

IBM TCP/IP Network Port Monitor

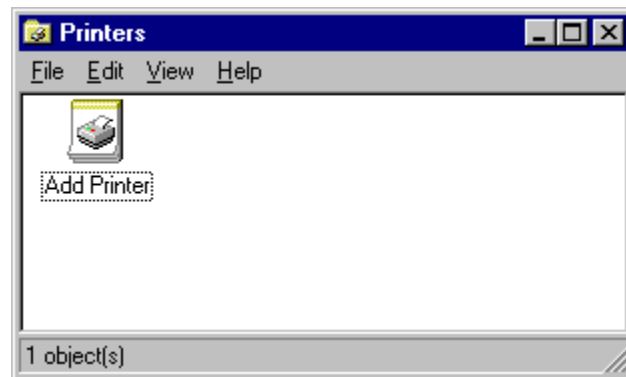
Demo - Installation and Setup

Demos shown below:

1. **Installation**
2. **Creating an IBM TCP/IP Network Port**
3. **Sharing a printer to the network**
4. **Windows 95/98 client setup**

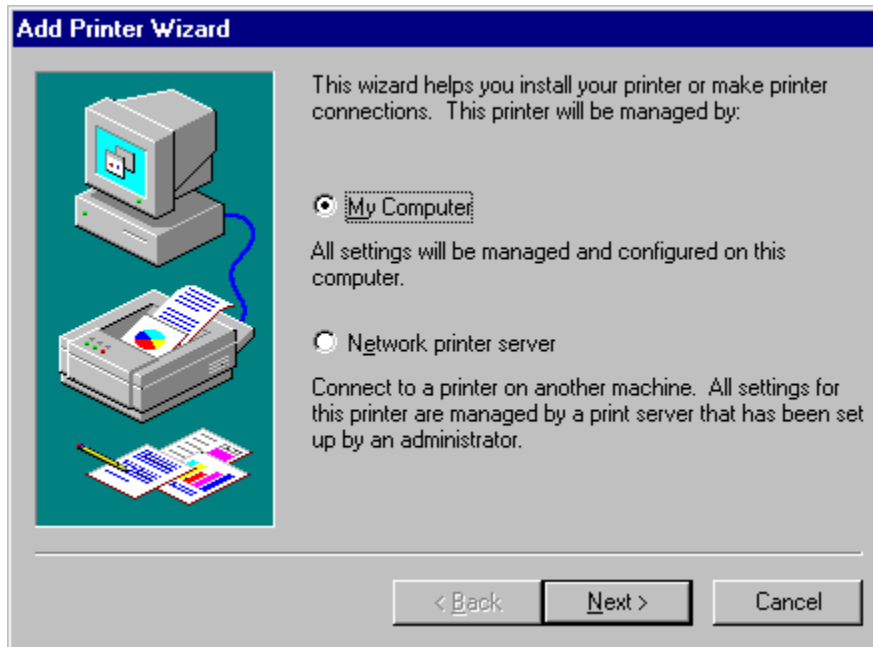
1. Installation

The installation of the IBM TCP/IP Network Port Monitor and the creation of IBM TCP/IP Network Ports can all be done as part of the standard Windows NT 4.0 Add Printer process. To begin this process, open the Printers folder, which can be done with Start -> Settings -> Printers, or by double-clicking "Printers" in My Computer. The printers folder looks like:



The Windows NT 4.0 Printers folder

Double clicking on "Add Printer" brings up the Add Printer wizard:



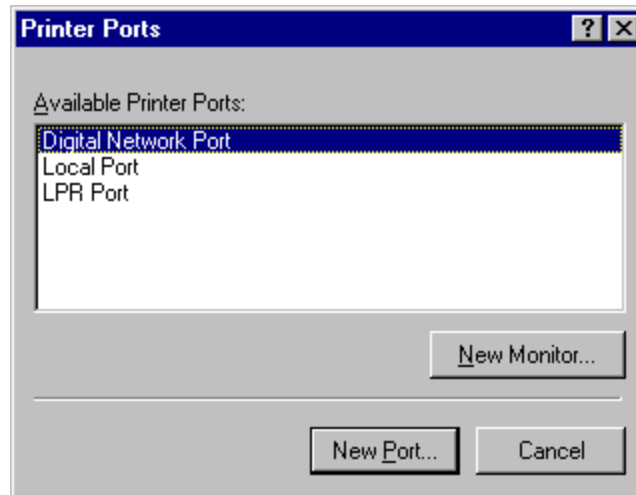
The first page of the Windows NT 4.0 Add Printer wizard

Since you are installing a printer on this workstation, leave the radio button as is, and click “Next>”, which results in:



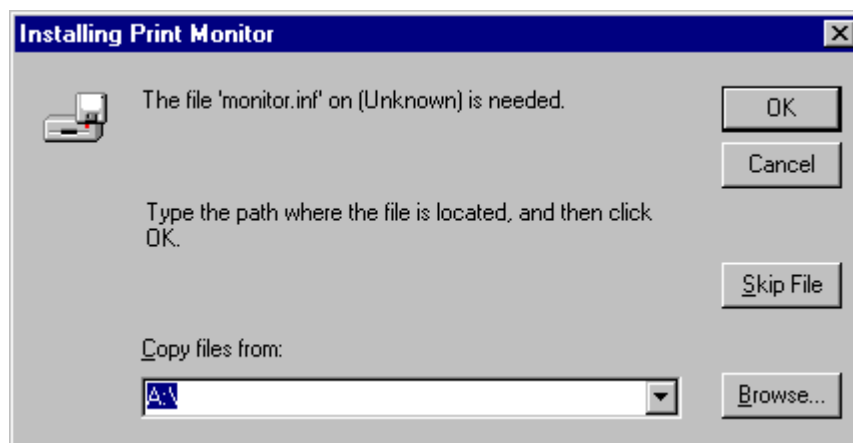
The Windows NT 4.0 Add Printer wizard—selecting a port

The installation of a port monitor is available in the Add Port process, so click “Add Port...”, bringing up:



The Printer Ports window

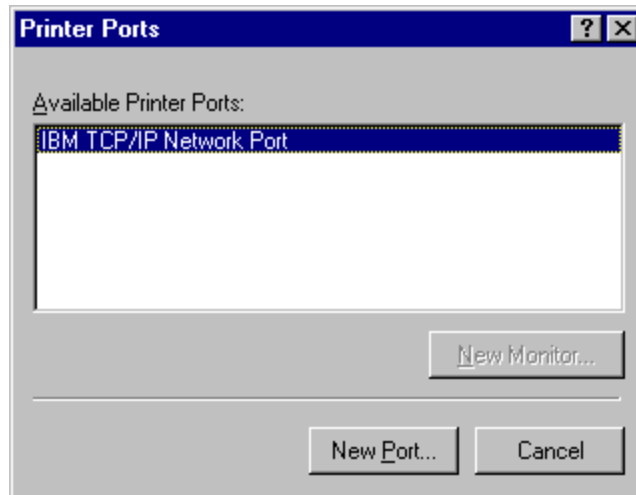
Since we have not yet installed the IBM TCP/IP Network Port Monitor, the entry “IBM TCP/IP Network Port” does not appear in the list of available printer ports. To install the port monitor, click “New Monitor...”, bringing up:



The Installing Print Monitor window

In the “Copy files from” entry field, enter the directory where the port monitor files are located. This will normally be either a location on an IBM Printer Setup CD-ROM or the location where you unpacked the file you downloaded from the web. Once you’ve done this, click “OK”.

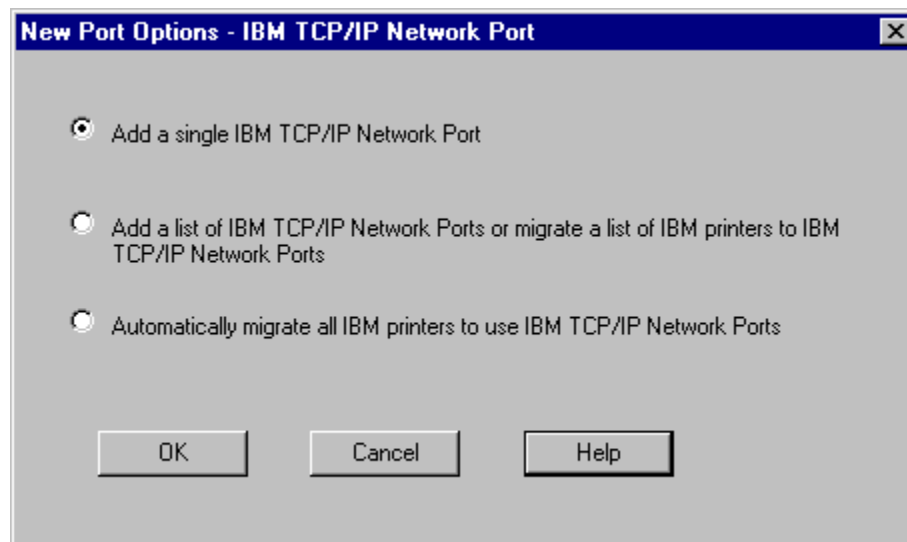
The Printer Ports window returns, except now only the IBM TCP/IP Network Port Monitor is in the list:



The Printer Ports window immediately after installation

Note: The other port types have not been lost. The next time you open the Printer Ports window, they will be back. They have simply temporarily disappeared from this window as a result of the Windows NT 4.0 port monitor installation process.

To continue the installation, you must click on "New Port...". A window will appear for a few moments showing that the port monitor files are being copied, then the main window of the IBM TCP/IP Network Port Monitor's "new port" process is displayed:

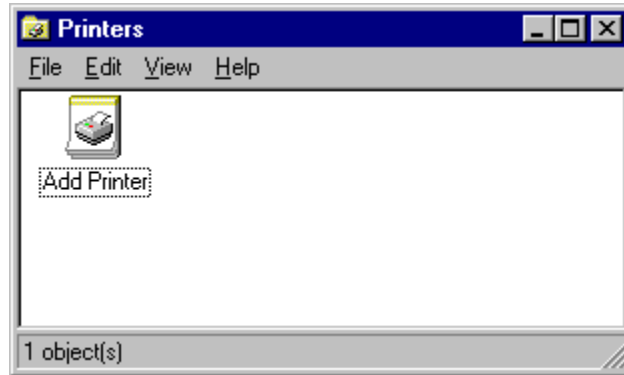


The New Port Options window

The IBM TCP/IP Network Port Monitor has now been installed. Normally we have installed the port monitor in order to then use it, so the next step would be to continue adding an IBM TCP/IP Network Port. To see the demo of this, continue to the next section (the "Creating an IBM TCP/IP Network Port" demo), but note that you can skip through the next section until you arrive at the point where the New Port Options window is displayed.

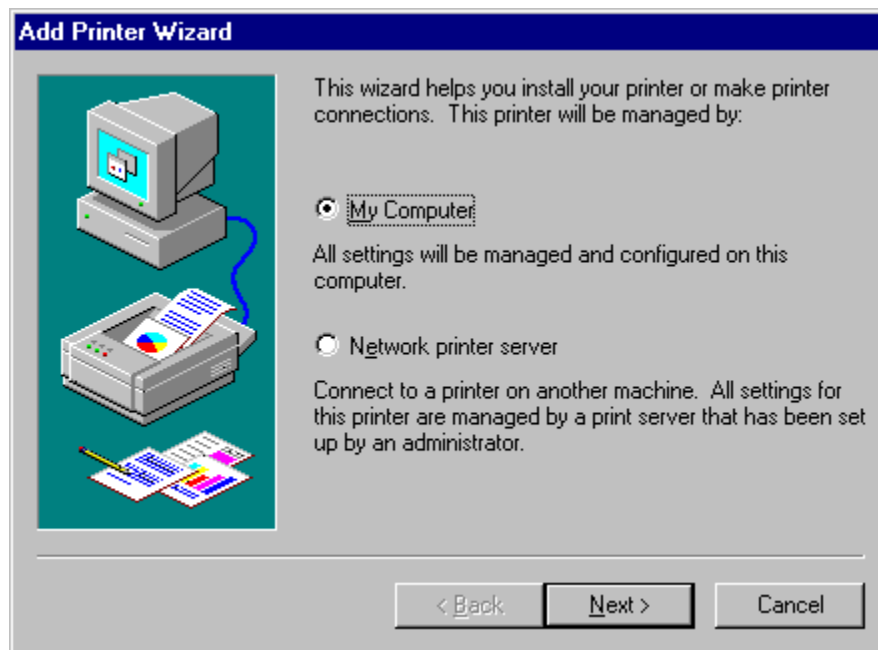
2. Creating an IBM TCP/IP Network Port

The creation of IBM TCP/IP Network Ports is done as part of the standard Windows NT 4.0 Add Printer process. (Note: This demo will repeat much of the "Installation" demo above, simply because they both are done in the Add Printer process.) To begin this process, open the Printers folder, which can be done with Start -> Settings -> Printers, or by double-clicking "Printers" in My Computer. The printers folder looks like:



The Windows NT 4.0 Printers folder

Double clicking on "Add Printer" brings up the Add Printer wizard:



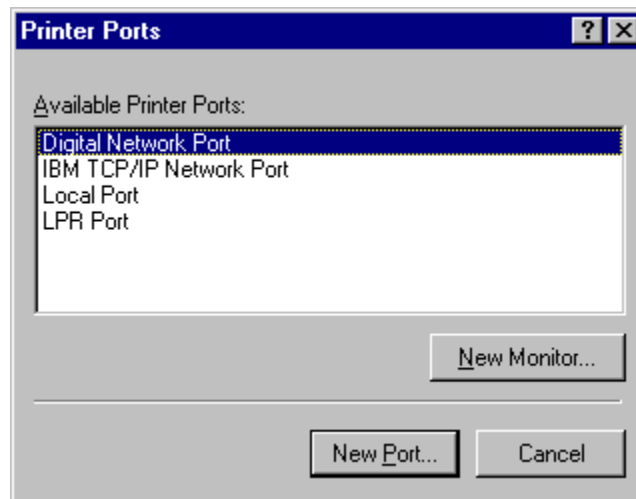
The first page of the Windows NT 4.0 Add Printer wizard

Since you are installing a printer on this workstation, leave the radio button as is, and click "Next>":



The Windows NT 4.0 Add Printer wizard—selecting a port

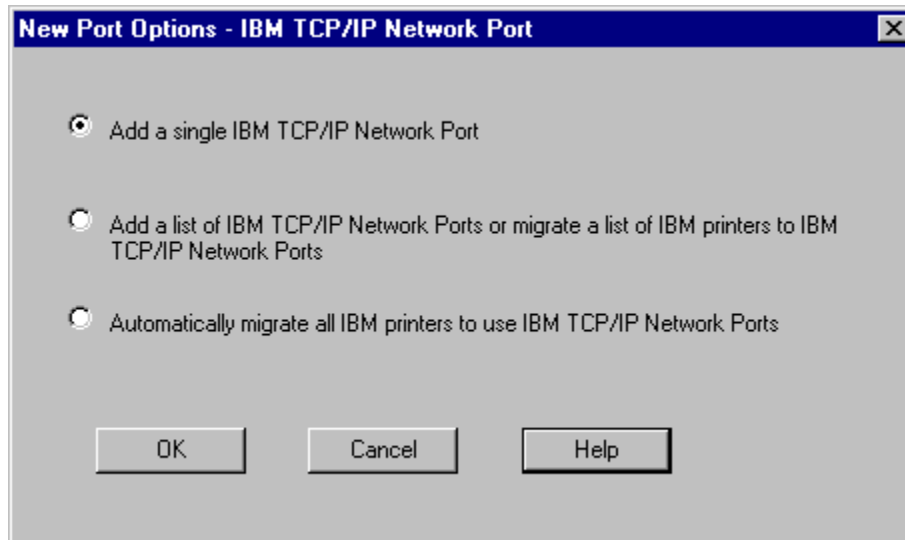
We want to add a new port, so click “Add Port...”, bringing up:



The Printer Ports window

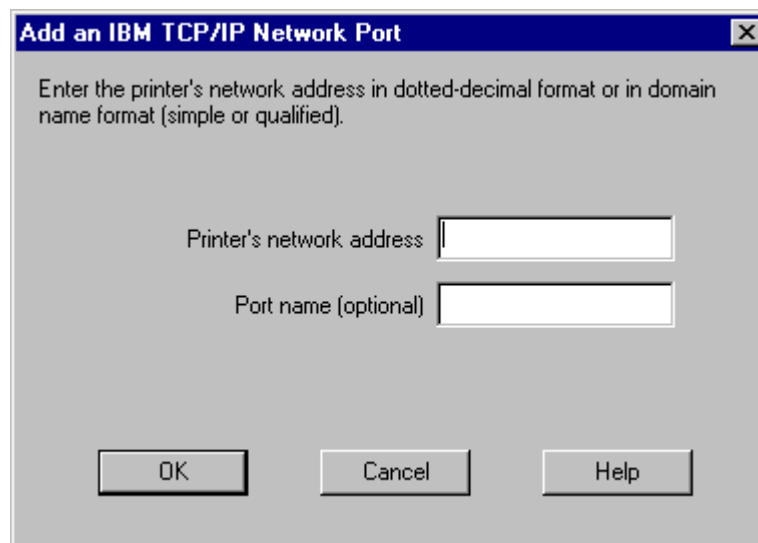
(Note: If “IBM TCP/IP Network Port” is not in the list of printer ports, this means you have not yet installed the IBM TCP/IP Network Port Monitor. A demo of the installation process is the first demo in this file—the “Installation” demo.)

Select “IBM TCP/IP Network Port” from the list, then click “New Port...”, bringing up the “New Port Options” window of the IBM TCP/IP Network Port Monitor:



The New Port Options window

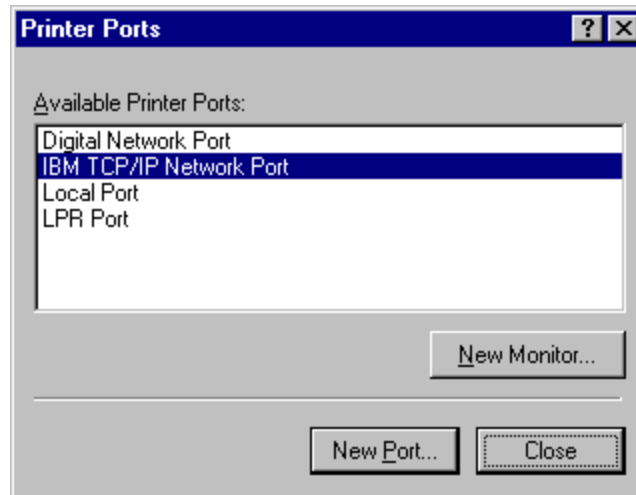
This demo will show adding a single port, so we leave the radio button as is and click "OK", resulting in:



The Add an IBM TCP/IP Network Port window

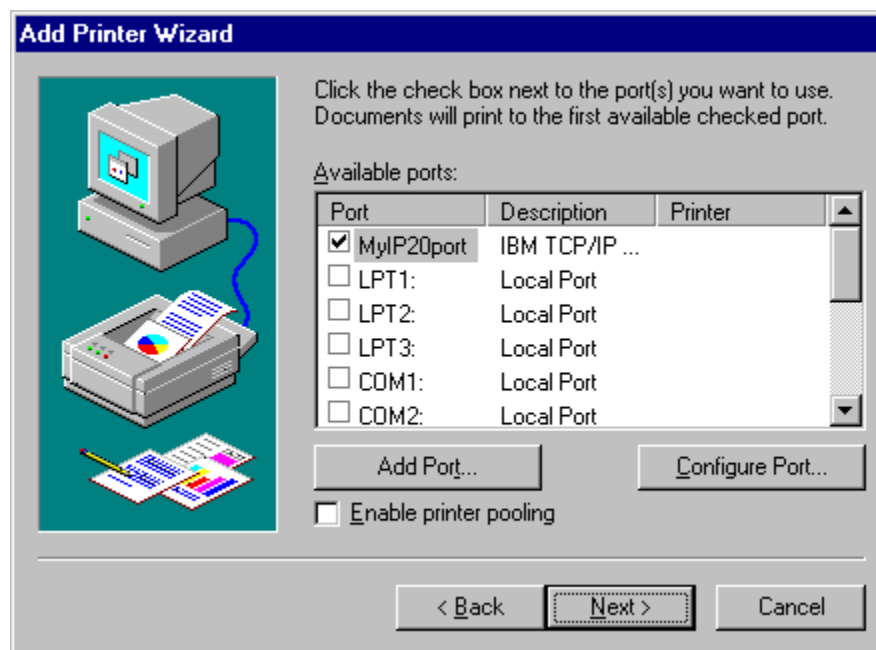
On this screen, you simply enter the network address of the printer. This can either be as dotted-decimal (e.g. 1.2.3.4) or as a domain name (e.g. myprinter). Optionally, you can also give the new port a name; if you do not enter a name, a default name of the form IBM:<network address> will be used.

After the entry fields have been filled in, clicking "OK" creates the port. At this point, you are returned to the "Printer Ports" window:



The Printer Ports window

Note, however, that now the bottom right-hand button is “Close” rather than “Cancel”, and it is now the default button. Clicking “Close” returns you to the Add Printer wizard, and the newly-created port is now in the list of ports, and has been selected:



The Windows NT 4.0 Add Printer wizard—selecting a port

At this point, you would continue the Add Printer process by clicking on “Next>” and providing all the necessary information to add the new printer (driver, printer name, whether it should be the default printer, and so on). In particular, see the “Sharing a printer to the network demo” just below for how to set up the printer such that it can be used from clients on other workstations.

The rest of the Add Printer process has nothing to do with the IBM TCP/IP Network Port Monitor, so we will not show it here in this demo.

Once the printer has been set up, since it is using an IBM TCP/IP Network Port, you will receive real-time printer and job status for the printer. For demos of the port monitor in action

for a printer, see the “The IBM TCP/IP Network Port Monitor in action” demo file available in the same place you got this file.

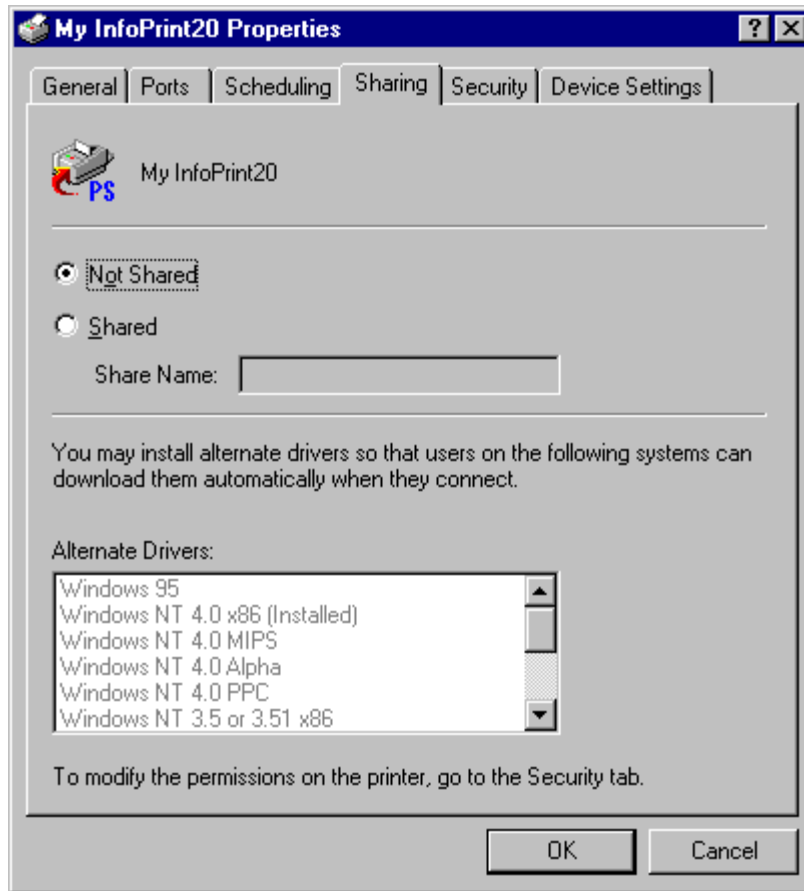
3. Sharing a printer to the network

Once a printer has been set up to use an IBM TCP/IP Network Port, and you wish to make it available to clients on other workstations, you need to share it to the network. Once you have done this, you have created a “print server”—that is, a machine that will accept clients for at least one of its printers. “Sharing a printer to the network”, then, means essentially “creating a print server”, and vice versa.

Notes:

- In the demo below, the standard method for sharing a Windows NT 4.0 printer is shown. **There is nothing specific to the IBM TCP/IP Network Port Monitor in the demo below.** Nevertheless, the demo is presented to show you how simple it is to set it up such that a client (on Windows 95/98, for example) can get real-time printer and job status from the IBM TCP/IP Network Port Monitor installed on a Windows NT 4.0 “print server”.
- The steps shown in this demo can be done during the creation of a printer (that is, in the Add Printer wizard) rather than, as shown here, after the printer has already been created. However, the values entered are the same, so this demo will present the correct way to share a printer, wherever the sharing is set up.

To share a printer to the network, bring up the Printers folder, right-click on the printer, and select “Sharing...”, bringing up the window:



The Properties window for a printer—sharing the printer to the network

The window above shows that the printer has not yet been shared to the network. To share the printer, simply click on “Shared”, and give the printer a share name. This share name is the name by which clients can access the printer.

An additional, optional, step is to install drivers for the client machines. If you do this, when a client links to your shared printer, the necessary driver will be downloaded automatically to the client. This makes the installation of the client much easier and also helps to guarantee that all clients are using the correct driver. To enable this automatic download, select the operating systems for which you expect to have clients.

When you click on “OK”, if you have selected any operating systems in the “Alternate Drivers” list, you will be prompted to enter the location of the drivers for those systems. These drivers will then be copied into a location where they will be available for automatic download.

4. Windows 95/98 client setup

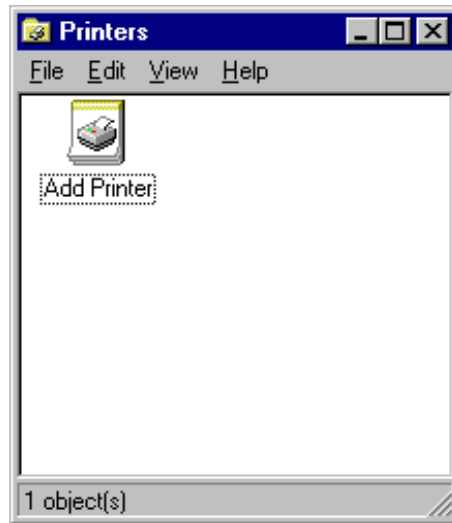
Once the print server has been set up as above (see the “Installation”, “Creating an IBM TCP/IP Network Port”, and “Sharing a printer to the network” demos above), you can print through the print server from Windows 95/98—you set up a Windows 95/98 client.

This process is very easy. Since all status information is provided through the standard Windows 95/98 queue view window, no extra applications need be installed on the client. This is especially important, since there are many clients but only one (or a few) print

server(s).

Note: In the demo below, the standard method for setting up a Windows 95/98 print client is shown. **There is nothing specific to the IBM TCP/IP Network Port Monitor in the demo below.** Nevertheless, the demo is presented to show you how simple it is to set up a client to get real-time printer and job status from the IBM TCP/IP Network Port Monitor (which has been set up on the Windows NT 4.0 print server).

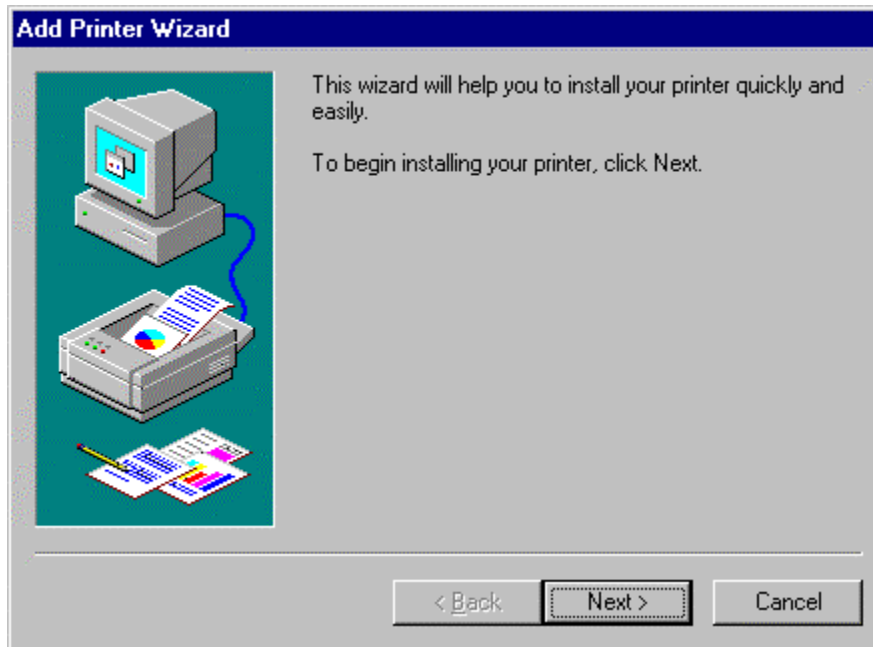
To set up a client on Windows 95/98, the first step is to open the Printers folder. This can be done with Start -> Settings -> Printers, or by double-clicking "Printers" in My Computer. The printers folder looks like (note: all windows shown below will be from Windows 95; Windows 98 windows are either the same or similar):



The Windows 95 Printers folder

This is an empty printers folder, since you haven't yet created any printers.

Now double-click on "Add Printer", bringing up the Add Printer Wizard:



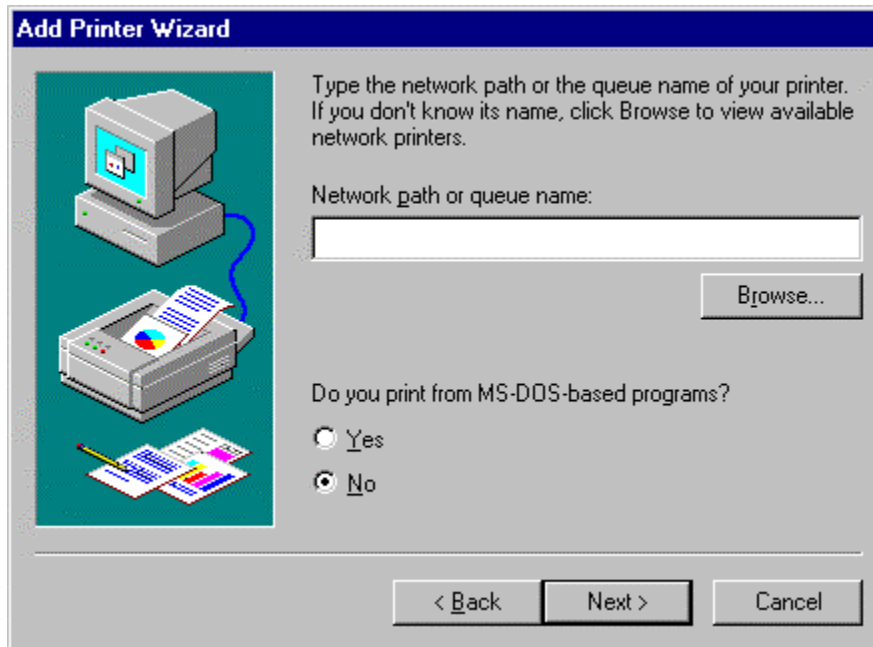
The start of the Add Printer Wizard on Windows 95

Clicking “Next>” takes you to the next page in the wizard:



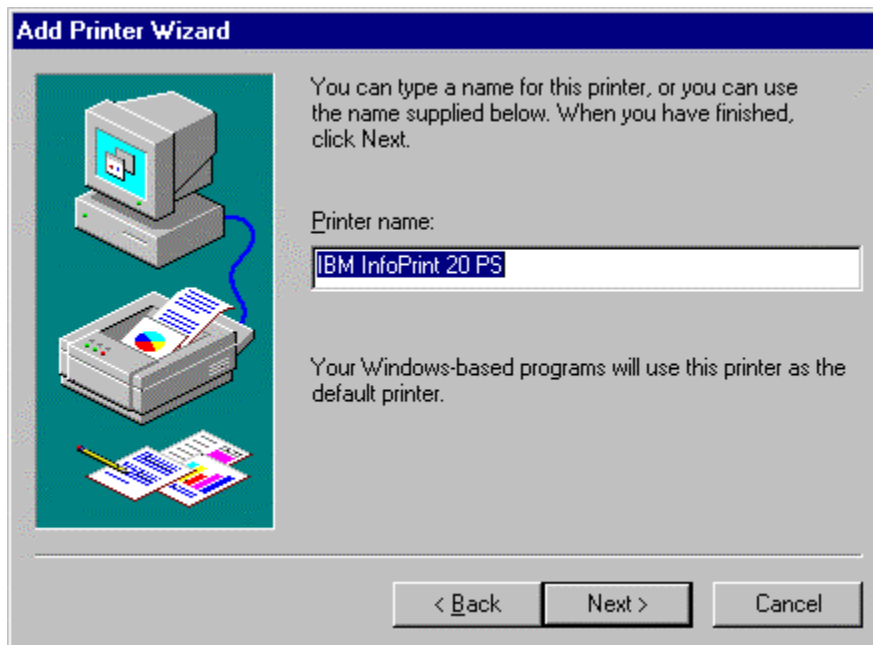
The Add Printer Wizard on Windows 95—specifying how printer is attached

As described on the window, you need to specify if you are setting up to print directly to the printer or to print through a print server. Since you are setting up a client, you need to select “Network printer” on the above window, then select “Next>”. This brings up the window:



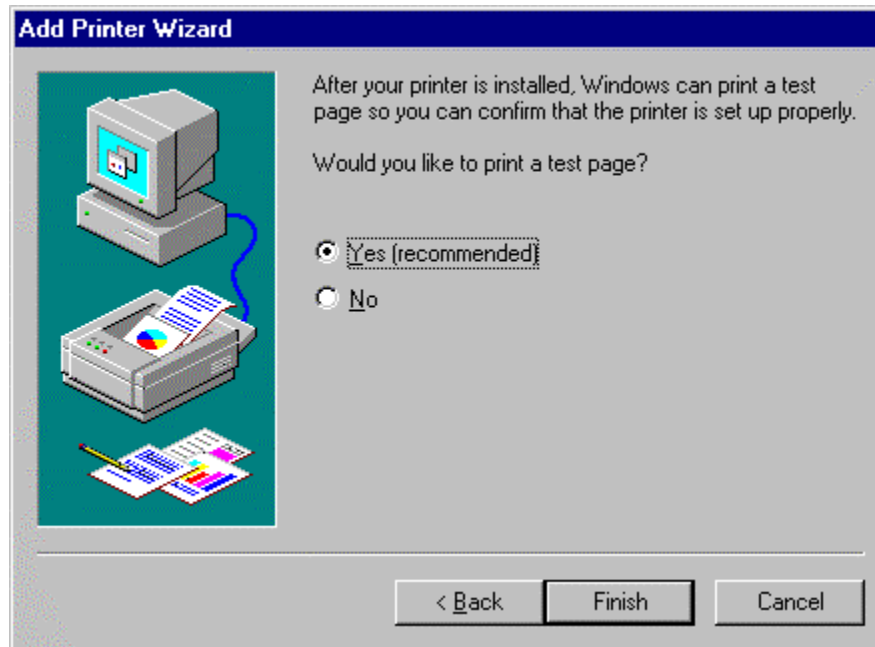
The Add Printer Wizard on Windows 95—pointing to the shared printer

Here you must enter the name of the shared printer on the print server. For example, imagine that the printer set up on the print server had the share name MyIP20, and the name of the print server was NTPrtServ. The correct thing to enter, therefore, is \\NTPrtServ\MyIP20. You can also click “Browse...” to find the printer of interest on the network. Once you’ve done one of these two, select “Next>” to bring up the following window:



The Add Printer Wizard on Windows 95—giving the printer a name

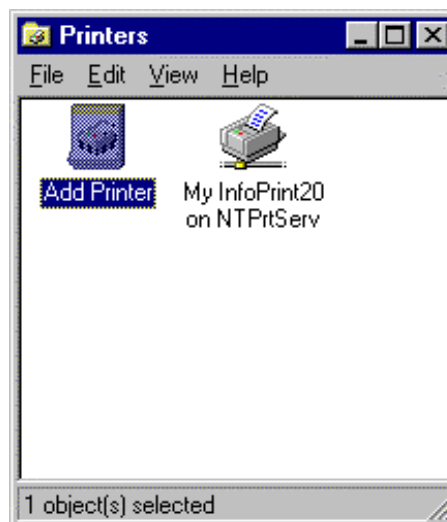
Enter any printer name you wish. We will use a name like “My InfoPrint20 on NTPrtServ” (the “on NTPrtServ” is so that you remember this is a shared printer). “Next>” then brings us to:



The last page of the Add Printer Wizard on Windows 95

After you click “Finish”, if you watch closely, a “Copying Files...” window will appear for a few seconds. This window is reporting on the progress of a very useful operation: the printer driver for the Windows 95 machine is being downloaded automatically from the Windows NT 4.0 machine.

You are returned to the Printers folder, which now contains the newly-created printer:



The Windows 95 Printers folder, with the new printer

That’s all there is to it! Even for novices, the steps above can be done in a minute or less. And once you’ve done the steps, your Windows 95 machine will get printer and job status on the Windows 95 queue view automatically, provided by the IBM TCP/IP Network Port Monitor that has been installed and setup on the print server. For more on the printer and job status you will see, look at the “Printing from a Windows 95/98 client” demo in the “The IBM TCP/IP Network Port Monitor in action” demo file available in the same place you got this file.