the computer or in the Windows NT Server domain displayed with an asterisk (*) in the List Names From box. To view groups from another domain, choose the domain name in the List Names From box. Domains appear only if your computer is a member Windows NT Server domain. The domains shown in the List Names From box have a trust relationship with your domain.

8. Use the options in the Add Users And Groups dialog box to display users, find the users in a group, or find the domain to which a group or user belongs. For detailed help, choose the Help button in the dialog box, or press the F1 key.
9. To add groups or users to the list of authorized users in the Access Through Share Permissions dialog box, select them in the Names box of the Add Users and Groups dialog box, and then choose the Add button.

You can also type the names of groups and users directly in the Add Names box. Separate individual names with a semicolon and no spaces. If the group or user you want to add is not located on the computer or domain shown in the List Names From box, type the computer or domain name followed by the group or user name, and separate the names using a backslash, for example **sales\anniep**.

10. If you are adding users or groups to a permissions list, select the permission for the groups or users shown in the Add Names box using the Type Of Access box.
11. Choose the OK button.
12. In the Gateway Configuration dialog box, choose the OK button.

13. In the Gateway Service for NetWare dialog box, choose the OK button.

See Also

[Enabling a Gateway on a Windows NT Server Computer](#)

[Using File Manager to Connect to NetWare Resources](#)

[Using the Command Prompt to Connect to NetWare File Resources](#)

[Using the Gateway Service to Share NetWare Print Resources](#)

[Setting Shared Directory Permissions](#)

[Troubleshooting Gateway Service](#)

Permissions

The kind of access a user or group is allowed to a shared resource, such as a directory, file, or printer. For example, the permissions associated with a file or directory are No Access, Read Only, Change, and Full Control.

Gateway Account

A NetWare user account that belongs to a group called NTGATEWAY. The account is used to create an authenticated connection from a Windows NT Server computer to a NetWare server.

Gateway accounts can be granted maximum permissions on NetWare servers.

NTGATEWAY

A group on NetWare servers to which accounts used to create a gateway must belong.

Network path

The location of a shared resource on the network. The Universal Naming Convention syntax for a network path is two backslashes followed immediately by the name of a computer, and then the volume name and the name of any directories and subdirectories, each separated by a single backslash.

For example, you would specify the directory \DATA\SYS on the THOR volume of a server called NW4 as **\\nw4\thor\data\sys**.

Setting Windows NT Logon Scripts

If you want to connect to specific NetWare resources in the same way every time you log on, you can make those connections in a logon script. You specify the logon script for each user on a Windows NT Workstation computer using the User Manager application in the Administrative Tools group of Program Manager, or for each user on a Windows NT Server computer using the User Manager for Domains application.

For more information about logon scripts, see User Manager Help.

See Also

[Using File Manager to Connect to NetWare Resources](#)

[Using the Command Prompt to Connect to NetWare File Resources](#)

Logon Script

A batch (.BAT or .CMD) file that runs each time a user logs on. A single logon script can be assigned to one or more user accounts.

Supported 16-Bit Utilities and NetWare-Aware Applications

Select one of the topics shown below for a complete list of supported MS-DOS 16-bit utilities or MS-DOS NetWare-Aware applications. Only the utilities and applications listed in these topics are supported. Known issues are described in the lists.

The NetWare-aware applications are supported on Intel, MIPS, and Alpha AXP platforms.

See Also

[MS-DOS 16-Bit NetWare Utilities](#)

[MS-DOS NetWare-Aware Applications](#)

MS-DOS 16-Bit NetWare Utilities

The Windows NT **net use** command or File Manager can be used to perform the same functions as the NetWare **attach**, **login**, and **logout** utilities, which are not supported. The Windows NT **net view** command can be used to perform the same function as the NetWare **slist** utility.

Like the NetWare **capture** command, the **net use** command enables MS-DOS and Windows applications to print to a specific port. In addition, Print Manager can be used to connect to NetWare print queues.

<u>Utility</u>	<u>Issue</u>
chkvol	None
colorpal	None
dspace	None
flag	None
flagdir	None
fconsole	None
filer	None
grant	None
help	None
listdir	None
map	None
ncopy	None
ndir	None
pconsole	None
psc	None
pstat	None
rconsole	Servers do not show if rconsole is run from a 4.x server.
remove	None
revoke	None
rights	None
security	None
send	None
session	Search mapping option not supported; will always map as root.
setpass	None
settts	None
slist	None
syscon	None
tlist	None

userlist	None
volinfo	If update interval = 5, command executes very slowly.
whoami	None

See Also

[Using File Manager to Connect to NetWare Resources](#)

[Using the Command Prompt to Connect to NetWare File Resources](#)

[Using Print Manager to Connect to a NetWare Print Queue](#)

MS-DOS NetWare-Aware Applications

Application	Versio n	Prerequisites
Lotus Notes, SPX connectivity option	3.0	<u>NWIPXSPX.DLL</u> , <u>NETWARE.DRV</u> , and <u>NWNETAPI.DLL</u> <u>Connection to a NetWare server</u> prior to loading Requires TBMI2 on <u>MIPS</u> and <u>Alpha AXP</u>
NetWare 3270 LAN Workstation for MS-DOS	3.0	None
NetWare 3270 LAN Workstation for Windows	1.2	Supported only on Intel platforms
<u>Attachmate Extra!</u> for MS-DOS to the NetWare SAA Gateway	3.1	Batch files
<u>Attachmate Extra!</u> for MS-DOS to the Attachmate 3270 Gateway	3.1	Batch files
<u>Attachmate Extra!</u> for <u>Windows</u> to the NetWare SAA Gateway	3.5	TSR
<u>Attachmate Extra!</u> for <u>Windows</u> to the Attachmate 3270 Gateway	3.5	TSR
DCA IRMA LAN for MS-DOS to Novell's SAA	2.1.0	None
<u>Btrieve</u> requester (BREQUEST.EXE)	6.10a	TSR

Gupta
SQLBase for
NetWare
systems

5.1.3

Btrieve support

NWIPXSPX.DLL,
NETWARE.DRV, and
NWNETAPI.DLL

Connection to a NetWare
server prior to loading

Runs only on an Intel
platform

NWIPXSPX.DLL

Many applications that are written for 16-bit Windows and are NetWare-aware require NWIPXSPX.DLL from Novell. If you have previously used the application under Microsoft Windows 3.x and are using the same computer for Windows NT, NWIPXSPX.DLL is already on your system. If you start the application and it cannot find this file, check your path by typing **path** at the Command Prompt. Verify that a copy of NWIPXSPX.DLL can be found. If not, obtain a copy of NWIPXSPX.DLL from Novell and copy it to the *\systemroot\SYSTEM32* directory.

If you are running these applications on either the MIPS or Digital Alpha AXP platforms, you will need to obtain NWIPXSPX.DLL from Novell. Copy NWIPXSPX.DLL to the *\systemroot\system32* directory.

If you copy NWIPXSPX.DLL to your Windows NT computer or modify your path statement, you must log off and then log back on for the changes to take effect.

NETWARE.DRV, NWNETAPI.DLL, and NWCALLS.DLL

NetWare-aware applications that use the NetWare application programming interface (API) to send and receive NetWare core protocol (NCP) packets might require NETWARE.DRV and either NWNETAPI.DLL or, for more recent versions of NetWare, NWCALLS.DLL.

NETWARE.DRV is installed in the `\systemroot\SYSTEM32` directory when you install Gateway Service. If you have previously used a NetWare-aware application on the same computer using an MS-DOSbased version of Windows, NWNETAPI.DLL or NWCALLS.DLL is probably already installed on your computer. If your application cannot find NWNETAPI.DLL or NWCALLS.DLL, make sure the appropriate file is installed on your computer and is in your computer's search path. If you are running the application on the Digital Alpha AXP or MIPS platform or you can't locate one of these .DLL files on your computer, contact Novell to obtain a copy of the appropriate file, and then install it in your `\systemroot\SYSTEM32` directory.

If you cannot load your NetWare-aware application with the version of NETWARE.DRV installed with the Gateway Service, replace NETWARE.DRV with the corresponding file supplied by Novell, dated 10/27/92 with a file size of 126,144 bytes.

If you copied any of these files to your Windows NT computer or modified your path statement during the current Windows NT work session, you must log off and then log back on for the changes to take effect.

Connection to a NetWare Server

If you do not have a preferred server and you have not connected to any NetWare server, you must first create a connection to a NetWare server.

Btrieve

If you are running MS-DOSbased or 16-bit Windows applications that require the Btrieve requester, BREQUEST.EXE, you must modify the AUTOEXEC.NT file located in `\systemroot\system32` so the applications can find the Btrieve requester. Find the location of BREQUEST.EXE on your computer and append location information in the AUTOEXEC.NT file.

For example, if BREQUEST.EXE is located within the `C:\BTRIEVE` directory, append the line shown below to AUTOEXEC.NT. Then log off and log back on for the changes to take effect.

```
lh c:\btrieve\brequest.exe
```

MIPS and Alpha Platforms

If the NetWare-aware application requires NWIPXSPX.DLL, you must have a copy of TBMI2.COM, supplied by Novell, in `\systemroot\SYSTEM32` to run the application on the MIPS or Digital Alpha AXP platform.

In AUTOEXEC.NT, insert the line shown below after the line referencing **vwipxspx**.

```
lh \systemroot\system32\tbmi2.com
```

Then log off and log back on to Windows NT.

Attachmate Extra! Extended for MS-DOS

If Extra! batch files are run from a console window, make the first line of the batch files **command /c** so that the Extra! hot keys work after Extra! has been initialized.

Attachmate Extra! for Windows IPX/SPX Connectivity

Attachmate Extra! for Windows requires the IPXINTFC, a terminate-and-stay-resident (TSR) utility. This TSR must be loaded by AUTOEXEC.NT before the DOSX TSR is loaded.

For example, suppose Attachmate Extra! for Windows has been installed in the C:\EXTRAWIN subdirectory. In AUTOEXEC.NT, make sure the following three lines are in the order shown below:

```
lh c:\extrawin\ipxintfc
REM Install DPMI support
lh \systemroot\system32\dosx
```

Log off and log back on to Windows NT for the changes to take effect.

Changing Your NetWare Password

You can change your password on one or several NetWare servers. If you want to change your password on more than one server, connect to all the servers before running the **setpass** command.

To change your password on a NetWare server

1. From the Main program group, start the Command Prompt, and use the **net use** command to connect to the NetWare server's SYS: volume.
2. At the Command Prompt, change to the drive for the NetWare server and type **cd \public** to make the PUBLIC directory the current directory.
3. At the command prompt, type **setpass** followed by the name of the NetWare server on which you want to change your password.

For example, to change your password on the server named NWSERVER type **setpass nwserver**

4. When you are prompted, enter your old password.
5. When you are prompted, enter a new password.
6. When you are prompted, retype your new password to confirm it.

The server confirms that you have successfully changed your password.

7. If you are connected to other NetWare servers that also use your old password, they are listed, and the server asks whether you want to change your password on these servers as well.

Type **y** and press ENTER to change the additional passwords. Type **n** and press ENTER to leave the passwords as they are.

See Also

[Supported 16-Bit Utilities and NetWare-Aware Applications](#)

Using Print Manager to Connect to a NetWare Print Queue

You connect to a NetWare print queue using Print Manager in the same way you would to connect to a shared printer on the Microsoft network. If the NetWare network is first in the network search order, the list of servers on the NetWare network is displayed automatically in the Shared Printers box. To hide the Shared Printers box, clear the Expand By Default check box.

To change the network search order, use the Network option in Control Panel.

To use Print Manager to connect to a NetWare print queue

1. From the Printer menu, choose the Connect To Printer command. Or choose the Connect Printer button on the toolbar.
2. In the Connect To Printer dialog box, select a printer from the Shared Printers box or type the name of a computer and print queue in the Printer box, and then choose OK.

For NetWare networks, the Shared Printers box shows servers and printer queues. Double-click an item to expand the display. For example, double-click a server name to display print queues. When you select a print queue in the Shared Printers box, Print Manager fills in the Printer box.

When typing a name, precede the computer name with two backslashes (\\) and separate the computer name from the print queue's name with a single backslash (\). For example, to specify a print queue named **printer1** on a NetWare server named **nw4**, type **\\nw4\printer1**.

3. If a printer driver is not available locally for a NetWare print queue, Print Manager prompts you to install a printer driver. Choose the OK button in the message box to continue. For details on installing a printer driver, see Print Manager help.

You can now print to the NetWare print queue just as you would to a Windows NT printer. Print Manager can generate considerable network traffic if print job information is updated frequently. You can decrease the amount of traffic by increasing the time between updates. The default is 60 seconds. You can increase the time by changing the Registry parameter for the refresh interval.

See Also

[Using the Command Prompt to Connect to a NetWare Print Queue](#)

[Setting Printing Options](#)

[Setting The Refresh Interval](#)

[Using the Gateway Service to Share NetWare Print Resources](#)

Using the Command Prompt to Connect to a NetWare Print Queue

If you are running an application that writes directly to a predefined port, you can use the **net use** command as you would use the NetWare **capture** utility to associate the NetWare print queue with the port. For example, to redirect output from LPT1 to the NetWare print queue called MEMOS on the server NW4, type:

```
net use lpt1 \\nw4\memos
```

This example is equivalent to the following NetWare **capture** command:

```
capture q=memos s=nw4 l=1
```

After you have redirected output using the **net use** command, you can use the **copy** command to send files that do not require formatting to LPT1, for example:

```
copy myfile.txt lpt1
```

You can also copy the file directly to the print queue, for example:

```
copy myfile.txt \\nw4\memos
```

See Also

[Using Print Manager to Connect to a NetWare Print Queue](#)

Using the Gateway Service to Share NetWare Print Resources

Once you have activated a gateway, you can share NetWare print queues with Microsoft networking clients, who see the NetWare queues as shared printers on your Windows NT Server computer.

To share resources on NetWare servers on which your credentials don't match those you used to enable the gateway, you must first establish a connection to the NetWare server using Print Manager or the **net use** command. The user account you use to log onto the NetWare server must be a member of the server's NTGATEWAY group.

Note: To share NetWare print queues on your Windows NT Server computer, a gateway must be enabled.

To share NetWare print resources using the Gateway Service

1. In Print Manager, select the printer icon or window for the NetWare print queue you want to share.
2. From the Printer menu, choose Properties. Or choose the Properties button on the toolbar.
3. In the Printer Properties dialog box, select the Share This Printer On The Network check box.

In the Share Name box, Print Manager creates a share name for the printer that conforms to MS-DOS naming conventions so MS-DOSbased computers can connect to the printer. If you edit the share name and your Windows NT Server computer has MS-DOSbased networking clients, be sure to follow MS-DOS naming conventions.

4. In the Location box, you can type a description of the printer's location. The contents of the Location box are for users' information only and are not used by Windows NT or the Gateway Service.
5. Choose the OK button.

See Also

[Using Print Manager to Connect to a NetWare Print Queue](#)

Setting the Refresh Interval

You can control the amount of time Print Manager waits to update the print job status for NetWare print servers. The default refresh interval is 60 seconds. Network traffic is generated each time information about a print job is updated. To generate less traffic, increase the refresh interval. To receive more frequent updates, reduce the refresh interval.

By default, the parameter that sets the refresh interval is not included in the Registry. To set the refresh interval to a value other than 60 seconds, add the **timeout** parameter to the Registry using the following procedure. Once you have added the parameter, you can edit its value.

Caution

Incorrect changes or deletions made to the Registry can damage Windows NT and prevent the system from running correctly. If errors in the Registry cannot be corrected, you may have to reinstall Windows NT from the original system disks.

To add the timeout parameter to the Registry

1. From the File menu of Program Manager or File Manager, choose Run.
2. In the Command Line box of the Run dialog box, type **regedt32** and then choose OK.
2. Navigate down the Registry tree to the following key:

```
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Print  
  \Providers\NetWare(R) Network
```

3. From the Edit menu, choose Add Value.
4. In the Add Value box, type **Timeout**.
5. In the Data Type box, select the REG_DWORD data type.
6. Choose the OK button.
7. In the DWORD Editor dialog box, select the Decimal option in the Radix box, type the refresh interval in milliseconds in the Data box, and then choose the OK button.

The value of **timeout** must be at least 10000 (10 seconds). To switch automatic refreshing off, select the Hex option in the Radix box and type FFFFFFFF in the Data box.

8. Choose the OK button.

Refresh Interval

In Print Manager, the amount of time between updates of information about pending print jobs.

Credentials

The username and password assigned to a user account.

Select Preferred Server for NetWare

- ▶ In the Preferred Server box, select the name of the NetWare server you want to use as your preferred server.

Enter Password

▶ Enter the password for the NetWare server you have selected as your preferred server.

If you are prompted for your NetWare password, your Windows NT password and the password on your preferred NetWare server may not be identical. By keeping your Windows NT password and your password to the NetWare server identical, you can access the NetWare server without having to enter your password again.

Setting Shared Directory Permissions

You can set the following permissions for files and directories through a gateway share:

- No Access (None)
- Read
- Change
- Full Control (All)

See Also


[Enabling a Gateway on a Windows NT Server Computer](#)

No Access (None)

Prevents any access to the shared volume, its subdirectories, and its files.

Read

Allows:

- Viewing filenames, directory names, and subdirectory names.
- Changing to the shared volume's directories and subdirectories.
-  Viewing data in files and running application files.

Change

Allows:

- Viewing filenames, directory names, and subdirectory names.
- Changing to the shared volume's directories and subdirectories.
- Viewing data in files and running application files.
- Adding files, directories, and subdirectories to the shared volume.
- Changing data in files.
- Deleting subdirectories and files.

Full Control (All)

Allows:

- Viewing filenames, directory names, and subdirectory names.
- Changing to the shared volume's directories and subdirectories.
- Viewing data in files and running application files.
- Adding files, directories, and subdirectories to the shared volume.
- Changing data in files.
- Deleting subdirectories and files.
- Changing permissions (NTFS files and directories only).
- Taking ownership (NTFS files and directories only).

Gateway Service for NetWare Dialog Box

Use the options in the Gateway Service for NetWare dialog box to select the NetWare server you use most frequently and to control printing features.

Choose one of the following buttons for information about the dialog box:

- [Username](#)
- [Preferred Server](#)
- [Add Form Feed](#)
- [Notify when printed](#)
- [Print Banner](#)
- [Gateway](#)
- [Overview](#)

See Also

[Setting a Preferred Server](#)

[Setting Printing Options](#)


[Using the Gateway Service to Share NetWare Print Resources](#)

[Enabling a Gateway on a Windows NT Server Computer](#)

Username

Displays the name of the user who is currently logged on. Options you set apply only to that user.

Gateway Button

 To enable the file gateway and to share NetWare volumes, choose the Gateway button.

Print Banner

When checked (the default), prints a page at the beginning of your document to separate it from others.



To stop printing a banner page, clear the Print Banner check box.

Notify When Printed

When checked (the default), displays a notice on your Windows NT computer when your document has been printed.

To stop notification when your document has been printed, clear the Notify When Printed check box.

Add Form Feed

When cleared (the default), an additional form feed is not sent to the printer at the end of a document.

To instruct the printer to eject a page at the end of a document, check the Add Form Feed check box.

Overview


Displays information on installing and configuring the Gateway Service for NetWare; using NetWare resources; and installing, configuring, and tuning NWLink.



To start help, choose the Overview button.

Preferred Server

Shows the name of the NetWare server to which you connect by default when you log on to your Windows NT account. The preferred server is the one that is queried for information about resources available on the NetWare network.

 To change the preferred server, select the name of a different server in the Select Preferred Server box.

Gateway Service

Enables users on Windows NT networks to access and use resources on NetWare networks.

Configure Gateway Dialog Box

Use the Configure Gateway dialog box to enable the gateway so you can share NetWare file and print resources, and to share NetWare volumes and directories and set permissions on them.

Choose one of the following buttons for information about the dialog box:

- [Enable Gateway](#)
- [Gateway account](#)
- [Password](#)
- [Confirm password](#)
- [Share name](#)
- [Add Button](#)
- [Remove Button](#)
- [Permissions Button](#)

See Also

[Setting Shared Directory Permissions](#)

[Enabling a Gateway on a Windows NT Server Computer](#)

Enable Gateway

To enable the file gateway, check this box.

Gateway Account

A gateway account is a user account that belongs to a group called NTGATEWAY on a NetWare server. The account is used to create an authenticated connection from your Windows NT Server computer to the NetWare server.



Type the username of your gateway account.

Password

Type the password for your gateway account

Confirm Password



Retype the password you typed in the password box.

Share Name


The Share Name box contains the names of shared NetWare file resources created using your gateway account. Microsoft networking clients can connect to these shares as if their contents were located on your Windows NT Server computer.

Add Button



Choose the Add button to share additional NetWare volumes or directories.

Remove Button

 Choose the Remove button to disconnect users and stop sharing the selected NetWare file resource.

Caution

The Remove button disconnects all users from the share without warning, which could result in a loss of data. It is prudent to warn users before disconnecting a share.

Permissions Button



Choose the Permissions button to control user access to the share.

New Share

Creates a share for a specified NetWare volume.

Choose one of the following buttons for information about the dialog box:

- [Share Name](#)
- [Network Path](#)
- [Use Drive](#)

See Also

[Enabling a Gateway on a Windows NT Server Computer](#)

Share Name

The Share Name box shows share names that users can specify to connect to the shared directory. In order for MS-DOS workstations to connect, the share name cannot exceed eight characters. On a Windows NT networks, the name can be up to 12 characters long.



Type the name of the share.

Network Path

The network path includes the name of a NetWare server, preceded with two backslashes, and the name of a NetWare volume, separated with a single backslash.

For example, to share the SYS volume on the NetWare server THOR, type **\\thor\sys**.



Type the path to a NetWare volume. Do not include a drive letter in the path.

Use Drive

By default, the drive letter of a new gateway share is the last unused letter of the alphabet. For example, the first gateway share is typically redirected to drive Z.

Access Through Share Permissions

Use the Access Through Share Permissions dialog box to set or change permissions for groups and users.

Choose one of the following buttons for information about the dialog box:

- [Access Through Share](#)
- [Owner](#)
- [Name](#)
- [Type of Access](#)
- [Add Button](#)
- [Remove Button](#)

See Also

[Setting Shared Directory Permissions](#)

[Enabling a Gateway on a Windows NT Server Computer](#)

Access Through Share


Displays the name of the shared directory through which access to files and subdirectories is controlled.

Owner

The name of the owner of a shared directory is not displayed. Ownership of a shared directory does not affect who can set permissions.


Name

Displays the names of groups and users and their current permissions.

 To change a permission, select the group or user and select a permission from the Type Of Access box.

Type of Access

Displays a list of available permissions. The permissions you can set are no access, read, change, and full control.


 To change a permission, select the group or user from the Name box and select a permission.

Add Button



To add groups or users to the permission list, choose the Add button.

Remove Button

 To remove a group or user from the permission list, select the group or user, and then choose the Remove button.

Add Users And Groups

Use the Add Users And Groups dialog box to add a group or user to the permission list for the share.

Choose one of the following buttons for information about the dialog box:


- [List Names From](#)
- [Names](#)
- [Add Button](#)
- [Show Users Button](#)
- [Members Button](#)
- [Search Button](#)
- [Add Names](#)
- [Type of Access](#)

See Also

[Enabling a Gateway on a Windows NT Server Computer](#)


List Names From

Displays the name of the domain or computer whose groups are shown in the Names box. An asterisk (*) following the name indicates that local groups for that domain or computer are shown.


 To display groups and users in another domain or on the computer, select another domain or select the computer.

Names


Displays the groups or users belonging to the current domain or computer.

 To add groups or users to the permissions list, select them in the Names box and choose the Add button.


Add Button

 To add groups or users to the permissions list, select the names in the Names box and choose the Add button.

Show Users Button

 To display the names of users belonging to the current domain or computer in the Names box, choose the Show Users button.

Members Button

 To see a group's content, select the group in the Names box and choose the Members button.

Search Button


To add a group or user, you must know the domain that contains the account for the group or user.




To find the domain to which a group or user belongs, choose the Search Button.

Add Names


Displays the names of groups and users you are adding to the permissions list.

 To add groups or users to the Add Names box, select them in the Names box and choose the Add button.

 Or type the names of groups and users in the Add Names box. Separate names with a semicolon. If the account of the group or user is not located on the computer or domain shown by the List Names From box, specify the location. Type the computer or domain name followed by the group or user name and separate the names with a backslash.


Type of Access


Displays a list of available permissions.

 To set a permission, select the group or user from the Name box and select a permission. Then choose the OK button.


Local Group Membership

Displays the members of the local group selected in the Add Users And Groups dialog box.

 To include the group in the Add Names box in the Add Users And Groups dialog box, choose the Add button.

 To include some of the listed members in the Add Names box in the Add Users And Groups dialog box, select them and choose the Add button.

On a Windows NT Server network, global groups that are members of a local group appear in the list.


 To see a global group's members, select the group and choose the Members button.


See Also

[Enabling a Gateway on a Windows NT Server Computer](#)

Global Group Membership

Displays the members of the global group selected in the Add Users And Groups dialog box or in the Local Group Membership dialog box.

 To include the group in the Add Names box in the Add Users And Groups dialog box, choose the Add button.

 To include some of the listed members in the Add Names box in the Add Users And Groups dialog box, select them and choose the Add button.

See Also

[Enabling a Gateway on a Windows NT Server Computer](#)

Find Account

When you add a user or group to the permissions list, you must know the name of the domain that contains the user or group's account. Use the Find Account dialog box to locate the domain of an account on a Windows NT Server network.


Choose one of the following buttons for information about the dialog box:

- [Find User or Group](#)
- [Search All](#)
- [Search Only In](#)
- [Search Button](#)
- [Add Button](#)

See Also

[Enabling a Gateway on a Windows NT Server Computer](#)

Find User or Group


 In the Find User Or Group box, type the name of the group or user whose account you want to find.

Search All




To search for the account in all the listed domains, select the Search All button.


Search Only In

 To search for the account in one or more domains, select them in the Search Only In box.

Search Button

 After specifying a group or user and the domains to search, choose the Search button to start the search.

Add Button

 To add the user or group to the Add Names box in the Add Users And Groups dialog box, select the user or group in the Search Results box and then choose the Add button.

Removing Existing Redirector Installations

If you have an existing installation of a NetWare redirector, such as NetWare Services for Windows NT from Novell, you must first remove the existing redirector installation and restart your computer and then reinstall the Gateway Service.

To remove an existing NetWare redirector

1. In Control Panel, choose the Network option.
2. In the Network Settings dialog box, select the name of the redirector software in the Installed Network Software box, and then choose the Remove button.
3. When Windows NT prompts you to confirm that you want to remove the software, choose the Yes button.
4. In the NetWork Settings dialog box, choose OK.
6. Restart your computer for the change to your network configuration to take effect.

See Also

[Troubleshooting Gateway Service](#)

