Additional Notes About Printing in Microsoft Windows for Workgroups Version 3.11

This document contains information not available in the printed documentation or in online Help for printers. Some of the topics in this document are specific to particular printer models or printer types, such as PostScript or PCL printers, and some are more general, such as instructions on how to print extended characters.

For additional information about Microsoft® Windows™ for Workgroups that does not pertain to printing, see "Other Online Documents" at the end of this document.

Using Write to View This Document

To make this document easier to read, you can enlarge the Write window to its maximum size. To do so, click the Maximize button in the upper-right corner of the window. Or open the Control menu in the upper-left corner of the Write window (press ALT+SPACEBAR), and then choose the Maximize command.

To move through the document, press PAGE UP or PAGE DOWN. Or click the arrows at the top and bottom of the scroll bar along the right side of the Write window.

To print the document, choose Print from the File menu.

For Help on using Write, press F1.

To read other online documents, choose Open from the File menu.

Contents

This document contains the following topics about printing:

1.0 Printing from MS-DOS–based Applications

1.1 Print Conflicts Between Remote and Local MS-DOS–based Applications

In Windows for Workgroups, Print Manager manages all local and remote print jobs, except for those from local MS-DOS–based applications. A conflict arises if a remote client sends a print job at the same time an MS-DOS–based application is printing. Since Print Manager does not control local MS-DOS–generated print jobs and MS-DOS–based programs usually do not close printer ports when their print jobs are complete, the redirector must use the MS-DOS–based application's idle time to determine when to print the remote print job. The time the redirector waits is specified in the [Network] section of the SYSTEM.INI file in the **PRINTBUFTIME=** statement. By default, this value is set to 45 seconds.

If the above situation occurs, you are warned that a potential device conflict exists and if you continue, the printed output may be incorrect or garbled. The local (print server) print job goes directly to the port, breaking up and potentially interrupting the remote print job.

If you have a shared printer on your machine, do not override a device conflict warning. You may be able to work around this problem by setting **PRINTBUFTIME=** to a lower value (such as 10 seconds).

1.2 Spooling Print Jobs from MS-DOS–based Applications

This section contains information on the use of Windows for Workgroups with third-party products or configurations that have not been tested and are not supported by Microsoft. If the procedures described in this section do not enable print spooling to work properly on your computer, contact the manufacturer of the third-party product for more information or use a supported configuration.

Windows for Workgroups cannot spool local print jobs sent to the printer by MS-DOS–based applications. The following paragraphs outline a workaround for this situation. This workaround may also alleviate device contention errors.

To spool print jobs from MS-DOS–based applications, you must print from one computer to another (using a dummy port) and then redirect the job back to the first computer. The print job is then put in the print queue. This may eliminate any device conflicts when you try to print to the local printer.

Note: This works only if the application has the ability to choose the LPT2 port over the LPT1 port.

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In the following example, Computer One has a shared local printer on LPT1 that is being accessed by Computer Two over the network.

1. Install a printer driver for the port LPT1.DOS on Computer Two and share it.

2. From Computer One, connect to the share on Computer Two using LPT2.

3. Print from an MS-DOS–based application to LPT2. Your print job may be effectively spooled.

2.0 Printing Extended or International Characters

In addition to the 128 standard ASCII characters you can type by using your keyboard, you can use extended or international characters by using the Character Map application. For more information, see Help for Character Map.

When Windows prints a file, each character you typed while using your application is translated from the Windows character to the appropriate character on your printer. If your printer supports the same character, the character prints. Otherwise, some other character, such as a period or other filler character, prints instead. Check your printer manual and experiment with your printer to determine which extended characters are supported.

Note: This limitation applies only to the printer's hardware fonts. Fonts provided by Windows for Workgroups do print the extended characters.

3.0 Configuring Your Printer's DIP-Switch Settings

The following printer models require certain DIP-switch settings in order to work properly in Windows for Workgroups. Make sure you configure your printer's DIP-switch settings before you install your printer.

3.1 Canon® Bubble-Jet BJ-10e and BJ-130e

All DIP switches should be set to the factory-default position. For the BJ-10e and BJ-130e models, this is the OFF position.

3.2 Epson® 9-Pin and 24-Pin Printers Supported by Windows for Workgroups

The following DIP-switch settings are required for all Epson 9-pin and 24-

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pin printers:

Auto LineFeed: OFF
Skip Over Perf: OFF

3.3 Fujitsu® 9-Pin and 24-Pin Printers Supported by Windows for Workgroups

The following DIP-switch settings are required for all Fujitsu 9-pin and 24-pin printers:

Color: AUTOSEL
LF Code: LF Only
CR Code: CR Only
Emulate: DPL24/DPL24C

4.0 Notes About PostScript Printers and Cartridges

This section contains information specific to PostScript printers.

4.1 Installing a PostScript Printer

When you install a PostScript printer, make sure you select the name of your printer model (not PostScript Printer) from the List Of Printers box in the Printers dialog box. If you select PostScript Printer, you may encounter problems when printing. However, if you are using Finale (manufactured by CODA), this is not the case.

4.2 Installing Support for Additional PostScript Printers

If you are using a PostScript printer that is not listed in the List Of Printers box in the Printers dialog box, you need to install a Windows PostScript Definition (WPD) file for the printer. To do this, use the Printers option in Control Panel or the Printer Setup command in Print Manager, and select Install Unlisted Or Updated Printer in the List Of Printers box.

Windows for Workgroups requires an OEMSETUP.INF file to install the WPD file. Insert the vendor-provided disk that contains this file in drive A, and then follow the instructions for setting up a printer. For more information about installing a printer, see Help for Print Manager.

4.3 Printing a PostScript Print File in UNIX®

The PostScript printer driver inserts a CTRL+D key combination at the beginning of every print job to reset the printer. Because UNIX systems recognize CTRL+D as an end-of-file character, any print files you create by using the PostScript printer driver do not print in UNIX. You can correct this problem by removing the CTRL+D key combination from the print job. To do this, add the following setting to the [ModelName,Port] section in the WIN.INI file (where ModelName is the name of your PostScript printer model):

   CtrlD=0

For more information about editing the WIN.INI file, see the WININI.WRI online document.

4.4 Printing TrueType® Fonts in Place of Other Fonts on a PostScript Printer

In most cases, the PostScript printer driver can evaluate the fonts in your document and determine whether to use the Windows TrueType fonts, the fonts built into your printer, or downloaded soft fonts.

In some cases, the printer driver can use either the Windows TrueType fonts or the printer fonts, as in the following examples:

• You are using a True Image printer that includes built-in TrueType fonts that have the same name as the Windows TrueType fonts, such as Times New Roman.

• You want to print a document in Windows for Workgroups version 3.11 that was created by using Windows version 3.0, and the document contains a font that is no longer supported, such as Tms Rmn. In this case, the closest matching printer font is Times, and the closest matching Windows font is Times New Roman; both are acceptable for printing.

If the driver can use either the Windows TrueType fonts or the printer fonts, it uses the printer fonts by default. If you want the driver to use the Windows TrueType fonts instead, add the following setting to the [ModelName,Port] section in the WIN.INI file (where ModelName is the name of your PostScript printer model):

   ttfavor=1

To use the printer fonts again, set this value to 0.

For more information about editing the WIN.INI file, see the WININI.WRI online document.

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4.5 Controlling TrueType Font Downloading on PostScript Printers

When you are setting printer options for a PostScript printer, you can specify that TrueType fonts be downloaded as Adobe® Type 1 fonts. To do this, use the Send To Printer As option in the Advanced Options dialog box for the PostScript printer driver. This setting causes smaller TrueType fonts to be printed as bitmaps and larger TrueType fonts to be printed as outline fonts.

By using the **MinOutlineEppem** setting in the WIN.INI file, you can specify (in the number of points per em) exactly when TrueType fonts should be printed as bitmaps and when they should be printed as outline fonts. To do this, add the following setting to the [ModelName,Port] section in the WIN.INI file (where ModelName is the name of your PostScript printer model):

   minoutlineeppem=<number>

The default value for number of points per em is 101. Fonts whose points per em are fewer than the number you specify are downloaded as bitmaps. Fonts whose points per em are greater are downloaded as outline fonts. To conserve printer memory, decrease the value. To produce high-quality printed fonts at larger point sizes, increase the value. Increasing the value also speeds up printing time but requires more memory.

For more information about editing the WIN.INI file, see the WININI.WRI online document.

4.6 Setting the Timeout for PostScript Printers

Some PostScript printers require a high timeout value in order to print complex documents. If you selected the Print PostScript Error Information check box in the Advanced Options dialog box when you configured your printer and your printer is printing timeout messages, try increasing the printer's timeout value. To specify the timeout value for your printer, add the following setting to the [ModelName,Port] section in the WIN.INI file (where ModelName is the name of your PostScript printer model):

   timeout=<number-of-seconds>

For example, if you want to set the printer timeout to 10 minutes on an Apple℠ LaserWriter® IINT connected to LPT1, you would add the following setting to the [Apple LaserWriter IINT,LPT1] section of the WIN.INI file:

   timeout=600

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Note: The **timeout** setting and the Timeouts options in the Printer Connect dialog box are unrelated. The **timeout** setting specifies the timeout value for your printer, whereas the Timeouts options in the Printer Connect dialog box specify the timeouts for Windows.

For more information about configuring your printer and setting Timeouts options for Windows, see Help for Print Manager or Control Panel. For more information about editing the WIN.INI file, see the WININI.WRI online document.

4.7 Rotating EPS Files When Printing in Landscape Mode

If the placement or orientation of imported images (such as EPS files) is incorrect when you are printing in landscape mode from an application that supports imported files, try adding the following setting to the [ModelName,Port] section of the WIN.INI file (where ModelName is the name of your PostScript printer model):

LandScapeOrient=270

For more information about editing the WIN.INI file, see the WININI.WRI online document.

4.8 Troubleshooting PostScript Printer Problems with TESTPS.TXT

Windows for Workgroups 3.11 comes with a file called TESTPS.TXT. This file is copied into the \WINDOWS\SYSTEM directory if you install a PostScript printer. TESTPS.TXT is used to test PostScript printers for connection and functionality problems. To use TESTPS.TXT, copy it to the port to which the PostScript printer is connected as follows:

```
COPY C:\WINDOWS\SYSTEM\TESTPS.TXT LPTx
or
COPY C:\WINDOWS\SYSTEM\TESTPS.TXT COMx
where x is the port number
```

If the printer is functioning correctly, it will print a page that contains the following information:

```
Max Printer VM (KB):  xxx.x
Max Suggested VM (KB):      xxx.x
Baud Rate:                        19200 (or less)
Data Bits:                        7
Parity:                           None
Stop Bits:                        1
```

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Flow Control: Hardware

If the printer is not functioning or is not connected properly, no page is
printed. If no output occurs, check the following:

- Is the printer plugged in? Is the power on? Try turning off the power and
  turning it back on again.

- Is there paper in the printer?

- Is the correct port being used to copy TESTPS.TXT? Try copying the file
  to other available ports.

- Is the printer cable functioning properly? Try a different cable.

- Is the LPT or serial card/port configured correctly? Check the DIP
  switches or software setup for the card.

- Are the settings in the Ports window of the Control Panel configured
  according to the TESTPS.TXT output? To verify this, use the following
  steps:
  - Open Control Panel, and then double-click the Ports icon.
  - Select the active port, and then choose the Settings button.
  - Compare the settings with the TESTPS.TXT output.

5.0 Notes About Hewlett-Packard®, Canon®, and PCL® Printers and Plotters

This section contains information specific to printing on Hewlett-Packard,
Canon, and PCL printers and plotters.

5.1 Configuring Memory on PCL Printers

If you are using a PCL printer, you may want to configure printer memory to
reserve a portion of it for permanently downloaded fonts or macros. To do
this, you can add two settings to the [HPPCL,Ports] section of your WIN.INI
file:

- **MemReserve=<kilobytes>** specifies the amount of total printer memory
  that is reserved. For example, if you are using permanently downloaded
  soft fonts that occupy 300K of memory, you can add **MemReserve=300** to
  your WIN.INI file. You do not need to add this setting if you use the Font
  Installer program provided with Windows for Workgroups to download
  your fonts. In this case, the printer driver can automatically detect how
  much memory is taken up by the fonts.

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- **ResetPrinter=<0, 1, 2>** specifies when the driver should reset printer memory. If the value is 0, the driver resets printer memory when the amount of memory available for printing (the total amount less the value for **MemReserve**) is low. If the value is 1, the driver resets printer memory after printing each page. If the value is 2, the driver never resets printer memory. In most cases, a value of 0 works, providing that the value for **MemReserve** is accurate. If you are printing a large document that contains complex graphics, you may want to specify a value of 1.

For more information about editing the WIN.INI file, see the WININI.WRI online document.

5.2 Simulating Bold Type on PCL Printers

The Windows for Workgroups PCL driver no longer simulates bold for a font that does not include a bold font style. For example, if you use a cartridge or soft font in your application that includes only a regular font style and you format text as bold, the text prints in the regular font style on a PCL printer.

5.3 Printing from PageMaker® Version 3.x to a PCL Printer

Aldus® PageMaker version 3.x expects a text band to be sent if you are printing to a PCL printer. If you are using a 3.x version of PageMaker, you need to add the following line to the [HPPCL,Port] section of your WIN.INI file in order to print successfully:

    ForceTextBand=1

For more information about editing the WIN.INI file, see the WININI.WRI online document.

5.4 Using the Hewlett-Packard LaserJet® IIIsi in PostScript Mode

If you are using a LaserJet IIIsi printer in PostScript mode, make sure the PRT PS ERRS option on your printer panel's menu is turned off (this is the factory-default setting), unless you are writing PostScript programs and need error information for debugging. If this option is on, your print jobs pause and a message appears on your printer's panel each time a PostScript error is encountered. In most cases, your documents still print, but the printing process is interrupted.

5.5 Using Intellifont for Windows Version 1.0 with Hewlett-Packard LaserJet III Printers

If you install Intellifont for Windows version 1.0 after setting up Windows for Workgroups version 3.11, you must reinstall the LaserJet III printer driver by using the Printers option in Control Panel or the Printer Setup command in Print Manager. The installation program for Intellifont for Windows installs an earlier version of the LaserJet III printer driver. This driver does not work correctly with Windows for Workgroups.

5.6 Upgrading HP® LaserJet Series III Printer Drivers

The HP LaserJet III printer driver included with Windows for Workgroups is named HPPCL5MS.DRV. In earlier versions of Windows, this driver was named HPPCL5A.DRV. If you upgrade to Windows for Workgroups, the Setup program updates the printer driver for the HP LaserJet III printer. However, some applications store the information about the printer-driver file with the document, and if you try to print a document that you created before you upgraded to Windows for Workgroups, you may receive a message notifying you that the printer driver cannot be found. If this happens, choose the Printer Setup command in your application to update the driver information stored in the document.

5.7 Using the Hewlett-Packard DeskJet® 500 Printer Driver

If you are using the HP DeskJet 500 printer driver provided by Hewlett-Packard with the HP DeskJet 500 printer, you need to adjust the resolution setting to print at 300 dpi. To do this, first try adjusting the resolution setting in the printer setup dialog box by using the Printers option in Control Panel or the Printer Setup command in Print Manager. If this doesn't work, add the following line to the [DJ500,Port] section of your WIN.INI file:

prtresfac=0

For more information about editing the WIN.INI file, see the WININI.WRI online document.

5.8 Printing Envelopes in Word for Windows Version 2.0 on a Hewlett-Packard DeskJet 500 Printer

If you are using the DeskJet 500 printer driver provided with Windows for Workgroups, you may encounter difficulties when using Word for Windows version 2.0 to print envelopes on a Hewlett-Packard DeskJet 500 printer.

To correct the problem:

1. In Word for Windows, choose the Options command from the Tools menu.

2. In the Category list, select the Win.ini button.

3. In the Option box, type **hpdskjet**

4. In the Setting box, type **+1**

5. Choose the Close button.

You can also add the following line to the [Microsoft Word 2.0] section of your WIN.INI file:

   hpdskjet=+1

For more information about editing the WIN.INI file, see the WININI.WRI online document.

5.9 Printing TrueType Fonts on Canon Series II and III Laser Printers

The Canon series II and III laser printers do not support incremental downloading of TrueType fonts. To print TrueType fonts by using one of these printers, you must select the Enable TrueType Fonts check box in the printer setup dialog box for the printer. This option supports the printing of TrueType fonts on these printers by printing them as graphics. This check box is selected by default when a Canon series II or III printer is installed.

If the Enable TrueType Fonts check box is not selected, TrueType fonts cannot be printed on these printers and are not available in your Windows-based applications; only printer and plotter fonts are available. For more information about setting printer options, see Help for Print Manager.

5.10 Printing Graphics on a Canon Bubble-Jet BJ-10e or BJ-130e

If you are printing in 360x360 dpi graphics mode and part of the graphics images in your documents are missing, make sure the DIP switch that controls graphics image density is set to HIGH.

5.11 Adjusting Hewlett-Packard Plotter Margins

If you are using one of the plotters in the following list, you can probably correct margin problems by experimenting with the margin settings in your application and by turning on the Expand switch on your plotter:

*   HP 7580 A,B (hardware switch on back panel, pin #9)
*   HP 7585 A,B (hardware switch on back panel, pin #9)

- HP DraftPro DXL, EXL (hardware switch on back panel, pin #9)
- Draftmaster® I, II (front panel selection)

Turning on the Expand switch increases the plotting area by setting the outer margins to the area under the grid wheels. However, this might decrease plot quality.

5.12 Adding Distinct Docl/Comp Pub I and Brilliant Pres I/Comp Pub II Font Cartridges

If you need to install these font cartridges for your LaserJet III printer, you can do so by using the Font Installer.

To install the font cartridges:

1. In Print Manager, choose Printer Setup from the Options menu.

2. In the Printers dialog box, select your printer from the list of installed printers, and then choose the Setup button.

3. In the printer driver dialog box, choose the Fonts button.

4. In the Font Installer dialog box, choose the Add Fonts button.

5. In the dialog box that appears, type the path for your Windows SYSTEM directory—for example:

   c:\windows\system

6. Select the name of the cartridge you want to install, and then choose the OK button.

5.13 Using the Hewlett-Packard HP-GL/2

Support for HP-GL/2 is in the HPPCL5E driver. Under the Options Dialog in the Printer Setup, an option of "Graphics Mode" is available. Two options are present: HP-GL/2 or Raster.   The first choice enables HP-GL/2 which will increase print performance. The second choice uses raster only. The default graphics mode is set to raster for the HP LaserJet 4L. The default mode is set to HP-GL/2 for the HP LaserJet 4/4M and 4Si/4Si MX.

For the HP LaserJet 4/4M and 4Si/4Si MX, if you encounter print difficulties in the default Graphics Mode, it is recommended that you change the mode to Raster and try your print job again. Additional information on this topic may be found in the help files that accompany this driver. Choose Help from the driver dialog screens or the HP font installer screens to access the HELP information.

6.0 Notes About Additional Printers and Font Packages

This section contains information specific to font packages and printing on dot-matrix, 24-pin, Epson, and IBM printers.

6.1 Feeding Paper on Fujitsu Dot-Matrix Printers

The manual-feed option is not supported on Fujitsu dot-matrix printers. All paper is automatically fed to the printer from the roller.

6.2 Printing to an IBM® Personal Pageprinter, Using the EPT Port

For best results, use the IBM Personal Pageprinter Adapter Program version 1.3.1 or later.

If you want to print to an IBM Personal Pageprinter assigned to the EPT port, you must set the LPT1 device contention to never issue a warning. For more information about managing device requests, see Help for Control Panel.

6.3 Printing to an IBM Proprinter® X24 or XL24, Epson MX-80, or Okidata® 24-Pin Printer

Because Print Manager sometimes interrupts the flow of data while printing, you might notice erratic output if you are using an IBM Proprinter X24 or XL24, Epson MX-80, or Okidata 24-pin dot-matrix printer when Print Manager is active. These printers cannot accommodate interruptions in data flow. To solve this problem, try deactivating Print Manager.

If you still have problems after deactivating Print Manager, use the following procedure.

To print to a file and then send the file to a printer:

1. Using the Printer Setup command in Print Manager or the Printers option in Control Panel, connect to the port named FILE.

2. Choose the Print command in your Windows application.

3. Copy the print file to the port your printer is connected to.

For more information about activating and deactivating Print Manager and

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printing to a file, see Help for Print Manager. For more information about printing to a file, see your MS-DOS documentation.

Note: This problem should not occur when you are printing on an IBM Proprinter X24e or XL24e.

6.4 Using Fonts with the Epson LQ-510, LQ-850, and LQ-1050 Printers

The Epson LQ-510, LQ-850, and LQ-1050 printer drivers support the full set of fonts provided with the latest versions of these printer models. Earlier versions of these printer models support only the Roman and Sans Serif fonts.

6.5 Printing TrueType Fonts on Kyocera® F-Series Printers

To print TrueType Fonts on Kyocera F-Series printers, you must select the Print TrueType As Graphics check box in the Options dialog box when configuring your printer. Otherwise, TrueType fonts may not print correctly. For more information about configuring printers, see Help for Print Manager.

6.6 Changing Printer Settings When Using Bitstream® FaceLift® Version 1.0

With some applications, you can change the settings for your printer on a per- page basis. If you are using the Facelift version 1.0 soft-font package from Bitstream, you cannot use this feature when you are printing multiple-page documents.

6.7 Using the Cut-Sheet Feeder on the NEC® Pinwriter P7 Printer

The Paper Source option, Cut Sheet Feeder, does not work properly with the NEC Pinwriter P7 printer. To use the cut-sheet feeder as the paper source, you must specify a left margin of about three inches for your document so that text prints correctly on the page.

6.8 Using Separator Pages

If you are using one of the following printer models and the printer is a local printer (attached to your computer), do not use the separator-page feature in Print Manager. This feature is not supported in these printer models.

Canon LBP-4
Canon LBP-8 II

Canon LBP-8 III
IBM Laser Printer 4019
Olivetti® DM 109
Olivetti DM 309

7.0 Troubleshooting

7.1 Troubleshooting Garbled Output

If you get garbled output on a printer, it may be due to one of the following problems:

1. Your network adapter and LPT1 port may have a conflicting IObase address, such as 370. You need to change the IObase address of the network adapter.

2. If you are using a NetWare server and PRINTCON.DAT is set up for text mode or is not in the SYS directory for your Novell® network installation, Windows for Workgroups version 3.11 will not print TrueType fonts correctly. One of the functions of PRINTCON.DAT is to set up the default data stream type. Without a PRINTCON.DAT file, the default is a "TEXT" data stream.

   To correct this problem, use the Novell PRINTCON utility to generate a PRINTCON.DAT file with a default data stream of "BITSTREAM". Once this is done, TrueType fonts should print normally.

8.0 Other Online Documents

The following table describes other online documents that contain important information about Windows for Workgroups that is not included in the *Microsoft Windows for Workgroups User's Guide* or in Help.

Document	Contains
SETUP.TXT	Information about problems that may occur when you set up Windows for Workgroups.
MAIL.WRI	Information about the MSMAIL.INI file and other Mail administration information.
README.WRI	Information about using Windows for Workgroups with the Multimedia Extensions version 1.0, specific display-adapter and system configurations, and MS-DOS–based applications, and information that was unavailable when the documentation was printed.

NETWORKS.WRI	Information about running Windows for Workgroups
with specific network configurations.

SYSINI.WRI	Information about the settings in the SYSTEM.INI
file.

WININI.WRI	Information about the settings in the WIN.INI file.