# **PC-NFS Networking**

The PC-NFS network provides access to remote file systems and printers. It is integrated with Windows to let you access these network files and printers from Windows applications, such as File Manager, Print Manager, or Control Panel. PC-NFS software also provides applications that run across your network.

**Copyright** 

## **Topic Areas**

PC-NFS Applications Network Drives Network Printers Features in the PC-NFS Network Icon

See Also <u>Getting Started</u> <u>Compatibility with Norton Desktop</u> <u>Printing with Both Local and Remote Printers</u>

Press F1 to get more information about How to Use Help.

### **Network Printers**

Connecting to Network Printers Disconnecting from Network Printers Managing Print Jobs Browsing Network Printers Getting a List of Server Names to Browse Setting Connection Options Saving Connections Using Previous Connections

### **Network Drives**

Connecting to Network Drives Disconnecting from Network Drives Browsing File Systems on the Network Getting a List of Server Names to Browse Setting Connection Options Saving Connections Using Previous Connections

## **PC-NFS Network Icon**

The PC-NFS Network Icon can be accessed from the Control Panel.

## Topics

Login and Logout Network Warning See PC-NFS Settings See the PC-NFS Serial Number Set Defaults Show Current Connections

## **PC-NFS Windows Applications**

Console Messaging	Sends and receives short messages.
<u>FTP</u>	Transfers files to and from FTP servers.
Login	Sets the current login name.
Network Statistics	Examines cumulative statistics for various protocols, such as number of UDP Packets sent and received.
Network Information Lookup	Looks up user names, machine names and other information in the NIS maps.
Ping	Determines if a machine is accessible on the network
Remote Services Status Telnet	Determines if a machine is running specified RPC services. Runs applications remotely, using terminal emulation

#### **Getting Started**

If you want to use Windows networking features such as connecting drives and printers, or use the PC-NFS Windows applications, you must:

- 1. Start the PC-NFS network before starting Windows.
- 2. Start the TSR rtm.exe before starting Windows

If you have not started the PC-NFS network and the RTM, when you enter Windows, you will receive an error message indicating what is not started. If you will be running for a long time without the network running, you may choose to turn the Network Warning off. See <u>Network Warning</u> for details.

The <u>PC-NFS applications</u> also require the PC-NFS network and the RTM to be run before they can be used.

When you start Windows, your current <u>user name</u> (login name) is in effect. If you wish to <u>login</u> with a different user name while in Windows, you can do so through the <u>Network Icon</u> in the Control Panel, or by using the <u>Login Application</u>.

#### To run the Console Messaging Application

If you plan to run the <u>Console Message</u> application you must also start the TSR <u>listener.exe</u> before starting Windows.

If you want to be able to receive messages immediately, you should start the Console Messaging application from the <u>PC-NFS Group</u>. Messages that are received by your PC will not be displayed unless this application is running. You may have this application started automatically when Windows is started. To do so, start Console Message, and choose the Options menu. Select Startup. Windows will automatically start Console messaging when Windows is started. You can also move the Console Messing application into the Windows Startup Group.

#### To start RTM or listener

If you receive a message that you need the RTM or listener to run:

- 1. Exit Windows.
- 2. Type rtm or listener at the DOS prompt, and press Enter.

The TSR will load, and you can restart Windows.

Note: You can not start TSR's from a DOS box in Windows.

#### Norton Desktop Compatibility

If you are using Norton Desktop, you should configure the PC-NFS software as described in <u>Configuring</u> <u>PC-NFS and Norton Desktop</u>.

#### **Printing to Local and Remote Printers**

If you want to print both to a printer attached to your machine, and a printer on the network, you must make sure that Control Panel and Print Manager are correctly configured. See <u>Printing to Local and</u> <u>Remote Printers</u> for more information.

Related Topics Console Messaging Login and Logout Network Warning PC-NFS Applications

#### **Configuring PC-NFS software and Norton Desktop**

Norton Desktop interacts with the network differently than Windows applications such as File Manager.

**Note:** Read the README.TXT file supplied by Norton Desktop for recommendations about using the Norton Desktop with networks. It contains important information about how Norton Desktop interacts with network drives.

#### To ensure compatibility with Norton Desktop and PC-NFS Software

To run PC-NFS software with Norton Desktop 1.0 you must edit the PCNFS.INI file, and may have to edit the AUTOEXEC.BAT. You may also want to change the default Norton Desktop display configuration.

1. In your PC's Windows directory, modify the PCNFS.INI file to specify a value of 1 (true) for the Norton 1.0 compatibility, as follows:

[Compatibility] Norton1.0=1

2. If you are running Norton's Erase Protect Utility, modify your AUTOEXEC.BAT file to ensure the lines:

EP /ON IMAGE

are after the lines:

NET INIT RTM (this line is optional)

3. If you have performed step 2, reboot your PC so that these changes take effect. Otherwise, you can just restart Windows.

#### Seeing Network Options and All Network Drives

When you start Norton Desktop, you may not see any options related to connecting and disconnecting drives in the desktop area. Be sure that the Full Menus option is enabled, by:

- 1. Within Norton Desktop, choose the Configure Menu
- 2. Choose the Full Menus option. Once you have done this you can <u>Connect to Network Drives</u> and <u>Disconnect Network Drives</u> just as you do in File Manager.

In Norton Desktop you may not see network drives that you mounted before starting Windows. To see these drives:

- 1. Choose the Configure Menu.
- 2. Choose the Select Drive Icons option.
- 3. In the dialog box that appears, choose All Network Drives to see your network drives.

## **Serial Number**

Each copy of PC-NFS software has a unique serial number, which is sometimes called a license.

## To see the serial number for your copy of PC-NFS software

1. Choose the <u>Network Icon</u> from the Control Panel.

The serial number for your copy of PC-NFS software is displayed on the Network Icon dialog box, along with other information about the PC-NFS network.

## Login and Logout

You can view your current user name by choosing the Network Icon from the Control Panel.

#### To change to a different user name

- Log out by choosing the Logout button from the Network Icon dialog box. You will be logged out, and your User Name will be set to <u>nobody</u>. If you are logged in as nobody, you will have limited access to the network. The Logout button will now show Login.
- 2. Log in to the network with a different user name by choosing the Login button on the Network Icon dialog box.
- 3. Enter your user name and password
- 4. Choose OK. You will be logged in with the specified user name.

Note: If your current user name is nobody, start at step 2 of this procedure.

Related Topics

## **Current Connections**

You will see some of the currently connected drives and printers in various Windows applications that use drives and printers, such as File Manager or Print Manager. For a complete list, use the process described below.

#### To see a list of drives and printers that are currently connected

- 1. From the Control Panel, choose the <u>Network Icon</u>.
- 2. Choose Settings. This displays the <u>Settings</u> dialog box.
- 3. Choose Connections. This will display a list of the current <u>connections</u>, showing what drive or print devices are connected, and the file system or printer to which they are connected.

## **PC-NFS Network Settings**

You can display a summary of how the PC-NFS network is currently configured.

#### To see a summary of the PC-NFS network configuration

- 1. From the Control Panel, choose the <u>Network Icon</u>.
- 2. Choose Settings. This displays the Settings dialog box. This dialog box displays information about the network, including:

DomainSubnet MaskUser NameEthernet AddressUser IDGroup ID's

It also displays the name and <u>IP Address</u> of the:

<u>NIS Server</u> <u>Gateway</u> <u>Authentication Server</u> Your machine

From the Settings dialog box, you can also change <u>Defaults</u> and see a list of <u>Current Connections</u>.

#### Defaults

The Defaults dialog box enables you to mask the default <u>file permissions</u> that will be used when you create a file on a connected drive. This overrides your current file permissions, as defined by your <u>user</u> <u>ID</u>. The changes you make to the default file permissions will be retained until you reboot your machine, or change them again. Masking allows you to further restrict existing permissions, but it does not allow you to expand your permissions. For example, if you have Read permissions only set for the Group, setting Write and Execute permissions in this dialog box will not enable them. However, you could turn off Read permissions.

#### To mask your default file permissions

- 1. From the Control Panel, choose the <u>Network Icon</u>.
- 2. Choose Settings. This displays the Settings dialog box.
- 3. Choose Defaults. This displays the Defaults dialog box. Choose Read, Write, and Execute permissions for each of the following:

User	Your user ID
Group	Groups of which you are a member
All	All groups, including those groups of which you are not a member

4. To confirm these changes, choose OK, or choose Cancel to discard them.

#### **Network Warning**

To use the network, the PC-NFS network must be started before starting Windows. You must also have the <u>RTM TSR</u> started. When you enter Windows, you will receive a message if the PC-NFS network is not started, or if RTM is not loaded. If you will be running for a long time without the network running, you may choose to turn this network warning off.

#### To disable the network warning

When you start Windows without the network, a message will be displayed. To disable the warning:

- 1. Choose the check box Disable Warning when Network is Not Running, on the message that is displayed.
- 2. Choose OK.

The next time you start Windows without the PC-NFS network or the RTM, you will see no warning.

#### To enable the network warning

You must have the network running.

- 1. From the Control Panel, choose the Network Icon.
- 2. On the Network Icon, remove the selection from the check box Disable Warning when Network is not Running.
- 3. Choose OK to retain this change.

## Related Topics

Starting the Network

#### **Connecting to Network Printers**

Connecting a network printer links a DOS device name (for example LPT1:) to a network printer. Then, when you want to print to the network printer, you simply use the DOS device name.

#### To access the Network Connections dialog

- 1 In the Control Panel window, choose the Printers icon.
- 2 Choose the Connect button.
- 3 Choose the Network button.

The Network Connections dialog box is displayed.

#### To connect to a printer

- 1. In the Network Connections dialog box select a port to which to connect.
- 2. In the Path field, enter the <u>server</u> and printer name in the format: server:printer name
- 3. Choose the Connect button.
- 4. The <u>Connection Options</u> dialog box is displayed.

**Hint:** You can select the Use the Default Options check box to use the default connection options. If you do this, the Connection Options dialog box does not appear.

You can also:

<u>Choose Browse</u> to get a list of printers on a specified server

<u>Choose Previous</u> to see a list of <u>connections</u> made in the past.

#### **Related Topics**

Disconnecting from Printers Current Connections Saving Connections Printing to local and remote printers

#### **Browsing Network Printers**

To connect to a printer, you need to know the name of the <u>server</u> and the name of the printer to which to connect. Browsing lets you locate this information.

#### To browse

- 1. Choose the Browse button from the Connections dialog box.
- Select a server from the list of servers by clicking on it. If you do not have a list of servers and are running <u>NIS</u>, you can get a list of servers by choosing <u>Get Servers</u>. If you know the name of the server, you can enter it in the edit field.
- 3. Choose Show Printers, or double-click the server name in the list .A list of printers is shown.
- 4. Select a printer by clicking on it.
- 5. To find out more about a particular printer, choose Printer Info. This option shows you the status of the selected printer and the number of print jobs in the printer's queue.
- 6. After you have located the printer you want, choose Select to return to the Network Connection dialog box.

**Note:** You can only browse on servers that are running version 2 of the <u>pcnfsd</u> program. If you want to check to see if a server is running version 2 of the pcnfsd program, you can use the <u>Remote</u> <u>Services Status</u> application.

#### **Related Topics**

Connecting Network Printers Network Printers

#### **Get Server Names**

The Get Servers dialog box lets you get a list of the <u>servers</u> currently available on the network if you are using <u>NIS</u>.

#### To get server names

- 1. Choose Get Servers from the <u>Browse File Systems</u> or <u>Browse Network Printers</u> dialog box or from the <u>Remote Services Status</u>, <u>Ping</u> or <u>FTP</u> applications. The Get Servers dialog box appears.
- 2. You may then choose either:

Servers in Current Subnet If you are a part of a <u>subnet</u> and you want a list of just the servers on your subnet.

All Servers in Domain If you want a list of all available servers in your <u>domain</u>.

3. Choose Verify Servers Are Available if you want to find out which servers are both running and have the appropriate software to support exported file systems or shared printers.

Note: Verify Servers Are Available may only be done when browsing file systems and printers.

- 4. Choose Start Search to begin the search. You may choose Cancel to stop the search, and choose Cancel again to leave the Get Server dialog box. If you cancel, you will create a list of servers found up to the time you have canceled.
- 5. If you choose Verify Servers Are Available, you will be asked to confirm the verification. Once it starts, you will not be able to cancel it. This verification process may take over a minute for each server that is **not** running the appropriate software to support file systems or print services. If you have many servers in your network, you may want to run this process overnight.

## **Related Topics**

Browsing Printers Browsing for File Systems on the Network on

#### **Setting Printer Connection Options**

The Printer Connection Options dialog box allows you to control certain aspects of the connection to a remote printer.

When the Options dialog box appears you may choose OK to continue the connection, or Cancel to cancel connecting.

#### **Data Transfer**

Change these values only if you are familiar with the details of data transfer, or have been advised to change these by your system administrator.

Data Transfer	Sets	Notes
Write Size	The number of bytes to transfer.	Default: 8192
Number of Retries	Number of times to retry transmission before stopping.	Default:4
Time before Retry	The time, in tenths of a second, before starting a retry.	Default :7 Set to 0 to retry indefinitely. This is not recommended

#### **DOS - Print Filter Options**

These options apply when printing from DOS.

Print Filter Option	Description
Standard	Supports most printing, including ASCII and
	Postscript which includes a Postscript header.
Postscript	Use Postscript if your applications do not
	append a Postscript header.
Raw	Sends all characters to the printer unchanged.

#### DOS - Queue spool file

These options apply when printing from DOS.

The print job spools:
After time-out elapses.
When application is exited
When you issue a net print command.
When you press the Hot key sequence.

#### **Other Options**

Choose <u>Add to PC-NFS Startup</u> to add the printer connection to the PC-NFS startup file drives.bat. The connection will be made automatically the next time you start the PC-NFS network.

Choose Use These Values as Defaults to change the default values provided for this dialog to the values you currently have set in this dialog box.

#### **Related Topics**

Managing Print Jobs

**Connecting Network Printers** 

#### **Disconnecting from a Printer**

Disconnecting from a printer ends the <u>connection</u> between your PC and the printer.

Do not disconnect from a printer if you are currently printing to it. If you have already spooled jobs to that printer, and the jobs are in that printer's print queue, the jobs will print.

## To disconnect

- 1. Select the printer to disconnect, for example, LPT1:.
- 2. Choose Disconnect.

#### **Related Topics**

<u>Connecting Network Printers</u> <u>Current Connections</u>

#### **Saving Connections**

To ensure that <u>connections</u> you make in Windows can be used again, you can save connections to the PC-NFS startup file, or have Windows connect all drives and printers for you when Windows starts.

#### To save connections in the PC-NFS startup file

Connections saved this way will be started when the PC-NFS network starts.

1. Make a connection. The <u>Connection Options</u> dialog box appears.

**Note:** You can select the Use the Default Options check box to use the default connection options. If you do this, the Connection Options dialog box does not appear. To ensure that the Connection Options dialog box does appear, remove the check from the Use the Default Options check box.

2. In the Connections Options dialog box, choose the check box Add to PC-NFS startup. This will automatically save your drive and printer connections to the PC-NFS startup file, drives.bat.

#### To have Windows connect all drives at Windows startup

In Windows 3.1, all connections made from File Manager and Control Panel are saved to a list of permanent connections. If you disconnect from a drive or printer from File Manager or Control Panel, the drive or printer is removed from the permanent connections list.

When Windows 3.1 is started, Windows attempts to connect all connections on the permanent connections list. If the drive is already in use, the existing connection is maintained.

The default is to try to connect all permanent connections. To override this default:

- 1. Choose Control Panel, then choose the Network Icon
- On the Network Icon, remove the check from the check box Restore All Connections at Startup.
  Note: If you wish to remove a connection from the permanent connection list, you must edit the ... file.

## **Previous Connections**

<u>Previous Connections</u> holds the definition of the server and path or server and printer you used to make a connection. It does not maintain the connection options or drive letter used.

## **Related Topics**

<u>Connecting Network Printers</u> <u>Connecting Network Drives</u> <u>Setting Printer Connection Options</u> <u>Setting Drive Connection Options</u> <u>Current Connections</u>

#### **Using Previous Connections**

The Previous Connections list enables you to select a <u>server</u> name and a <u>file system</u> that you have previously used. There is also a list of Previous Connections for printers.

#### To select a Previous Connection

- 1. From the Network Connections dialog box, choose Previous. The Previous dialog box displays.
- 2. You may select a Previous Connection and choose Select to return to the Network Connections dialog box. The Network Path or Printer Name will be filled with your selection. You may modify this path.
- 3. If you wish to remove Previous Connections that you are unlikely to use, select the Previous Connection, and then choose Delete.
- 4. When you are done, choose Cancel. This will return you to the Network Connections dialog box.

#### **Related Topics**

<u>Connecting Network Printers</u> <u>Connecting Network Drives</u> <u>Saving Connections</u>

#### Managing Print Jobs

The PC-NFS network and Printer Manager allow you to manage your print jobs. You can:

View the print queue of currently connected printers.

View the print queue of printers not currently connected.

Remove print jobs from the print queue if they are yours.

Connect a Network Printer

Each of these requires that the <u>server</u> you contact is running <u>pcnfsd</u> version 2, except for Connecting to a Network Printer. The Print Manager provides information about these services. If you are viewing a print queue of a printer that is not currently connected, you must use the syntax server:printer, just as if you were connecting the printer.

#### **Related Topics**

Printing to local and remote printers

## **Printing with a Local Printer Attached**

When you wish to print with a local printer attached, and still be able to print to network printers, you must take the following steps:

#### To configure for Local and Remote Printing

- 1. In Control Panel, choose "Use Print Manager". Print Manager correctly handles output redirection to a local or remote printer.
- 2. In Print Manager, make sure "Print Net Jobs Direct" is disabled. To do this In Windows 3.1, choose the menu "Options" and then choose"Network Settings." In Windows 3.0, choose the menu "Options" and then choose"Network."

If you do not follow these procedures, you may not be able to print to you local printer.

## **Connecting to Network Drives**

Connecting a network drive links a DOS drive letter to a <u>server</u> name and <u>file systems</u>. You can access the files and executables on the file systems once you connect them.

#### To access the Network Connections dialog

- 1. Start File Manager.
- 2. From the Disk menu, choose Network Connections.

The Network Connections dialog will appear.

#### To connect a network drive

- 1. Select the drive letter.
- In the Path field, enter the server and path name in the format: server:/path/path or \\server\path\path
   The format server:/path/path is preferred.
- 3. Choose the Connect button.
- The <u>Connection Options</u> dialog appears.
  Hint: You can select the Use the Default Options checkbox to use the default connection options. If you do this, the Connection Options dialog does not appear.

You can also <u>Browse</u> to get a list of file systems on a given server, or choose <u>Previous</u> to see a list of <u>connections</u> which you have made previously

Each drive connected will be added to the Permanent Connections list.

#### **Related Topics**

Disconnecting from Drives Current Connections Saving Connections

#### **Browsing File Systems on the Network**

To connect to a drive, you need to know the name of the <u>server</u> and <u>file system</u> to which you want to connect. Browsing lets you identify this information.

#### To browse

- 1. Choose the Browse button from the Network Connections dialog box.
- From the Network Servers list box, select the name of the server which has file systems you want to view. If you do not have a list of servers and are running <u>NIS</u>, you can get a list of servers by choosing the <u>Get Servers</u> button. If you know the name of the server, you can enter it in the edit field.
- Choose Show Exports, or double-click the server name in the list.
  Note: If the server name you have selected is not an NFS server, it may take over a minute before you receive a message which tells you that there are no exported file systems. There is no way to cancel during this operation.
- 4. A list of <u>exported</u> file systems on that server is shown in the Exported File systems list box. You can select one by double-clicking on it, or selecting the file system and choosing Select Path. This returns you to the Network Connections dialog.
- 5. After returning to the Network Connections dialog, you may add additional path information.
- 6. You can also select a different server to see its file systems, repeating steps 2 through 4.

#### **Drive Connection Options**

Connection Options lets you control your privileges and communications with the <u>file system</u> and files you are accessing in the connection.

When the Options dialog box appears, you may choose OK to continue the connection, or Cancel to cancel connecting.

#### **Connections Options**

You may change any of the following options.

Drive Access Option	Provides the following drive access	
No Sharing Control Read Only Access Lock Manager Control	Read and write to files on the drive. Only read the files on the drive. Use only if the server has lock manager capability and if you are using applications tha have file sharing and /or file record locking.	

#### **Data Transfer**

Change these only if you are familiar with the details of data transfer, or have been advised to change these by your system administrator.

Data Transfer	Sets	Default/Notes
Write Size	The number of bytes to transfer.	8192 bytes
Number of Retries	Number of times to retry transmission before stopping.	4 times
Time before Retry	The time, in tenths of a second, before starting a retry.	Default: 7 Set to 0 to retry indefinitely. This is not recommended

#### **Other Options**

Choose the <u>Add to PC-NFS Startup</u> check box to add the connection you are making to the PC-NFS startup file drives.bat. The connection will be made automatically the next time you start the PC-NFS network.

Choose Use These Values as Defaults check box to change the default values provided for this dialog box to the values you have currently set in this dialog box.

## **Disconnecting from Network Drives**

Disconnecting from a drive ends the connection between your PC and the server.

#### To access the Network Connections dialog

- 1. Start File Manager.
- 2. From the Disk menu, choose Network Connections.

The Network Connections dialog will appear.

#### To disconnect from a drive

- 1. Select the drive letter to disconnect, e.g., M:.
- 2. Chose Disconnect.

The drive should not be in use when you disconnect. Switch to another drive before disconnecting.

Each drive disconnected will be removed from the Permanent Connections list.

#### **Related Topics**

Current Connections Saving Connections

Authentication Server **Connect** Connections Console Message **Disconnect** <u>Domain</u> Ethernet Address Export File Locking File Permissions File System <u>FTP</u> **Gateway** Group ID Group Name IP Address <u>Listener</u> <u>Login</u> Mail Alias Mount Daemon Network Statistics Network Icon Network Information Query <u>NIS</u> <u>NIS key</u> NIS map NIS server <u>nobody</u> Password Print Queue PCNFSD Ping PC-NFS Group Port Number Protocol **Remote Services Status** RPC RPC Program Name **RPC Program Number** RPC Version Number <u>RTM</u> <u>Server</u> <u>Subnet</u> <u>Telnet</u> <u> TSR</u> User ID User Name

Authentication Server A machine on the network that has software that verifies user privileges on the network.

## Connect

To make a file system or printer on a network server accessible from your PC.

## Connections

The drives and printers that are redirected to a server. These drives and printers are referred to by names such as N: and LPT2:, but are located on another machine in the network.

## Console Message

A short message that can be sent to other users on your network. You can also receive console messages. Console messages can be sent from users of DOS, Windows, and UNIX.
## Disconnect

To remove the link between a file system or printer on a server and your PC.

#### Domain

A named collection of machines on a network.

# Ethernet Address

A six-part hexadecimal number that identifies an Ethernet communications adapter.

**Export** To make a file system available on a file server so other machines can connect to it.

**File Locking** A service that prevents simultaneous updates of the same file by different users.

#### File Permissions

Refers to the three types of file access on a file server: Read, Write, and Execute. As the owner of a file, you can grant all or some of these permissions to user groups.

#### File System

A location on a server, expressed as a path name, to which other machines can connect. For example, the server whiz might make two file systems available: /usr and /my/own/stuff. Available file systems are referred to as exported file systems.

## FTP

File Transfer Protocol. The FTP application conforms to the File Transfer Protocol, letting you transfer files between machines on a network without regard to the operating systems of the machines involved in the transfer.

**Gateway** A machine that provides a link between two networks.

**Group ID** A unique number associated with a group name on a file server. Generally, the file server assigns your group ID to any files that you create.

# Group Name

The name of a group of users. Members of a group share common file access privileges. The Group Name maps to a Group ID. For example "engineering" is a Group Name that might map to the Group ID 123. A user may belong to several groups.

## IP Address

A number that uniquely identifies every computer connected to a TCP/IP network.

#### Listener

A TSR that "listens" for console messages being sent on the network. You must start the listener before starting Windows to receive messages.

## Login

An application where you enter the user name to identify yourself on the network. Your user name is used to determine what rights and permissions you have as you perform network activities, as well as identify you to others using the network.

#### Mail Alias

A name that represents a group of mail addresses. For example, you may have a mail alias to include all of the engineers on a project, "eng", another for the writers, "writers", and yet another that combines the two groups, "next\_release". When mail is sent to a mail alias, all the members of the mail alias recieve a copy of the mail message.

#### Mount daemon

A server program that performs mounts and dismounts (or connections and disconnections) to an NFS server.

## **Network Statistics**

An application that displays statistics about the network, such as the number of packets sent and received.

## Network Icon

An icon that appears in the Control Panel. This icon provides access to PC-NFS services, such as Login, and displays PC-NFS network specific information.

#### **Network Information Query**

A PC-NFS application that lets you look up information in network databases, such as user names, machine names, machine addresses, and other network data. This application uses NIS services.

## NIS

A service that provides access to a set of network databases that contain information such as server names, IP addresses, and Ethernet addresses.

## NIS key

An index to an entry to an NIS databse (also called a map). For example, in the map hosts.byname, the key is the name of a host machine, such as greathost. In the map hosts.bynumber, the key is the IP address of the machine, such as 126.148.4.22.

#### NIS Map

A data file containing network information about various aspects of the network. For example, there are maps for hosts, groups, mail aliases, passwords (user IDs), protocols, and services. In addition, any domain may have additional maps to facilitate administering the network.

## **NIS Server**

The server that currently supplies NIS services, such as the lookup of server names and addresses.

## nobody

If you do not specify a user name when logging in to PC-NFS, you will be assigned the default user name nobody. The user name nobody has a minimum number of system privileges defined by the system administrator.

### Password

A character string used to verify a user name. For example, a user name might be tarzan, and the password, swinging.

## Print Queue

A list of the print jobs waiting to be printed on a given printer. The printer may be referred to either by its redirected name (for example LPT1:) or by its network name (for example *server:printer*), depending on the context.

#### PCNFSD

The PC-NFS services daemon. The PC-NFS services daemon runs on a server and provides services such as redirected printing. PCNFSD Version 2 supplies more print services than Version 1, and should be used in preference to PCNFSD Version 1.

**Ping** The ping application lets you determine if your PC has a working connection to a network machine.

## Port Number

The number of a port or logical communication channel on the network. Many services take advantage of well known ports for their activity.

## Protocol

A defined interaction between network components. Many key features of networking are protocol-based, including TCP, UDP, NFS, NIS, telnet, and FTP.

## Remote Services Status

Determines if a machine is running specified network RPC services, such as services for remote printing.

## **RPC (Remote Procedure Call)**

A mechanism that allows client/server computing. The client program calls for procedures that a server application performs on another machine. The RPC protocol provides a definition for the interaction between the client and server.

## **RPC Program Name**

The name of an RPC service, such as NIS, NFS, or the lock daemon. This name may vary across network implementations (it is dependent on how it has been defined in the services file). so the RPC Program Number is considered the definitive identifier.

**RPC Program Number** The number of an RPC service. This is considered the key identifier of the service.

#### **RPC Version Number**

The RPC program version. Often several versions of an RPC program will be running. Use the version number to determine if you are running the correct version. For example, use PCNFSD version 2 to get more printing services than are available in PCNFSD version 1.

## RTM

The Resident Transport Module. A TSR that is used by PC-NFS software, and that must be started before running Windows.
**PC-NFS Group** A group within the Program Manager that contains PC-NFS applications.

### Server

A machine that provides resources to other computers on the network. Common server types are file servers, print servers, and FTP servers.

## Subnet

A means of making the Ethernet address for small networks more efficient by splitting host numbers into two fields. Usually servers on your subnet are located close to you.

# Telnet

An application that lets you log in to another computer, providing terminal emulation of that computer.

## TSR

A Terminate-and-Stay-Resident program that remains in memory while relinquishing control of the PC to the user for running other programs.

## User ID

A unique number associated with each user name. Generally, a file server assigns your user ID to those files that you create, as the owner of those files.

## User Name

The character string with which you identify yourself to the network. Your name maps to your user ID. For example "tarzan" is a user name, which might map to the user ID 123.

# Exit

Press Exit to leave an application.

System menu

Minimize button