



Mass Deploying Windows Drivers in Windows 2000

White Paper

Abstract

This white paper sets out to describe the steps necessary to install a Brother printer into a Windows NT 4, 95/98, Windows 2000 network environment.

Typically printer drivers are installed individually on each client PC, however, Windows NT 4 and Windows 2000 systems allow system administrators to install the driver onto a Windows 2000 server and allow clients to automatically retrieve the driver from the server without having to manually install and configure the driver themselves. This makes the driver installation process a much more simple and more straightforward process. This capability is known as Point and Print.

IPP Printing and Driver Deployment

Microsoft have also developed a similar capability for Windows 95/98/Me users who wish to print using the IPP protocol via a Windows 2000 system, for more information, refer to the Microsoft Web site or visit the Brother Solutions Center (<http://solutions.brother.com>) for more information.

Brother Network Printer Driver Wizard software

To compliment the above capabilities, Brother has also developed the Network Printer Driver Wizard software that automates the installation of a Brother printer driver into a Windows 95/98/Me, NT 4 or Windows 2000 environment. Visit the Brother Solutions web site (<http://solutions.brother.com>) for more information.

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Windows 2000 Driver Deployment - Overview

This document sets out to describe the steps necessary to install a Brother printer into a Windows NT 4, 95/98/Me, Windows 2000 network environment using the Point and Print capabilities found in a typical Windows 2000 system.

Whilst this document refers to the HL-2060 printer, it can be used for ANY Brother printer that is supplied with the appropriate printer drivers.

This document assumes that you have already installed a printer driver onto your Windows 2000 server and are about to share it to other network users.

For a complete list of network documentation, please visit the Brother Solutions Web site at solutions.brother.com

Structure of this document

This document is split into two sections:

- **Section 1 “Windows Installation Methods”** – The things you need before you configure your driver for different clients.
- **Section 2 “Configuring the driver for mass deployment”** – The actual steps needed to be taken to configure a driver into a Windows network.

For more information on Windows 2000 and its capabilities, we recommend that you visit the Microsoft web site at www.microsoft.com.

Windows Installation Methods

Usually there are four possible ways of installing Brother printer drivers. You can install the driver using the SETUP.EXE program, install the driver using an INF file, install the driver using the Brother Network Printer Driver Wizard software or install the driver using the IPP protocol.

SETUP.EXE

The SETUP.EXE program is designed to run from Microsoft 95/98/Me/NT 4 or Windows 2000 clients. This automates the installation of the printer driver and allows you to install additional capabilities such as 'Interactive Help', 'Status Monitoring' etc. This software is usually automatically run for you when you select the install printer driver option on your Brother CD-ROM.

Add Printer Wizard

You can also use the Add Printer Wizard capability found in Windows to install printer drivers, however, if you install a Brother printer driver in this way, you do not get the same driver capabilities as you would if the driver was installed using the SETUP.EXE program. If you use the 'Add Printer Wizard' you must specify the location of the appropriate INF file supplied on the Brother driver CD-ROM.

Brother Network Driver Wizard

Released in January 2001, the Brother Network Driver Wizard software automates the installation of a printer in a Windows 95/98/Me/NT 4 or Windows 2000 peer-to-peer environment. If you are un-familiar with installing a printer driver into peer-to-peer environment, it offers an easy way of installing the printer driver. The Wizard software also has the additional capability of creating a self running .exe file which other users can run at their convenience, this .exe file can install the appropriate Brother printer driver and necessary peer-to-peer printing software without any user-intervention.

IPP Printing and Driver Deployment

Microsoft developed a similar point and print capability for Windows 95/98/Me users who wish to print using the IPP protocol via a Windows 2000 system, for more information, refer to the Microsoft Web site or visit the Brother Solutions Center (<http://solutions.brother.com>) for more information.

This document specifically refers to the Point and print capability found in Windows systems and as such, the following three points must be noted:

- **Ensure that the Microsoft TCP/IP printing protocol is installed onto your Windows 2000 server.** This is important, as this is the mechanism that will send the actual print data to the printer. Microsoft's Windows 2000 server supports several printing protocols such as DLC/LLC and AppleTalk, however, this document explains the steps necessary to configure a Brother printer on a Microsoft based TCP/IP network.
- **Locate the INF file that you will need to install the Brother printer drivers.** These files will be stored in a subdirectory on the CD-ROM that was supplied with the printer.
- **Install the appropriate Brother driver and configure it so that other clients can automatically download the driver.** The final steps towards mass deploying the Brother driver onto desktop computers that can connect to the server.

Configuring the driver for Mass Deployment

When the driver that you wish to share is installed, you can choose to deploy that driver to other Windows clients. To do this, do the following:

From the Properties of the printer driver, click “Additional Drivers”

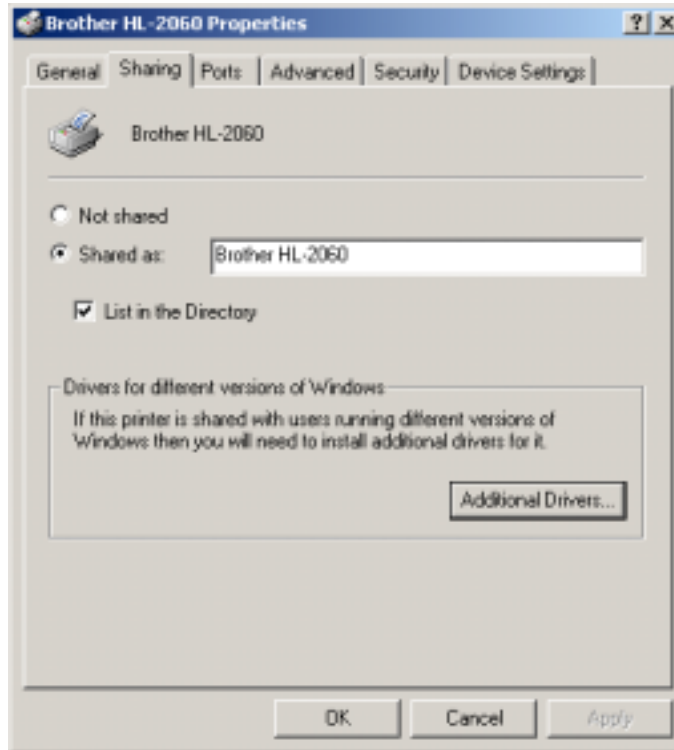


Figure 1 The “Sharing” tab of a printer driver

You’ll then see an additional drivers screen where you can select which other printer drivers you wish to install. By default the driver will have already installed the Windows 2000 driver, however, if the driver that you installed did not contain a digital certificate then you may find that “Windows NT 4.0 or 2000” is already selected.

On the screenshot below the Windows 2000 HL-2060 driver has already been installed. In this particular situation we also want to install Windows 95/98 and also Windows NT 4 drivers. To do that, simply select “Windows 95/98” and “Windows NT 4.0 or 2000”. Please note that there is no specific Windows NT 4 option for the Intel processor.

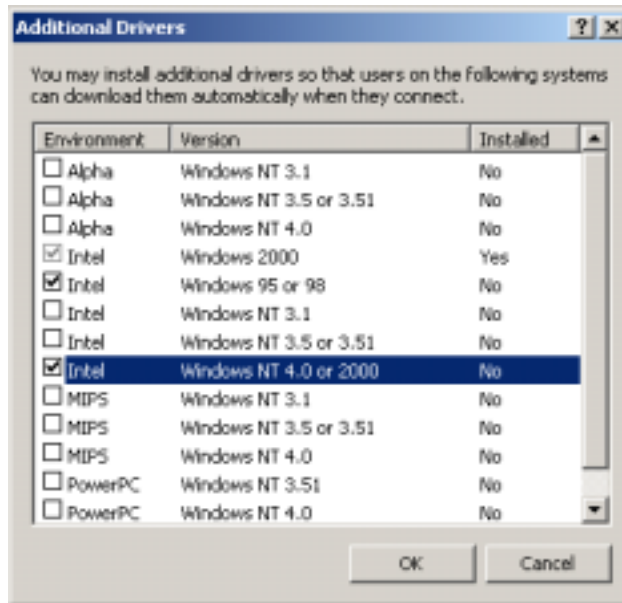


Figure 2 Selecting other OS clients support

As soon as you click OK, Windows 2000 will try to find the additional drivers and at some point you will be asked to insert the Windows 2000 CD-ROM.

If Windows 2000 can not find the additional Windows 95/98 or Windows NT 4 drivers on the Windows 2000 CD-ROM, you will be asked to insert the necessary Windows 95/98 CD-ROM:

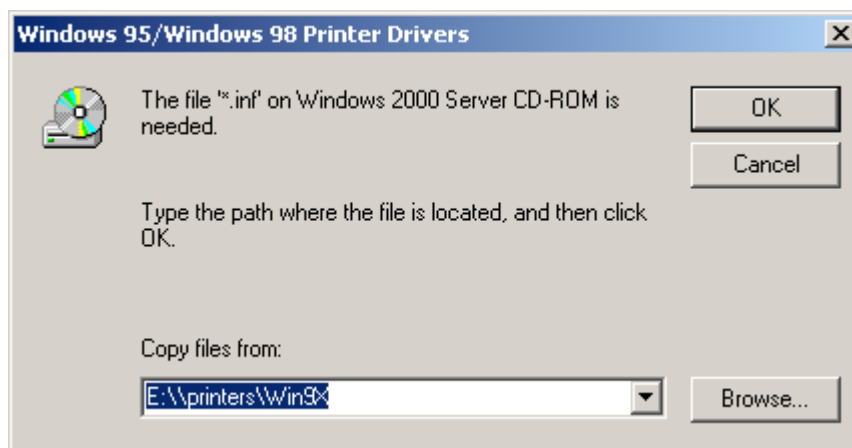


Figure 3 Specifying the location of the Windows 95/98 drivers

At this point you must do one of two things:

1. Insert the Brother CD-ROM/floppy disks that contain the appropriate Brother driver.
2. Insert the Microsoft Windows CD-ROM if the driver is already provided on the Windows 95/98 CD-ROM

In the above example, we must browse to the folder that contains the HL-2060 Windows 95/98 driver.

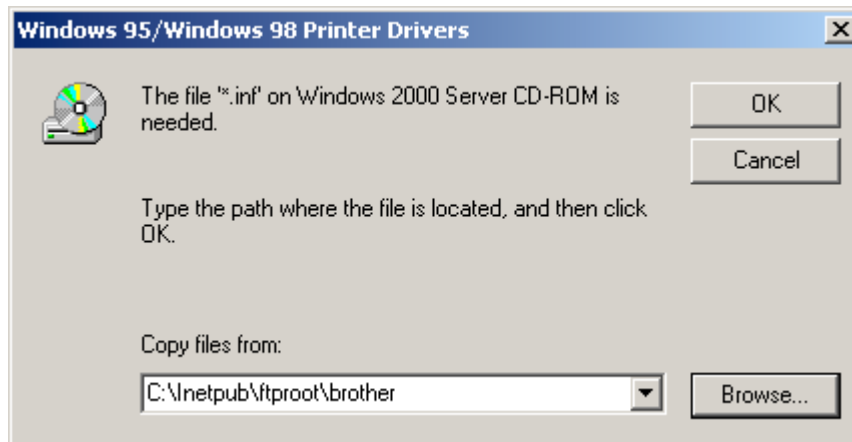


Figure 4 Changing the location of the Windows 95/98 Drivers

We are then asked to specify which language we wish to use:

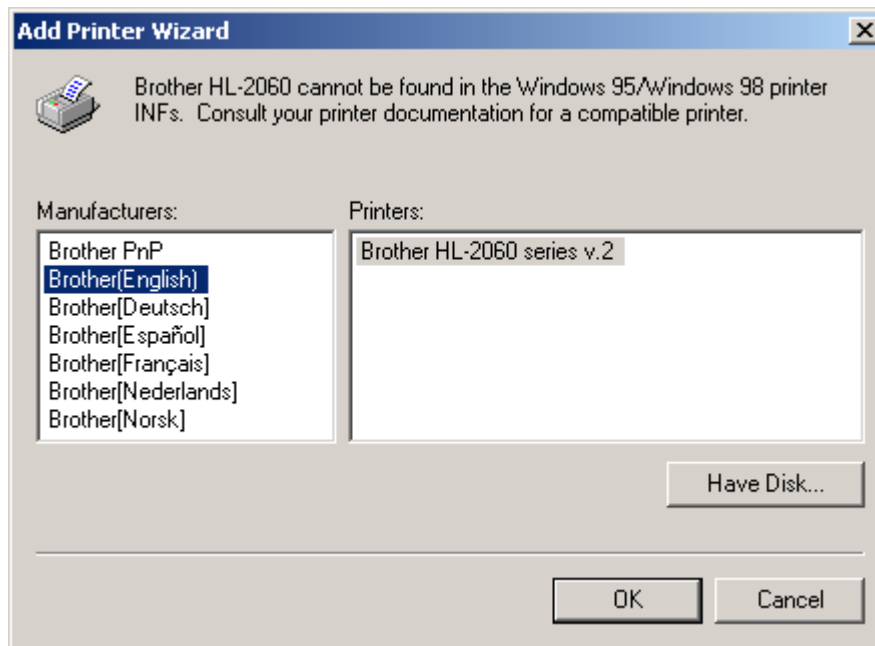


Figure 5 Selecting the appropriate language of the Windows 95/98 Driver

The driver will then be copied to a folder on the HDD of the Windows 2000 computer.

As soon as the Windows 95/98 drivers are installed, Windows 2000 will try to locate the other drivers that we wish to install. In our example, we also specified Windows NT 4 drivers, so the Windows 2000 Wizard will not prompt you to install the Windows 2000 CD-ROM as it tries to locate NT 4 drivers.

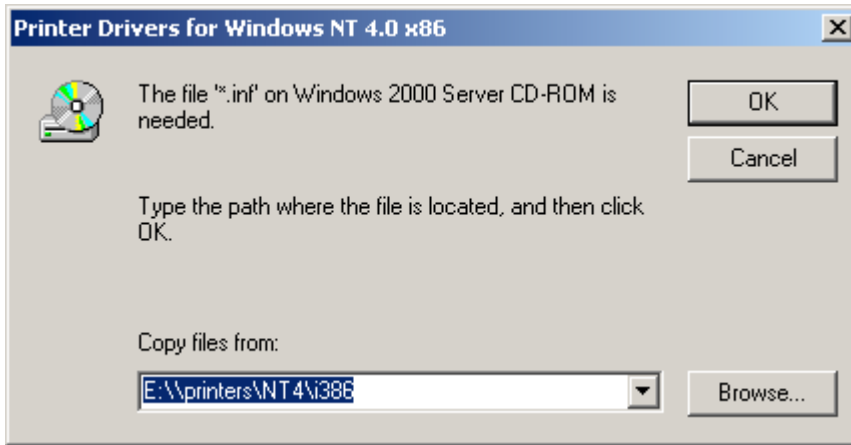


Figure 6 Specifying the location for the Windows NT 4 printer drivers

If those drivers are unavailable, then you must insert the necessary Brother CD-ROM and specify the location of the NT 4 driver files.

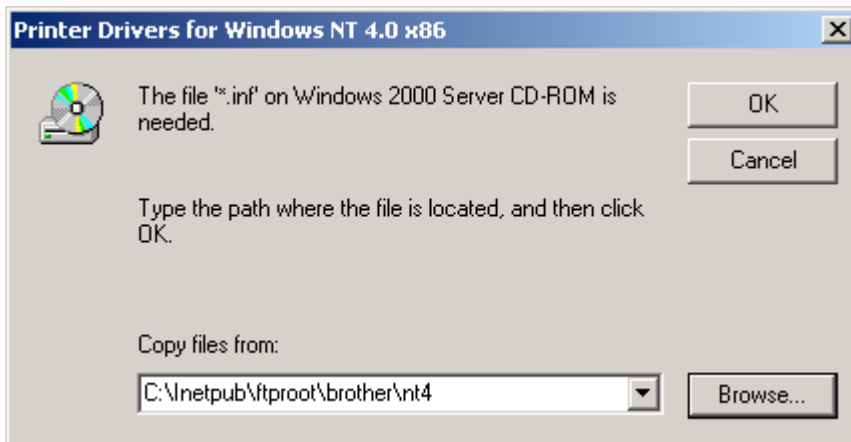


Figure 7 Changing the location of the Windows NT 4 Drivers

When you copy the Windows NT 4 driver files into your Windows 2000 system you will probably see the following:

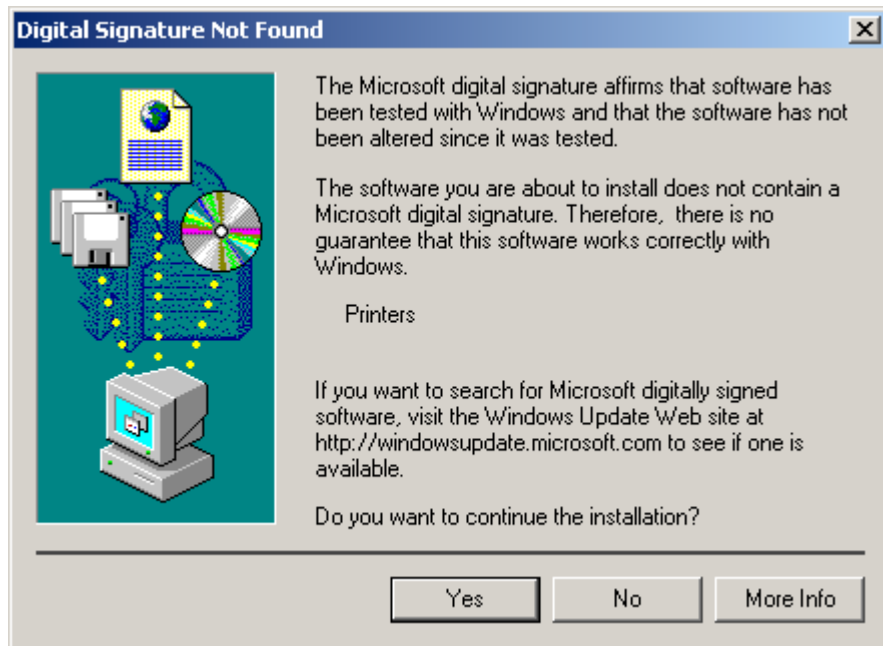


Figure 8 The Digital Signature Not Found error message

This is because the NT 4 driver has not been digitally signed. At this point, don't worry, the files are simply being copied to the HDD of the server and are not actually being used. So click the "Yes" button.

The files will be copied across onto the server.

Sharing the driver

With the drivers copied into the HDD of your Windows 2000, you are now ready to deliver the drivers to your other clients. To do this, simply assign a suitable share name to the printer driver:

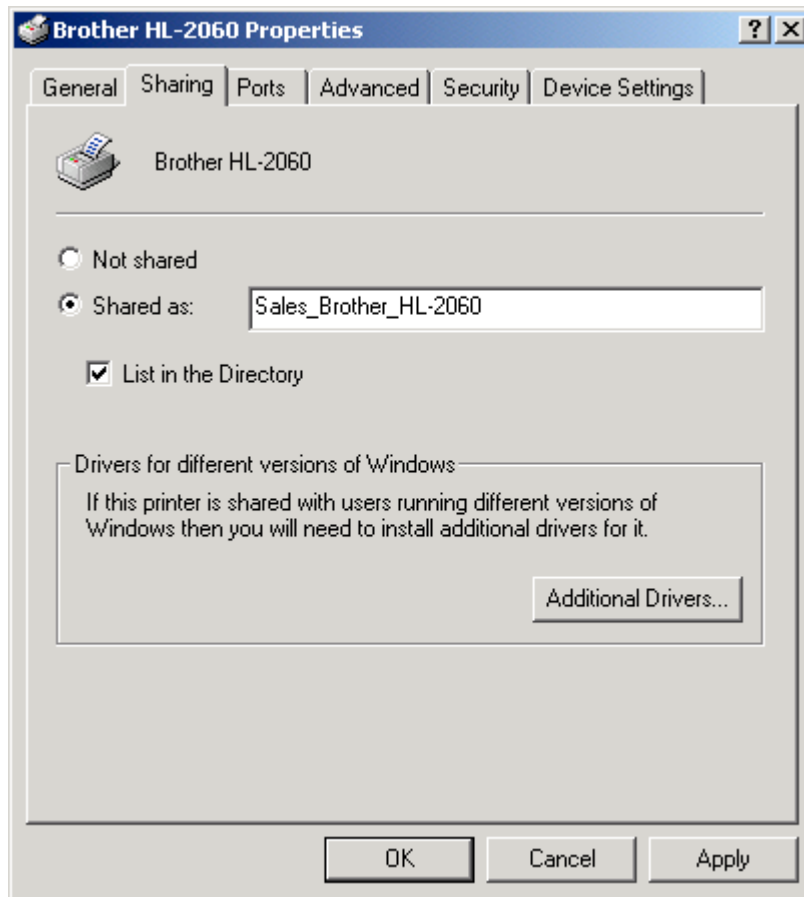


Figure 9 Setting the share name

Providing everything is configured correctly, when you browse your network neighbourhood the printer share name will appear. Click the share name and the drivers will be copied to the HDD of your client PC.

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