

IPP Protocol.

How to print using the IPP protocol on Windows 95/98/Me Systems

A Brother "How-TO" Document

Abstract

The IPP protocol allows Windows 95/98/Me users to send print jobs over the Internet or an Intranet. By installing Microsoft's optional Internet Printing Services software you can now connect your Windows 95/98/Me PC to a Windows 2000 PC and send print jobs using the IPP protocol. You can even send print jobs to printers that do not have embedded support for the IPP protocol. This means that you can use the IPP protocol to print to legacy dot matrix printers, or even printers that do not have a Print server installed in them.

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IPP Windows 95/98/Me and Windows 2000 – An Overview

With the release of Windows 2000, Microsoft included support for the Internet Printing Protocol (IPP), this protocol allows Windows 2000 users to print from their PC in a new way. Typically, when submitting a print job, users would send a job using the LPD protocol or send the job over a parallel cable to the PC. With the release of Windows 2000 and some additional software Windows 95/98/Me users are also able to submit jobs using the same IPP protocol as their Windows 2000 counterparts.

For more information on the IPP protocol, go to: www.ietf.org and <u>www.pwg.org</u>. For more information on IPP printing go to <u>www.microsoft.com</u>. For more information on Windows 2000 direct IPP printing refer to the Windows 2000 IPP protocol document on www.brother.com.

Structure of this document:

This document is split into two parts:

- 1. **Requirements**. Lists the items require if you wish to print using the IPP protocol on a Windows 95/98/Me PC.
- 2. Configuring a PC. The steps that must be followed.

Requirements

There are several requirements that you must ensure you have before you attempt to print from a Windows 95/98/Me PC using the IPP protocol.

Requirements

- 1. You must have at least 1 Windows 2000 system that is running the IIS (Internet Information Server) service.
- 2. The Windows 2000 system should have the appropriate printer drivers already installed. You will require a Windows 2000 printer driver and a Windows 95/98/Me printer driver.
- A TCP/IP connection between the Windows 2000 system and the Windows 95/98/Me Client.
- 4. An installed version of the Microsoft Internet Print Services software on your Windows 95/98/Me PC. Visit the Microsoft web site and download the "Microsoft Internet Print Services" software. At the time of writing this software could be found at:

For Windows 95 http://www.microsoft.com/Windows95/downloads/contents/WUPreviews/IPP/

For Windows 98 http://www.microsoft.com/Windows98/downloads/contents/WUPreviews/IPP/

- 5. After running the software, re-boot your PC.
- 6. To confirm that the software is running correctly, go to the Control Panel and select the Add/Remove Programs applet and verify that the "Microsoft Internet Print Services" option is installed.

Configuring your PC

Connect your Windows 95/98/Me Client PC to a Windows 2000 system that is running IIS (Windows 2000 Professional, Microsoft Peer Web Services) and also has at least one printer share.

To make this connection enter the following:

http://ip_address/printers

Where ip_address = the IP address of the Windows 2000 server or the DNS name of the server (for example, <u>www.myserver.com</u>).

When connected you will see a screen similar to the one below:

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Figure 1 Connecting to the printer share list using Windows Explorer

Click the "Connect" button (this button was not available prior to the installation of the Microsoft Internet Print Services software.

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Figure 2 Pulling the printer driver from the Windows system

The Windows 2000 system will verify that you are an authorised user and you may find it will ask you for a user name and password. This is entirely at the discretion of the system administrator. Once, you are verified, your Windows client will download the driver from the Windows 2000 system.

You will then see a message telling you that the driver was added successfully.

To check the configuration of the printer driver go to the Control Panel | Printers and then select the properties of the printer. Click on the details tab and look at the "Print to the following Port" option. Instead of a regular queue name such as <u>\\servername\sharename</u> you will see a friendly URL name beginning with HTTP.

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Brother HL-1660			
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Figure 3 Checking the properties of the driver

Verify that you can print by printing a test page.

All documents that you print will be sent to the Windows 2000 system using the IPP protocol, once the job has been received, it will be sent to the printer by whatever connection exists between the printer and the Windows 2000 system. This means that if the printer is connected to the Windows 2000 system by a parallel cable, your IPP jobs will be sent over the parallel cable.

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