

## Installing a PC onto a Windows 95/98 network

This document is a “memory jogger”, a “checklist” document for anyone who is experienced at setting up Windows 95/98 PCs, and who needs to install a PC onto an existing or new Windows 95/98 network. This document is only for advanced users.

Installing a PC onto a Windows 95/98 network is relatively simple. Follow the basic rules below and you will be connected in no time.

To connect a PC to a Windows 95/98 network, you will need to go through the following steps :

- Install a network card in the PC.
- Physically connect the PC to the network.
- Install the network card into Windows 95/98.
- Specify a **network client** in the Network properties in the Control Panel.
- Specify a **network communications protocol** in the Network properties in the Control Panel.
- Enable **File and Printer sharing** as necessary.
- Specify a **Computer Name** for the PC.
- Specify the **network Workgroup** that the PC is to connect to.
- Specify a **Computer Description** for the PC.
- Specify the **Primary Network Logon** for the PC.
- Get rid of all non-needed protocols, network interfaces, and clients.

It is assumed that you know how to physically install a network card, and also how to install it into Windows 95/98. Once you have installed the card, follow the steps below to install your PC onto a Windows 95/98 network :



### CLIENT

The client you will require is the **Client for Microsoft Networks.**



### PROTOCOL

If you do not have any protocols installed, when you load the “*Client for Microsoft Networks*”, the **Microsoft IPX/SPX Compatible** protocol gets loaded. This is the default protocol for the Client for Microsoft Networks.

**If you are connecting your PC to an existing network then you will have to use the same protocol as the other PCs on the Windows 95/98 network you are connecting to. So have a look at their network configuration for guidance.**

If you are setting up a whole new Windows 95/98 network, on the other hand, then The Client for Microsoft Networks can use any of three protocols equally well. That said, use the following table for guidance :

<b>IPX/SPX</b>	<p>This is the <b>default protocol</b> that gets loaded when you load the "<i>Client for Microsoft Networks</i>". This protocol was first invented by Novell and Microsoft had to make it its default protocol because of the predominance of Novell at the time that Windows 95 was invented.</p>
<b>TCP/IP</b>	<p>This is the <b>Internet standard</b> protocol and is now also becoming the <u>world standard protocol</u> for all networks – <i>NetWare 5.x and Windows 2000 now use it as their default protocol instead of IPX/SPX which used to be the default protocol pre-NetWare 5 and pre-Windows 2000.</i></p> <p>If you are setting up a complete Windows 95/98 network from scratch, then use <b>TCP/IP</b> in preference to IPX/SPX as it is a much more "robust" protocol than IPX/SPX, particularly in the case of database applications. Note, however, that TCP/IP on a Windows 95/98 network demands proper documentation of the IP addresses, as each PC needs to have a unique IP address and at the same time you cannot, on peer to peer Windows 95/98 networks, have a server process that allocates the IP addresses automatically – you have to set them up manually and document them properly in some HelpDesk document.</p> <p><b>If you are not familiar with IP addresses then use IPX/SPX initially. It is advisable, however, that you learn about IP addresses so that you can later move your Windows 95/98 network to TCP/IP rather than IPX/SPX.</b></p>
<b>NetBEUI</b>	<p>This protocol is an old protocol. It is the default networking protocol for <b>Windows 3.1x</b> networks (Windows 3.1x networks do not understand IPX/SPX). You should never use it for a network of PCs running only Windows 95/98. The only time that you will need this protocol is if you need to network a Windows 95/98 PC with a Windows 3.1 PC, or if you have a specific networked application that uses NetBEUI to communicate between PCs running the same networked application, e.g. the SAPS modem sharing software where SAPS on each PC communicates with SAPS on the PC that has the modem, using NetBEUI.</p>

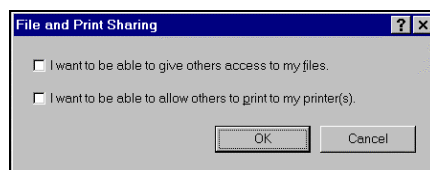


**FILE and PRINT SHARING**

You only need to enable **File and Print Sharing** through the Network icon if the PC you are setting up is going to have drives, files, directories, and printers that need to be accessed by other PCs on the network.

Typically, however, even in a Windows 95/98 network the set-up will be one where there is a central fileserver PC on which everybody stores their files (as that server PC will also usually be the only one that gets backed up automatically overnight, in a well backed up installation, *that is*). Thus, if this PC is not the fileserver, the only reason you might need to enable **File and Print Sharing** would be to share a printer that will be connected to this PC. If that is the case then only enable the ***I want to be able to allow others to print to my printer(s)*** option. If this is the server PC, on the other

hand, then, quite obviously, do enable also the *I want to be able to give others access to my files* option.

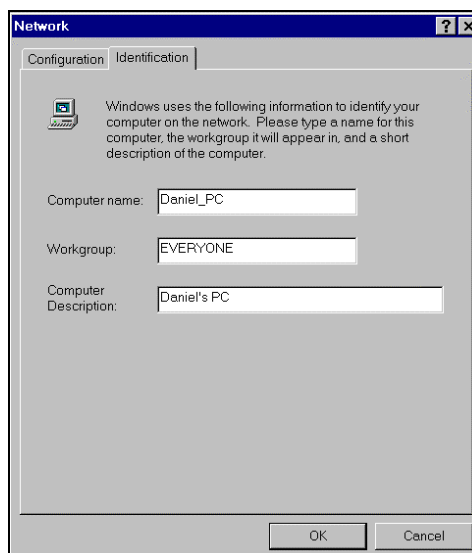


## NETWORK IDENTIFICATION

This phase is crucial. There are three things to remember :

- In Windows 95/98 you can only network with other PCs that are in the same Workgroup as you. If you choose a different workgroup name from other PCs, or if you misspell the workgroup name, you will spend many years trying to network this particular PC. Thus, if you are connecting this PC to an existing network, then check what workgroup is being used by the other PCs on the network before configuring the *Network Identification* tab for this PC with the same workgroup name.

If, however, you are installing the Windows 95/98 network from scratch, then name the workgroup **EVERYONE**, the standard AnswersThatWork “default” name.



- Next, set up the Computer Name. You cannot have two PCs with the same *Computer Name* on a Windows 95/98 network, so if you are adding this PC to an existing network make sure you do not choose a name that is the same as that of an existing PC on the network. Also, avoid spaces and apostrophes in the Computer Name as early Windows 95 versions will either not properly recognise Computer Names with spaces/apostrophes (specifically when you try to network

printers) or they will recognise them but will behave strangely sometimes. **The AnswersThatWork standard is to name the PC based on the name of the user, as illustrated above.**

- Finally, set up the **Computer Description**. This can be anything whatsoever – it is effectively a comment in which you can put whatever you want. **The AnswersThatWork standard is to use this field to describe the location of the PC.** In a small office it is not really needed, but in a larger office it can prove quite useful – a typical description might be, for instance, *“Faye’s PC in the corner in the small office”*. This way, in larger or more spread out Windows 95/98 networks, when you locate a PC through Explorer, the description will tell you exactly where that PC is physically located.



### **PRIMARY NETWORK LOGON**

Make sure that is set to **Client for Microsoft Networks**.



### **GETTING RID OF UNNECESSARY NETWORK ITEMS**

When you install a network card onto a PC, Windows 95/98 will typically also install both the **Client for Microsoft Networks** and the **Client for NetWare Networks**. If you are not going to connect to a Novell server, then delete the Client for NetWare Networks.

Similarly, when you install IPX/SPX, Windows 95/98 installs that protocol on every network interface defined in the Network icon. Therefore, if you have a Dial-Up Adapter defined in there, it will install IPX/SPX onto that Dial-Up Adapter as well as install it onto the network card. Unless you are configuring Remote Access through a Dial-Up Adapter, you will almost always want to remove the binding of IPX/SPX from the Dial-Up Adapter.

Also, if you replaced one network card with another, make sure you remove the definition of the old network card from the Network Properties, as Windows 95/98 does not do that automatically.

And so on .... In summary, study your Network properties carefully and remove any unnecessary stuff. It makes for a “cleaner” environment, and in a Windows environment anything “cleaner” means “less problems” and a better chance of solving problems when they do occur.

**COMPLETING THE SETUP**

Now that you have completed the setting up process, all you need do is click **OK** endlessly till Windows 95/98 asks you to reboot the PC to finalise the settings.

**TESTING THAT YOU CAN CONNECT**

Restart the PC, login to the network, then start **Explorer**. Go through **Network Neighborhood** and see if you can see the **EVERYONE** workgroup and at least all the server PCs within that group (in a Windows 95/98 network, a server PC is a PC that has File and Print Sharing enabled).

Note that the first time you connect to the network it can be up to 15 minutes (yes!!) before you are able to see the other PCs on your Windows 95/98 network, so do not get alarmed if you do not seem them immediately, it is an intrinsic design “*feature*” of Windows 95/98 networking.

**NETWORK PRINTERS AND MAP DRIVES**

Now that your new PC is working properly on the network, map drives and printers in the same way that they are mapped on the other non-server PCs on the network.

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