

Connecting Print Partner V Series to a Windows NT 4.0 Print Server using Ethernet C card.

Introduction

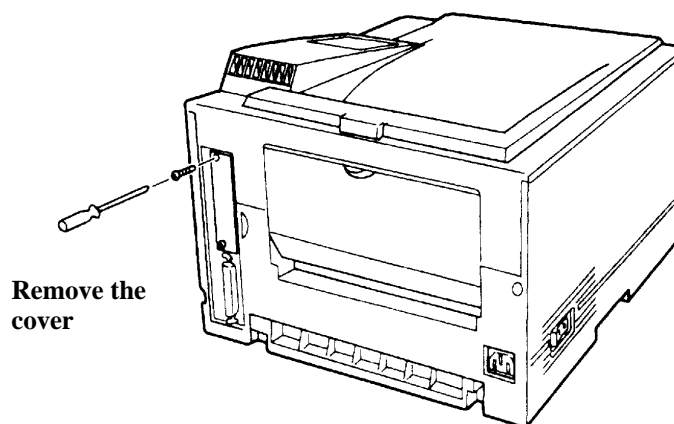
This document describes how to use Windows NT Workstation or Server 4.0 as a print server for Fujitsu's Print Partner V series printer range. A print server is the place on the network where print jobs are queued up prior to being sent to the printer. It is possible for a printer to have just one queue on a dedicated server, or to have a queue on each machine on the network. Typically a dedicated server is used on large networks, and a queue for each machine is used on smaller workgroup networks. Whether you need to set up a server or a queue for each machine, the setup of Windows NT 4.0 is more or less the same. The differences are, on a server you need to share the queue so that every body else can use it, and in multiple queue environments you need to repeat the procedure on each machine that needs to connect to the printer.

Setup Procedure

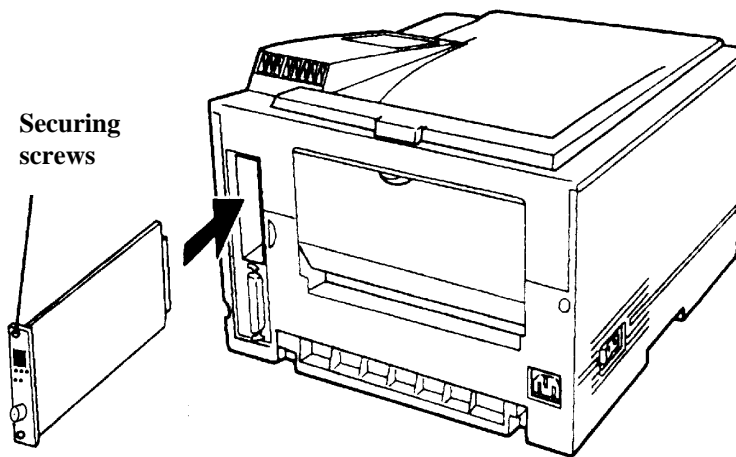
- 1) [Install the printer network adapter card into the printer.](#) Connect the printer to its mains supply, and then plug in its network connection. Switch the printer on.
- 2) Now [set up the IP address of the printer's network adapter card.](#)
- 3) Lastly [install the printer on your Windows NT](#) machine. Repeat this procedure as required where multiple printer queues are required.

Installing the printer network adapter into the printer

The Print Partner 10/14A printers use the Fujitsu Ethernet C adapter card, to connect to Ethernet type networks. This needs to be installed into the printer as follows:



- 1) Remove the blanking cover above the parallel port by removing the two securing screws.



2) Use a tested and working anti-static wrist strap in accordance with its manufacturer's instructions. Remove the network adapter from its packaging, and slide the board into the interface slot, and push it home. Secure the board with the screws supplied.

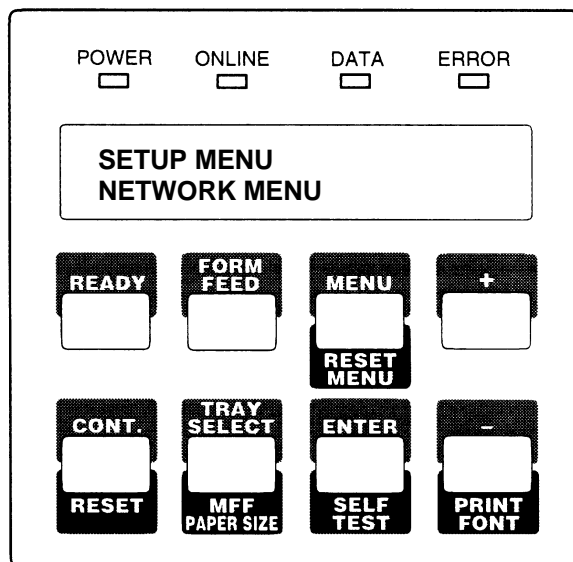
3) Connect the adapter card to your network either using the 10BaseT (twisted pair) or 10Base2 (thinnet coax cable) port. The printer will automatically detect the

Ethernet adapter and which port is being used when the printer is powered up. Connect the power lead and switch on.

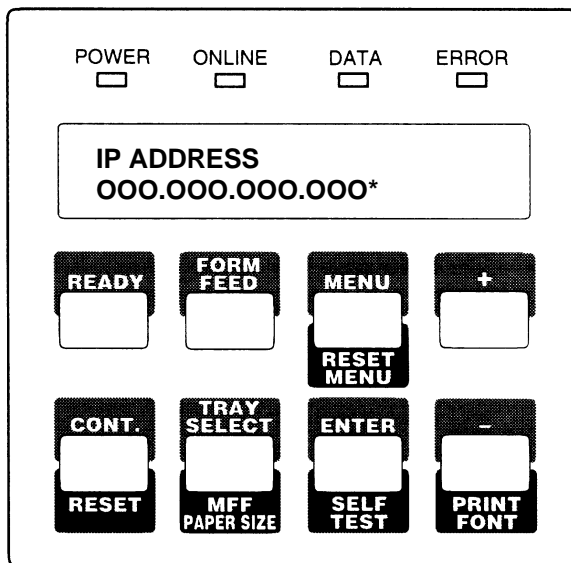
Setting the IP address of the printers adapter card

The printer needs an address on the network, so that Windows NT 4.0 can send print jobs to it. This procedure involves setting three values, the IP address, netmask, and gateway address, if you are not familiar with these terms see [IP addresses](#). The values can be set from the printers control panel. To do this:

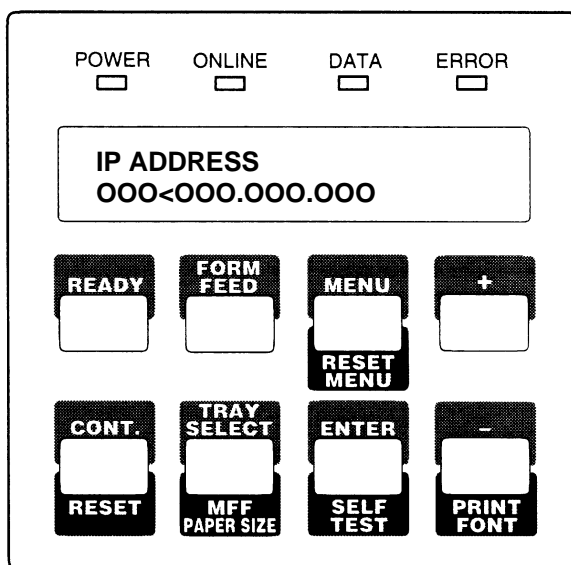
- 1) Power up the printer and wait for the control panel to display 'READY'. Press the ready button to take the printer off line (the online LED goes off), then use the menu button to scroll through the menu options until the printer displays:



- 2) Press the enter button to select the menu, then using the menu button again, scroll through the network menu until the printer displays:

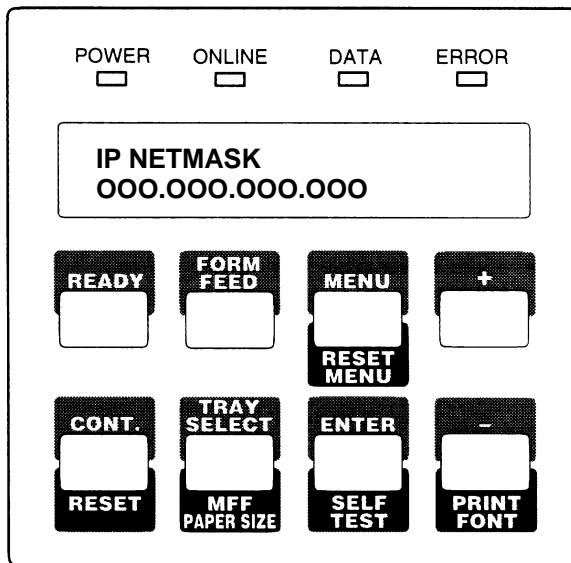


- 3) Press the enter button again, and the display will change to:



- 4) Use the plus (+) and minus (-) buttons to set the first three digits of the IP address. Then press the menu button to set the next three digits in the same way. Repeat until the whole IP address has been entered. Press the enter button to enter the address. The '<' symbol will change to a '*'.

- 5) Now press the menu button, the printer will display:



- 6) Set the netmask in the same way as the IP address. After the netmask has been entered, you'll be asked to set the gateway address, this is done in the same way as the IP address, and the netmask.
- 7) Put the printer back on line by pressing the READY button, the printer will display 'setting interface', the online LED will light up and the display will say READY.

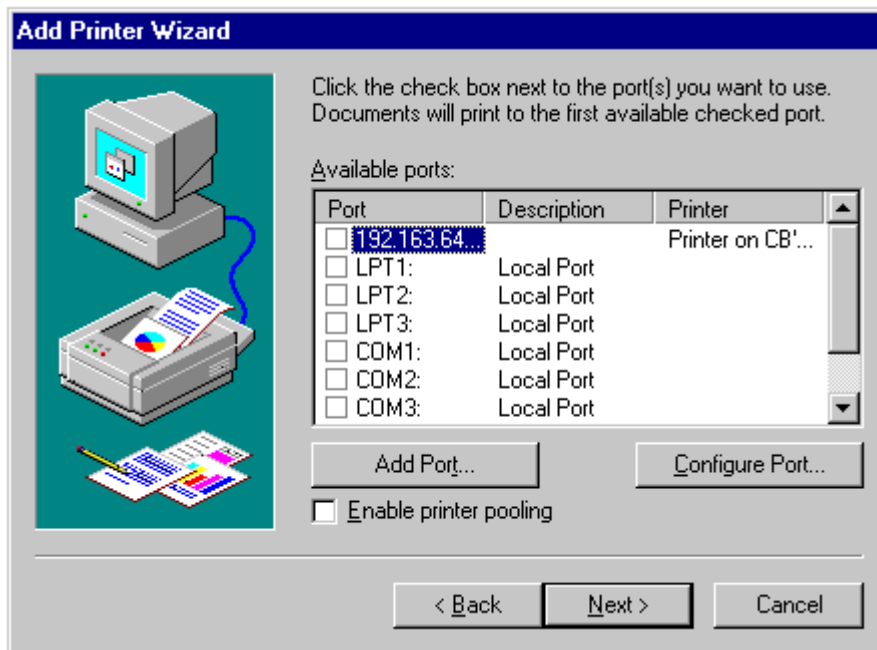
Installing the Printer on Windows NT 4.0

The final step in this process is to set up a new LPR port, set up a printer queue, and load a printer driver. Windows NT 4.0 has a Wizard to help you do this. Note for this next section to work, you need to have the TCP/IP protocol and TCP/IP printing services installed, if your not sure see [Installing TCP/IP protocol and TCP/IP printing services](#). To use the Add Printer Wizard:

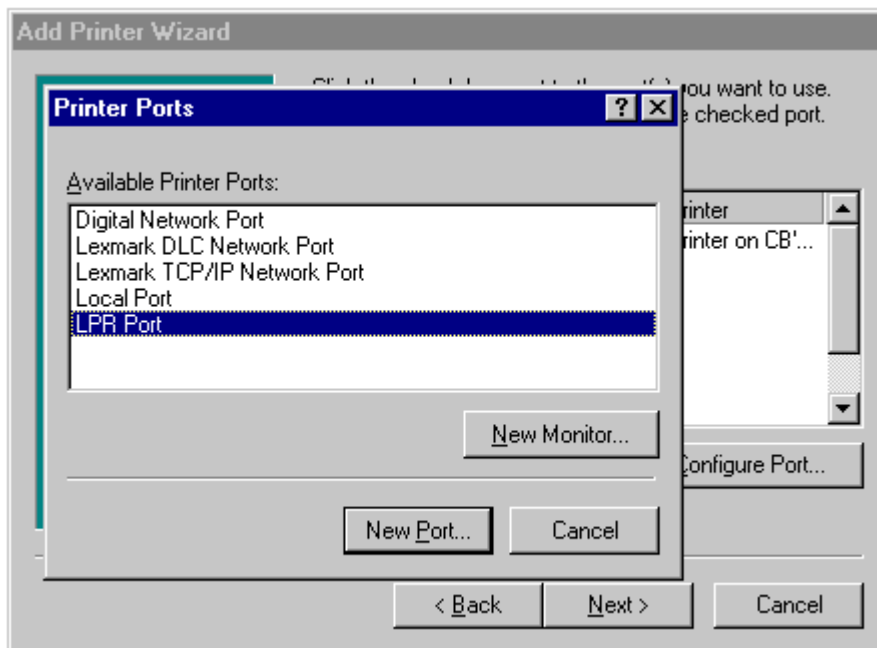
- 1) Logon to Windows NT 4.0 as an administrator, if you do not know how to do this, you need to contact your MIS department.
- 2) Press the **Start** button and select 'settings ► printers'. In the 'printers window', double click on the 'Add printers' icon. The 'Add printer wizard' will now start.
- 3) In the first step, select 'My computer', and then click 'Next'.



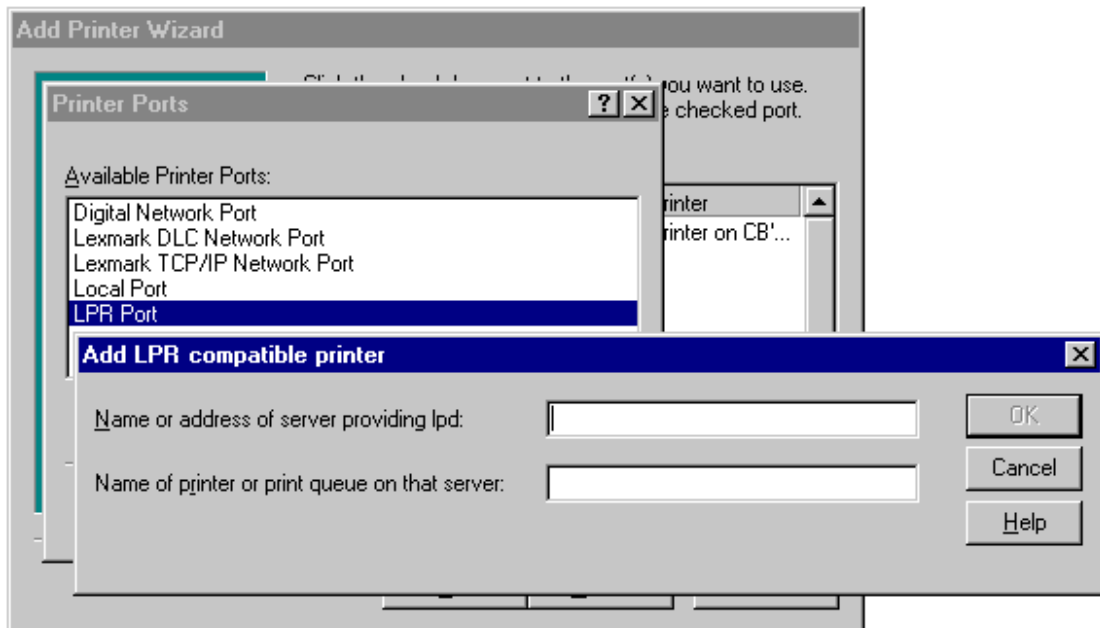
4) You now need to add a new port. Click the 'Add Port' button.



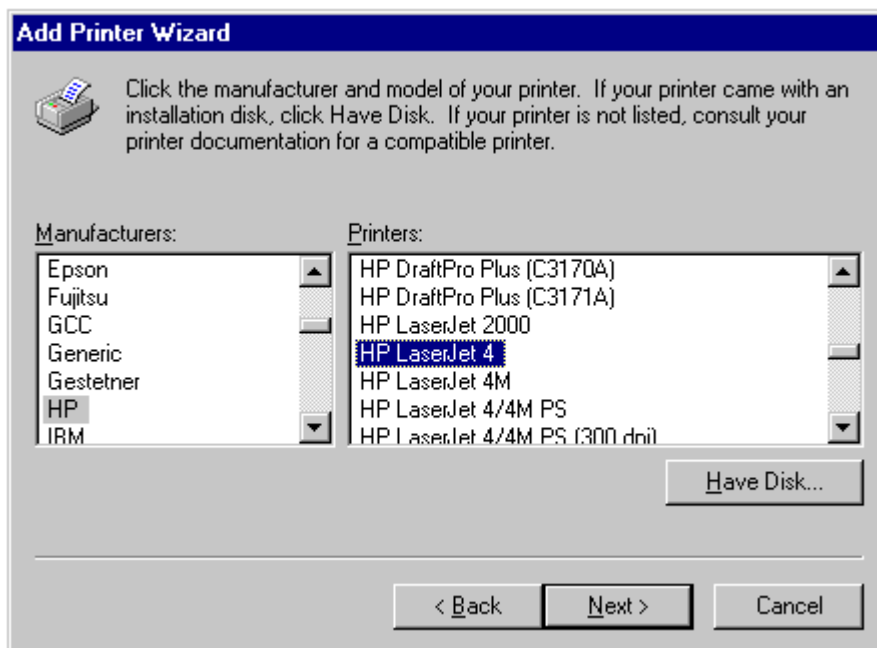
5) Select 'LPR Port' and click the 'New Port' button.



- 6) In the top box you need to type the IP address set in step 4 of 'Setting the IP address of the printers adapter card'. The bottom box refers to the name of a queue, which may be set up on the printer; in this case you can leave it blank. Click OK, then next.



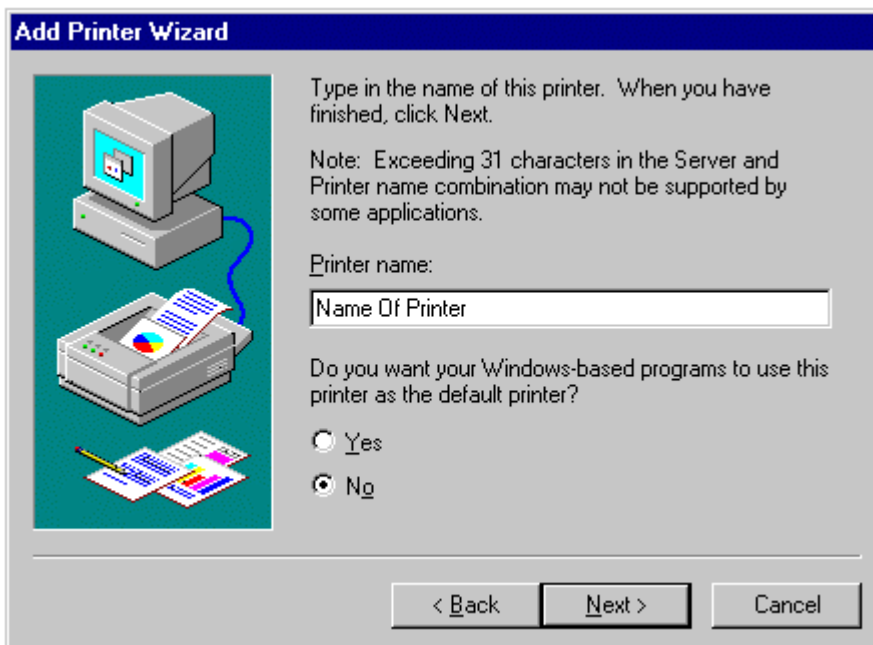
- 7) You now need to install a printer driver. The Printer Wizard will need to load this from your Windows NT 4.0 CD-ROM, make sure this is loaded into your machine. If you have a postscript compatible printer select the 'HP LaserJet 4/4M PS' printer driver, otherwise select the 'HP LaserJet 4M' driver. Note Print Partner Windows NT 4.0 printer drivers will be available from your Fujitsu reseller eminently.



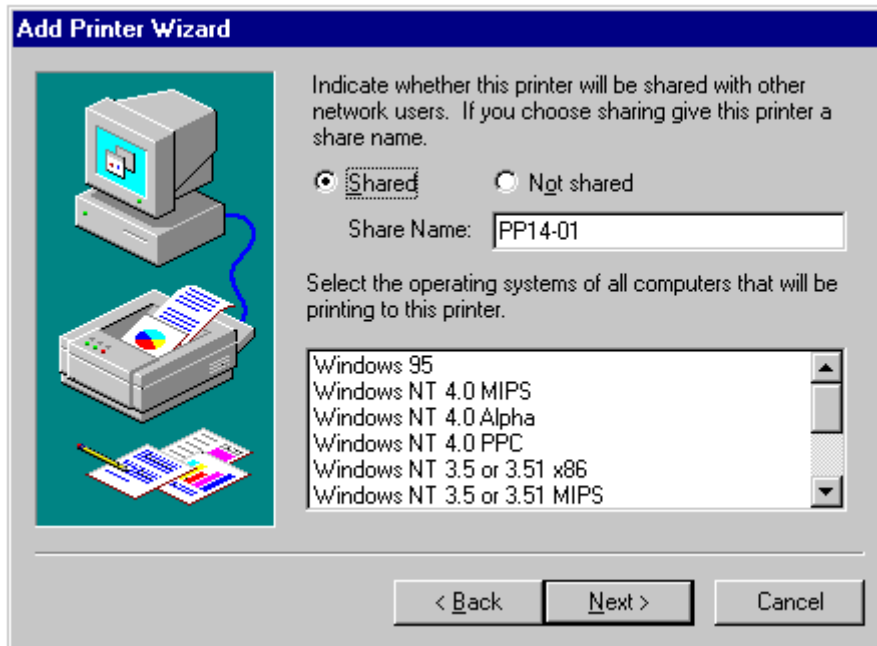
- 8) If you already have the printer driver you have just selected installed on your system, the Add printer wizard will ask you if you want to replace it. If you are updating the driver, you will want to replace the existing driver, otherwise just keep the existing one. Note you will only see this step, if the 'Add printer Wizard' finds the driver you selected already installed.



- 9) Now you need to give the printer a name. Try to use a name that tells the user what type of printer it is, and its location, for example pp14floor2. If you would like this printer to be the default printer i.e. the printer that gets used automatically by Windows applications, click yes, otherwise click no.



- 10) If you 'share' the printer, you make it available to other users on the network to use. If you are setting up a print server you will want to do this. In the workgroup situation, you will be setting the printer up on each machine, in which case you may not want to share it. When a printer is shared, it needs to be given a share name. The share name is the name by which the printer is known on the network. You can either use the same name set in step 9, or give it another name. If your client machines use any of the operating systems listed by the Add Printer Wizard select them here. This will load the printer drivers for these operating systems on to the server, when the clients want to print, the server can download the correct printer driver to them.



- 11) In the last step, Windows can print out a test page for you. If you select yes, wait for the test page to be printed, then tell windows that the page printed ok. If you say no, windows will try to debug the installation for you.



IP addresses

IP addressing is the system used to address computers on the Internet and many private networks. The IP address performs a similar function to your postal address or telephone number, allowing one computer on a network to reliably communicate with another.

It is important that you first contact your system administrator and ask them to assign an IP address, netmask and gateway address.

If you do not have a system administrator the information below will help you to assign an address. However if you have an Internet connection you should contact your Internet Service Provider (ISP) for advice first.

To make it easier to read and use IP numbers are normally represented as four numbers separated by full stops, for example:

192.168.125.101

Each of the four numbers can be in the range 0 to 255, though 0 and 255 are normally reserved for other uses, so you should avoid using them.

To prevent two computers from having the same address, all IP addresses are assigned by the Internet Assigned Number Authority (IANA).

The IANA have set aside groups of numbers for use on private networks. If you have no system administrator to assign numbers for you, these are the numbers you should use. The table below identifies 254 numbers, which should be more than enough. Note it is possible to have many more IP address than this, but you need a better understanding of IP addressing than I can explain here.

IP Address
192.168.125.1
192.168.125.2
:
and so on
:
192.168.125.253
192.168.125.254

Assign a number to the printer, and to each computer, which needs to connect to the printer. Make sure you do not have any duplicate numbers on your network.

The Netmask you should use with these numbers is:

255.255.255.0

The Gateway on the printer should be set to:

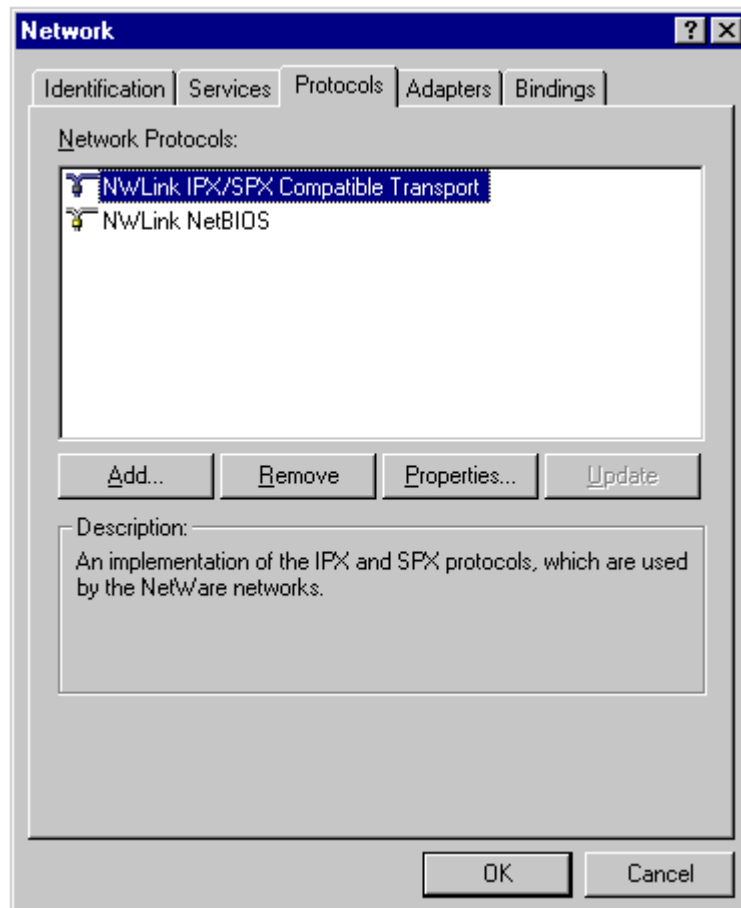
0.0.0.0

This means that you do not have a gateway on your network. If you do, ask the gateway administrator for advice. When setting up NT you just leave the box blank.

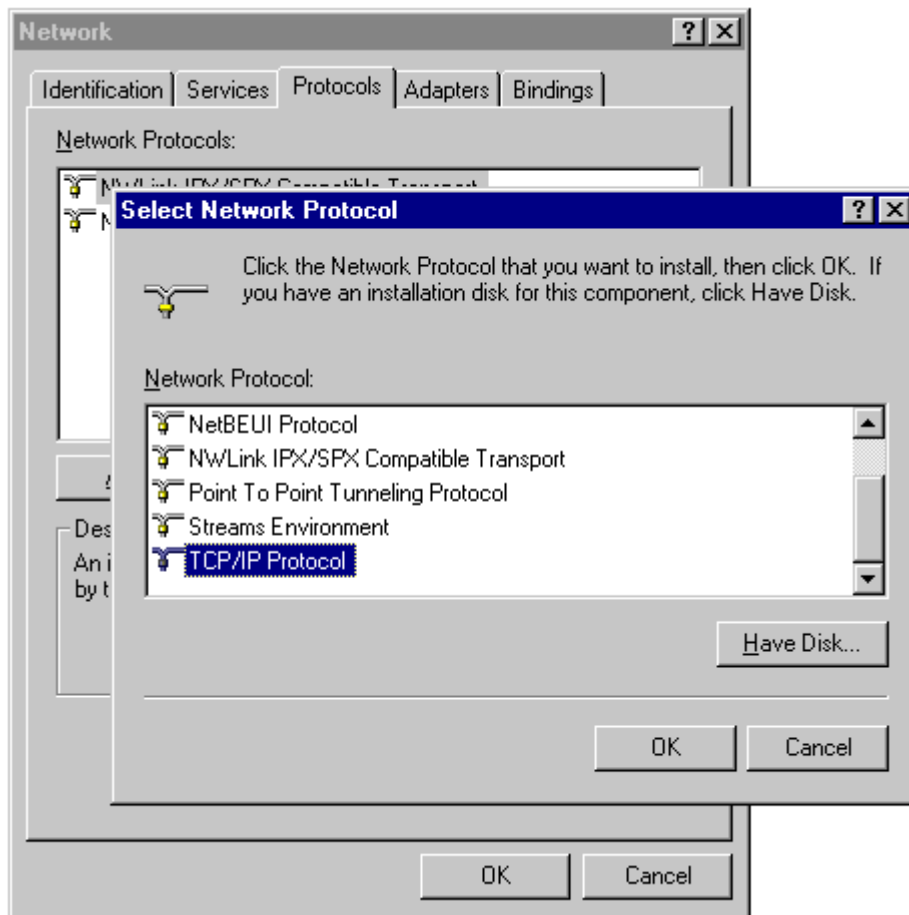
Installing TCP/IP protocol and TCP/IP printing services

In order to print using a LPR (Line Printer Remote) port to print to a network printer from Windows NT you must have the TCP/IP protocol and TCP/IP printing services installed. To do this:

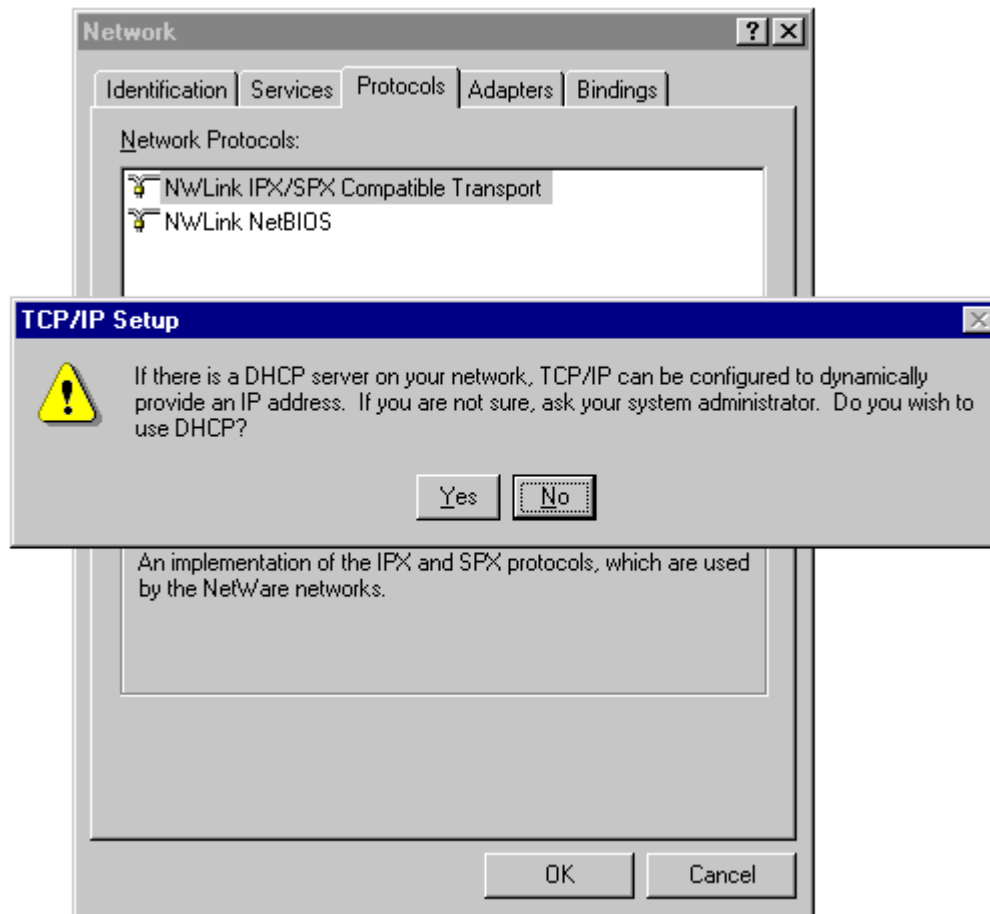
1. Logon to Windows NT 4.0 as an administrator, if you do not know how to do this, you need to contact your MIS department.
2. Press the **Start** button and select 'settings ► control panel'. In the 'control panel window', double click on the 'Network' icon. The 'Network' control panel will now start.
3. On the 'Protocols' tab, click the Add button.



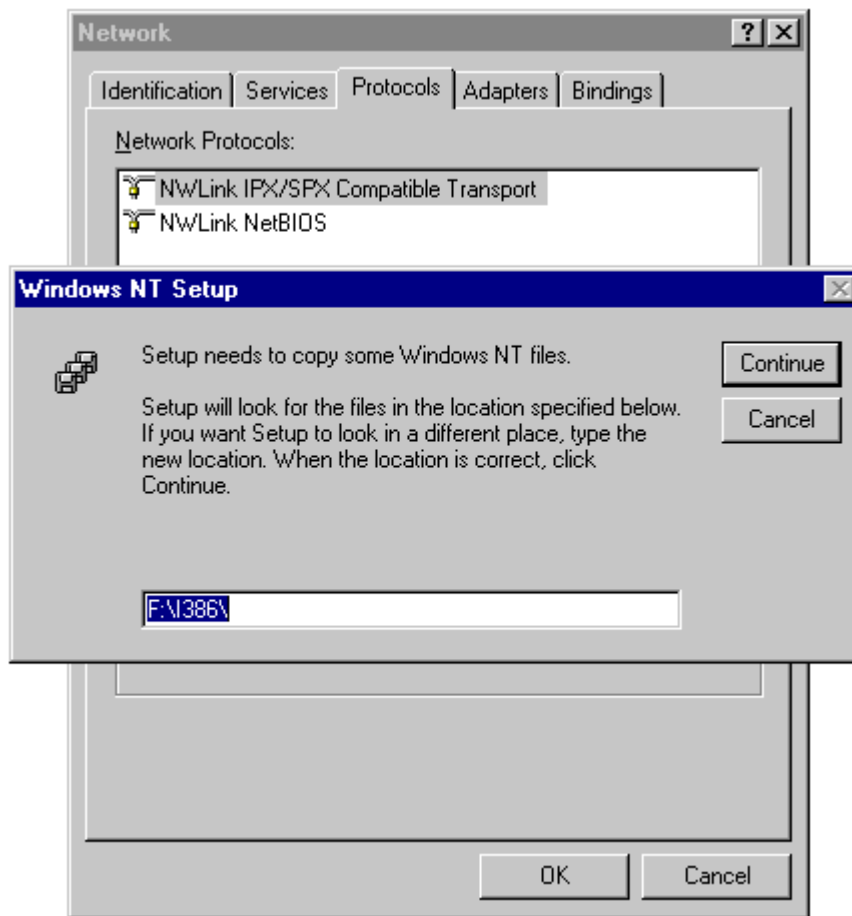
4. Now select the TCP/IP Protocol, and click ok.



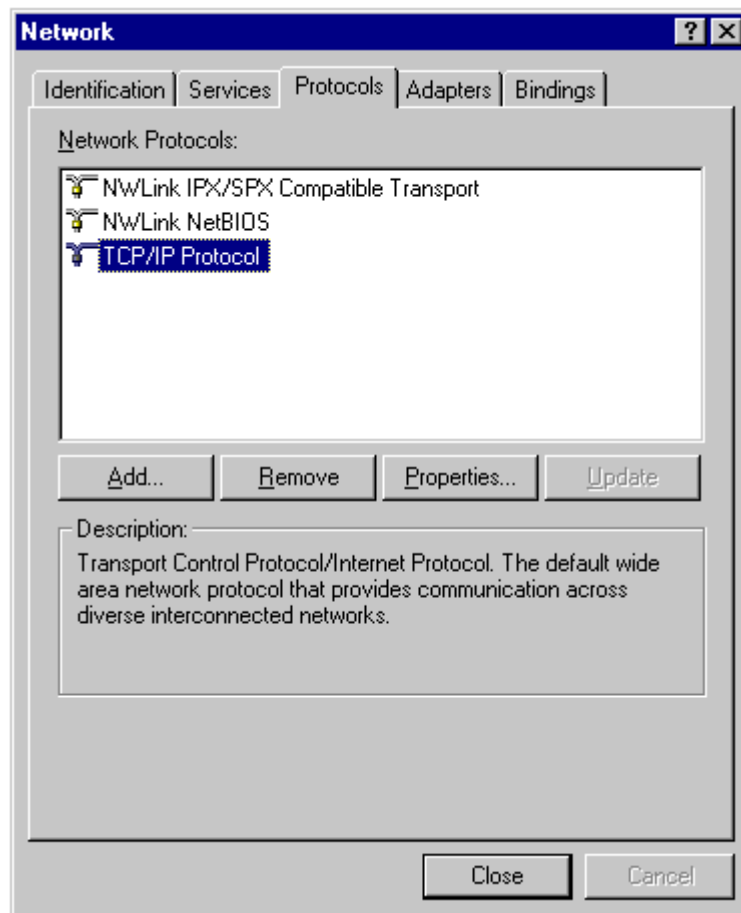
5. You will then be asked if you would like to use a DHCP server to set up your IP address. Click no unless you have been advised otherwise by your system administrator. If you are going to use DHCP you do not need the steps below to manually set an IP address.



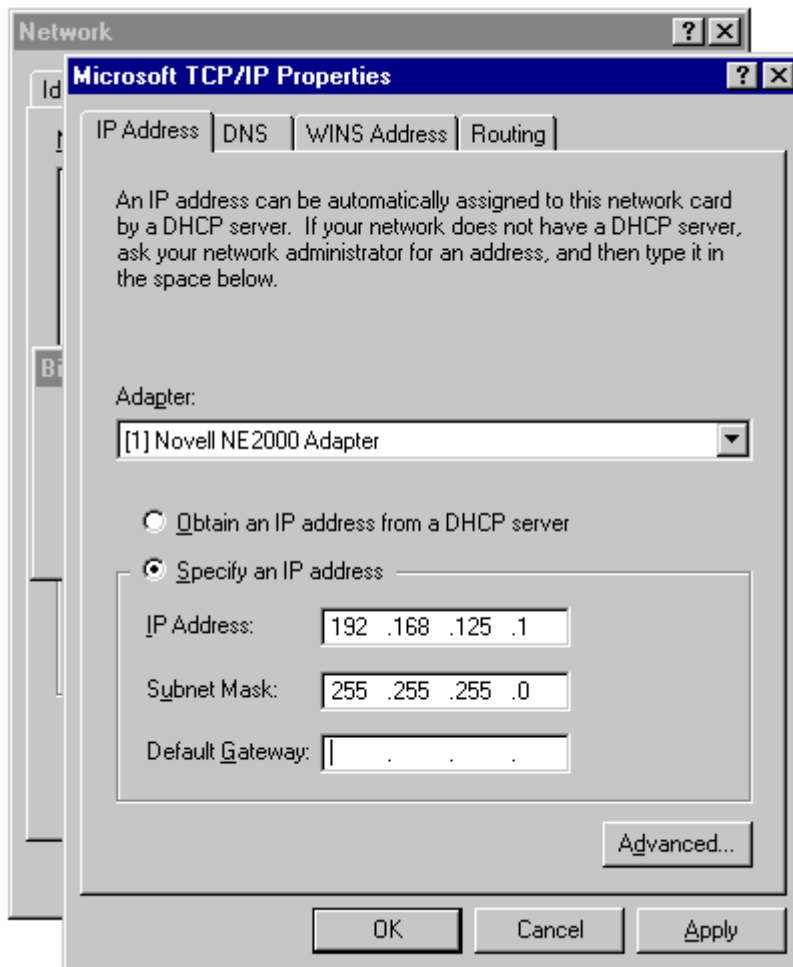
6. Setup will now ask where it should get the files it need from, this would normally be your CD-ROM drive. Insure the path is correct and click Continue.



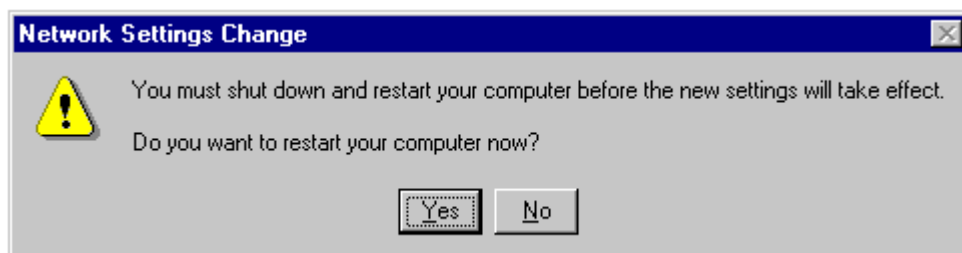
7. The next box confirms that the protocol has been installed ok. Click Close.



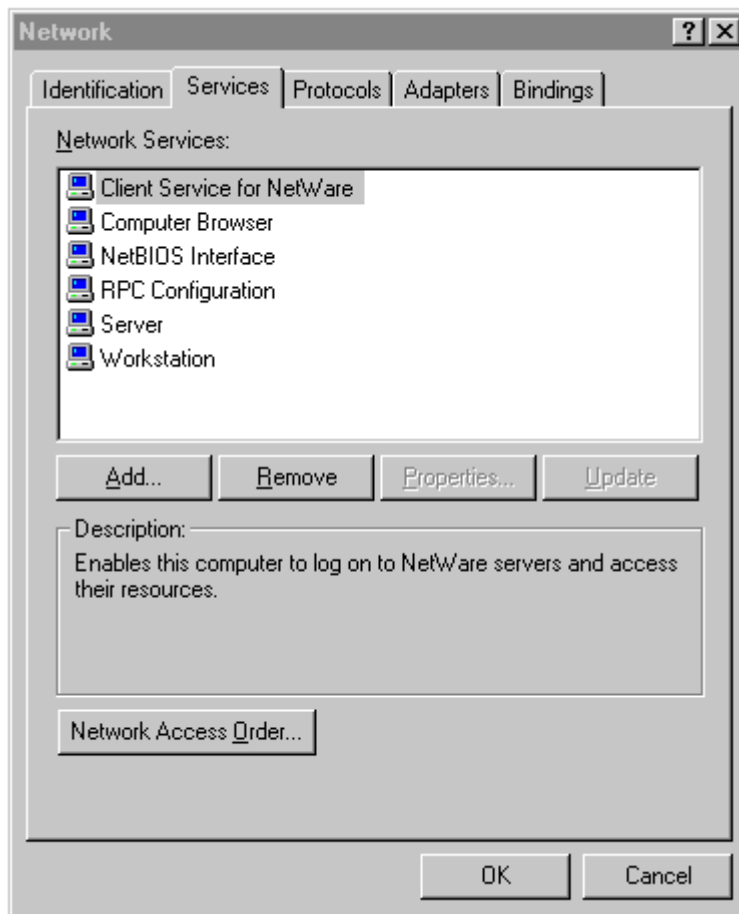
- You now need to enter an IP address and Subnet Mask. If you're not sure about IP addresses see [IP addresses](#). Type in the IP address that you have assigned to the NT machine and hit the Tab key, NT will automatically enter the correct Subnet Mask. You do not need to set a Default Gateway, unless your system administrator advises otherwise. Click OK.



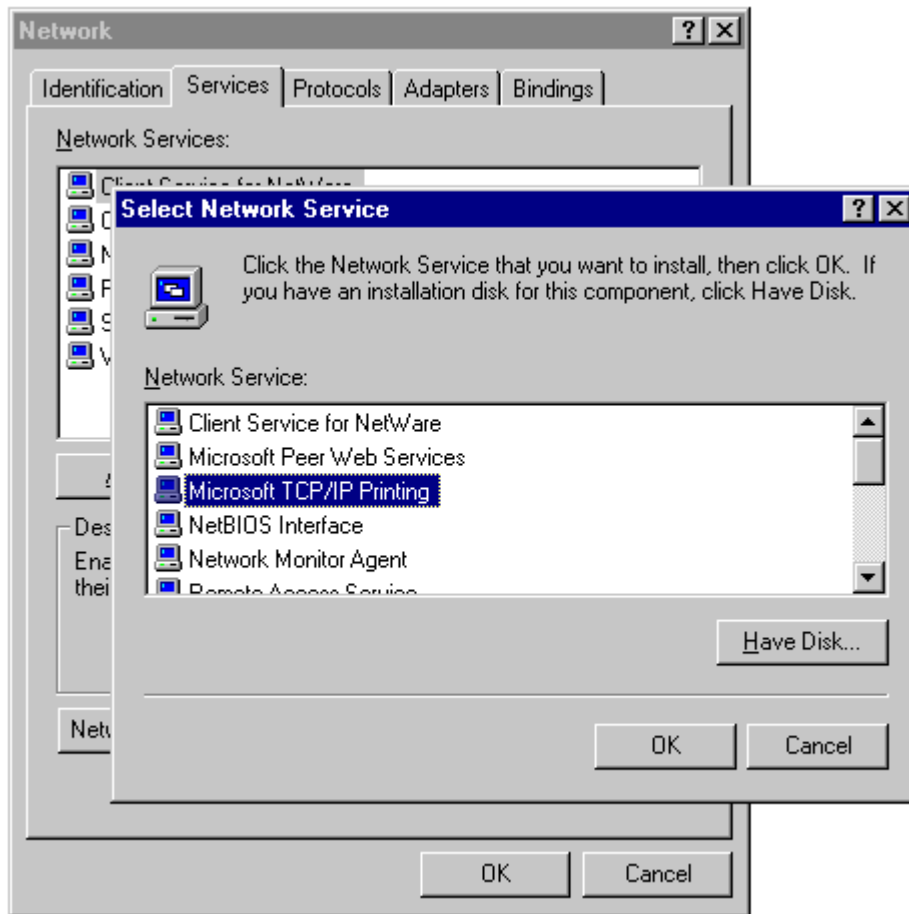
- TCP/IP is now set up on your machine, but you need to reboot for the settings to take effect. Click Yes.



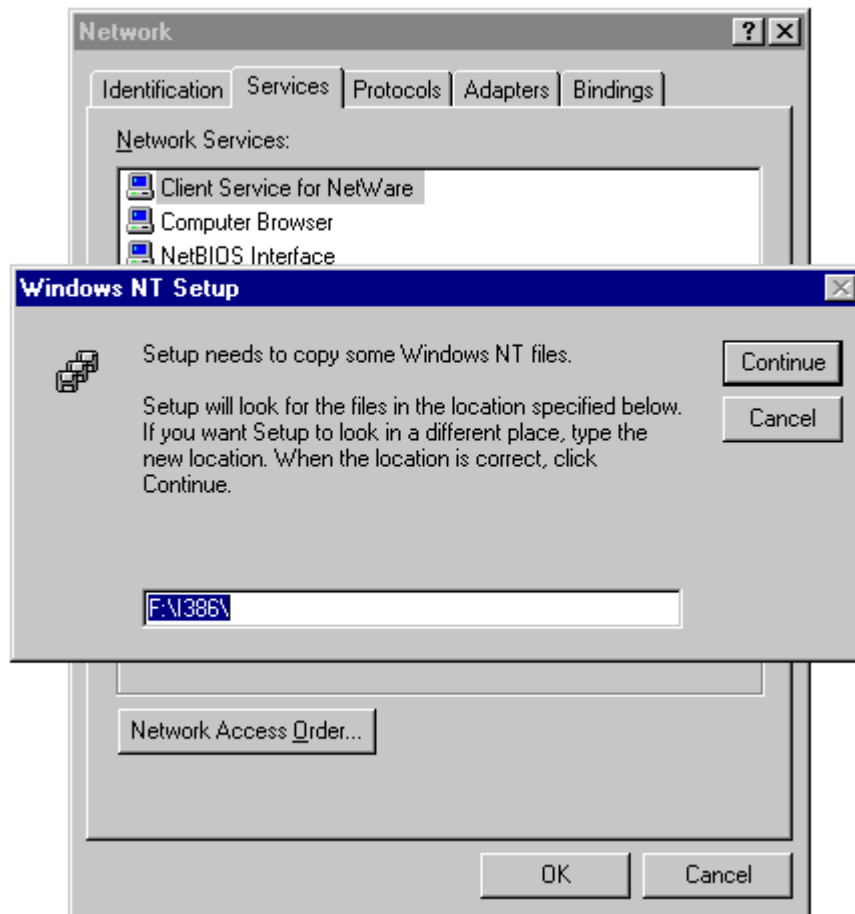
10. You now need to install TCP/IP printing services. Logon as an administrator again, and restart the networks control panel. On the Services tab, click the Add button.



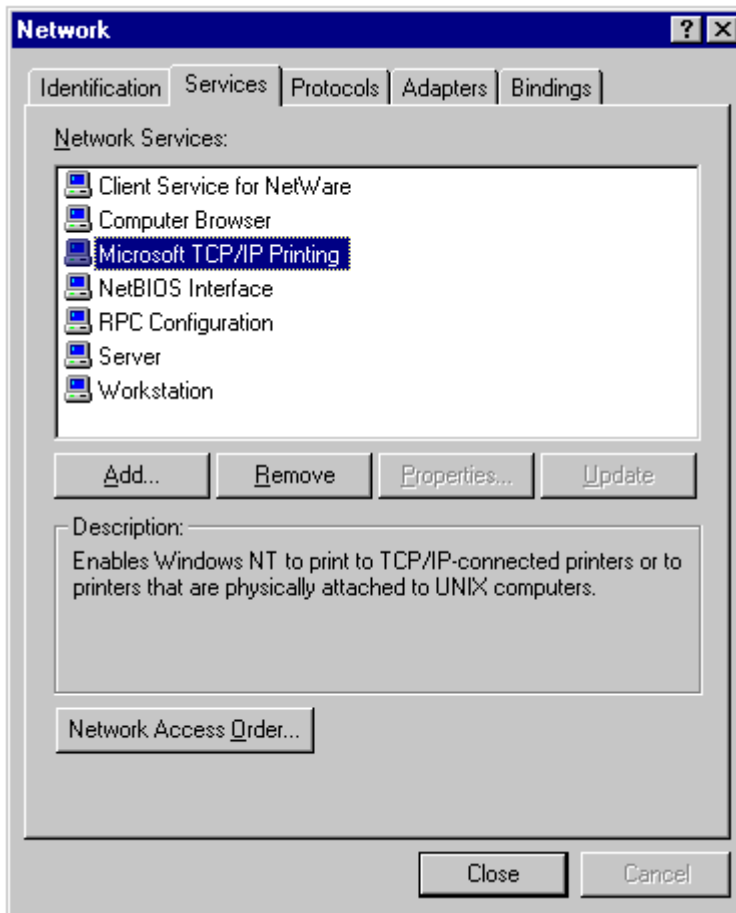
11. Select Microsoft TCP/IP Printing, and click OK.



12. Setup will now ask where it should get the files it needs; this would normally be your CD-ROM drive. Insure the path is correct and click Continue.



13. The next box confirms that TCP/IP Printing has been successfully installed. Click Close.



14. TCP/IP Printing is now set up on your machine, but you need to reboot for the settings to take effect. Click Yes.

