



## Troubleshooters

A SURVIVAL GUIDE

# Printing It Right

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**S**peed is one of the more important issues when it comes to printing in Windows. Technical support staff is used to receiving calls from users complaining about their printers printing too slowly and occasionally, you will get complaints such as "it was printing fine, then suddenly ...."

Printing in Windows is usually less troublesome than printing in DOS, especially when most Windows applications share a common printer driver that runs within Windows. But you will occasionally receive complaints about funny or garbage outputs. Some users run into printing problems after they have upgraded their printer to another model, or after they have changed a driver, or after they have added in a printer cartridge or additional RAM.

In this article, I will try to teach users how they can finetune their printing, or check for settings and configuration when an error occurs.

There are three

types of printers: dot-matrix, laser and postscript. Few problems occur in dot-matrix printers because there are no memory settings or other configuration available. Dot-matrix printers print whatever is sent to them; it will print graphics or text according to the dot specifications indiscriminately.

### Laser Printers

For laser printers, there are occasions where a user may encounter messages such as "insufficient memory to print job" or "out of memory" while printing.

The reason for this is usually because of the incorrect memory setting for the laser printer in the Control Panel. A laser printer has only 1MB on board and some users set it at a higher memory in the Control Panel's Printers Setup option. This causes the application to send data excessively at a fast speed to the printer due to the high memory specification. As a result, "memory overflow" or "out of memory" is inevitable. On the other hand, if you have a 3MB printer and you configure it to 1MB, you will find that the processing and printing time to be very slow.

Ideally, users of laser printers are advised to have at least 2MB RAM for their printers. This will greatly improve the efficiency of the printer.



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because the printer can then download fonts to be stored in the printer's RAM, and the printing of the subsequent pages will be faster.

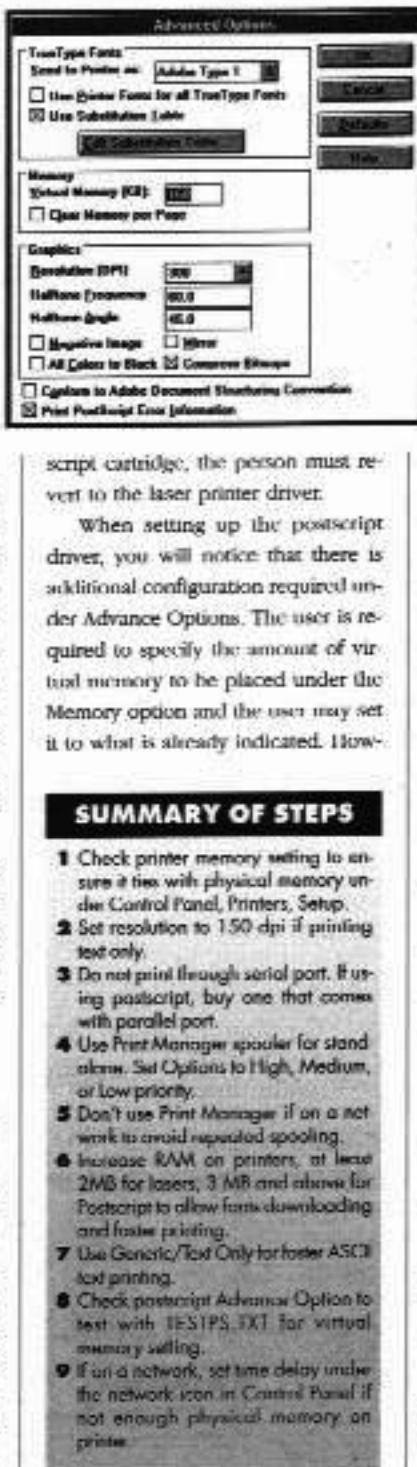
If a user is printing text alone, it will be much faster for them to set the printing resolution to 150 dpi instead of 300 dpi. This will not deteriorate text-printing resolution as the 300 dpi resolution only affects graphics printouts. If a user wishes to print text in ASCII, it may be faster if they choose the Generic/Text Only driver instead, even if it is on a laser printer.

For a standalone PC, it is advisable for the user to maintain the Print Manager. The user may then configure its priority to high, medium or low. The network users will get faster results if they disable the Print Manager because most networks already come with their own spooler. If the Print Manager is on, the printing process will have to go through two processes: through the Print Manager and the network spooler.

When add-on cartridges such as font cartridges are used, the user must ensure that the printer driver setting also indicates the add-on cartridge specification under the Cartridge (2 Max) option.

### Postscript Printers

There are a few things that the postscript printer users have to consider. First, if the printer is a true Postscript printer, the driver in use must be a postscript driver, preferably specific to that particular printer. Secondly, if a postscript cartridge is added to a laser printer, users must change the printer driver into a postscript printer accordingly. In another scenario, if another user chooses to use this same printer without the post-



script cartridge, the person must revert to the laser printer driver.

When setting up the postscript driver, you will notice that there is additional configuration required under Advance Options. The user is required to specify the amount of virtual memory to be placed under the Memory option and the user may set it to what is already indicated. How-

### SUMMARY OF STEPS

- 1 Check printer memory setting to ensure it ties with physical memory under Control Panel, Printers, Setup.
- 2 Set resolution to 150 dpi if printing text only.
- 3 Do not print through serial port. If using postscript, buy one that comes with parallel port.
- 4 Use Print Manager spooler for stand alone. Set Options to High, Medium, or Low priority.
- 5 Don't use Print Manager if on a network to avoid repeated spooling.
- 6 Increase RAM on printers, at least 2MB for lasers, 3 MB and above for Postscript to allow font downloading and faster printing.
- 7 Use Generic/Text Only for faster ASCII text printing.
- 8 Check postscript Advanced Option to test with TESTPS.TXT for virtual memory setting.
- 9 If on a network, set time delay under the network icon in Control Panel if not enough physical memory on printer.

ever, to optimize performance, the user should do a procedural test. To carry out the test, the user should try to print out the file TESTPS.TXT, which can be found in the WINDOWS\SYSTEM directory. The result will indicate the best memory setting required for your postscript printer. Before printing out the file, the user must ensure a postscript printer is hooked up to the system. This file will only produce the result of memory requirement on postscript printers. This test can be done from the file manager, using the copy command to copy to the printer port such as LPT1.

Some postscript printers come only with a serial port for Apple Macintosh. By printing with serial cable, printer performance will deteriorate considerably, so the user has to take into account the availability of a parallel port when purchasing a postscript printer.

When using postscript printer, it is advisable to have at least 3 MB RAM

### Other Enhancements

As a general guide, users are advised to have the two following drivers loaded, even if they do not have postscript printers:

Generic/Text Only  
Postscript

As mentioned above, Generic/Text Only driver supports almost any printers and prints much faster when printing any ASCII files.

The Postscript driver enables postscript typefaces to be supported on any word processing software; even if no physical postscript printer is attached. With this driver, the user can also save graphics or text to file. The file can then be printed through a postscript printer elsewhere. ■