

Creating PDF Files without Adobe® Acrobat®

A Brief Tutorial for Windows® Users

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Many people believe that you need expensive software packages like Adobe® Acrobat® in order to create PDF files. Actually, you can create high-quality PDFs using free software and built-in features of Microsoft® Windows®. This document explains how to do it.

1. Introduction

Portable Document Format (PDF) is a popular and useful file format for print-oriented documents. When you want to ensure that your document looks the same to everyone who views or prints it, PDF is a good choice. PDF reader software is available free of charge for Windows, Macintosh, Linux, and other operating systems.

PDF files are sometimes called “Acrobat files,” because the most popular PDF software is Adobe Acrobat; many people believe that you must have Acrobat in order to create PDF files. Actually, there are a number of programs that can generate PDF, and some of them can be downloaded for free.

This document explains how to create a PostScript file and then convert it to PDF.

2. Creating a Virtual PostScript Printer

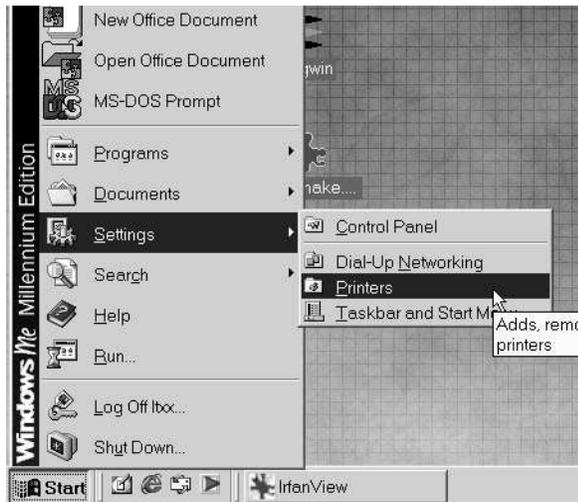
Normally when you print a document, your computer sends data through a cable to a physical printer, which then renders the document as ink on paper. It is also possible to set up what I will call a *virtual printer*. When you want to print a document from Microsoft Word or any other Windows program, you can select a virtual printer just as you might select a real printer—as far as Word is concerned they are the same thing. But when you use a virtual printer, instead of the data being sent to an actual printer, it is stored in a file on your hard disk. You can save this file in order to print it later, email it to a colleague, or—the topic of this paper—convert it to another format such as PDF.

Of course, before you can use a virtual printer you will need to create it, and it needs to be a specific type known as a PostScript printer (PostScript is a printer language that used to be very common for desktop printers and is still widely used in professional publishing). The following steps show how to create a virtual PostScript printer in Windows. Depending on your Windows version, some of the dialog boxes shown may appear different or be missing, but the basic procedure should be the same for all versions from Windows 95 on.

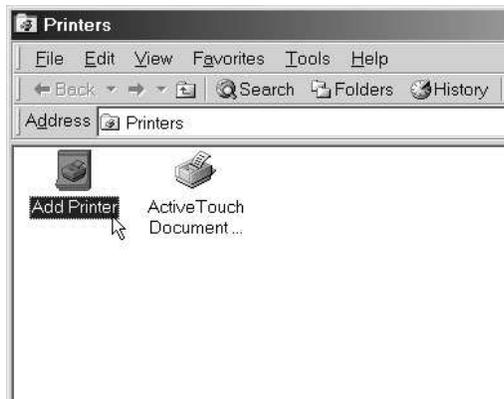
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1. Open the Windows Start Menu, and select Settings ► Printers.



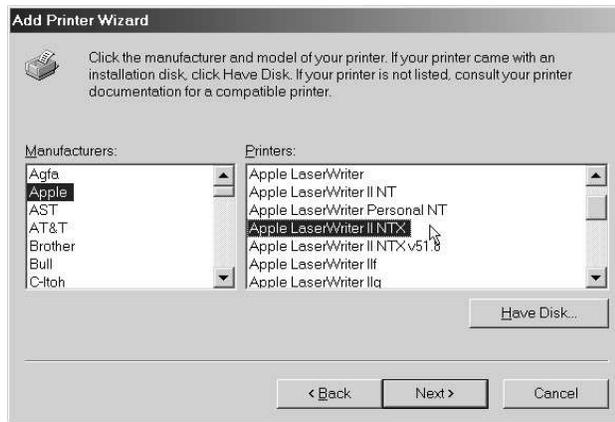
2. Double-click the Add Printer icon.



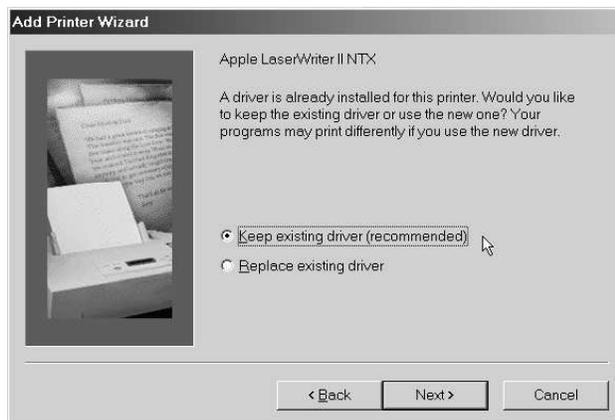
3. Select Local printer.



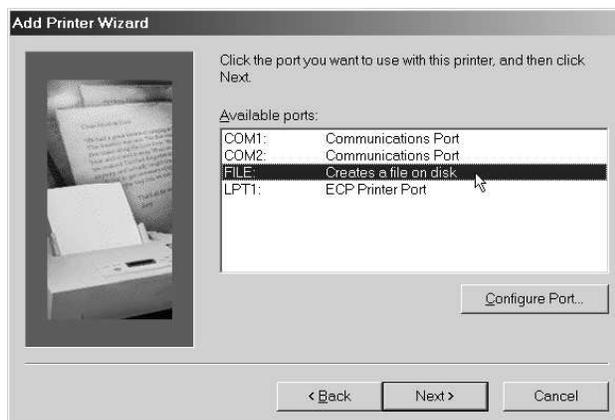
4. Select a PostScript printer driver. There are usually several available, but I have found that Apple LaserWriters and HP LaserJets generally work well. If you are unsure which drivers are PostScript, look for one with **PS** in its name.



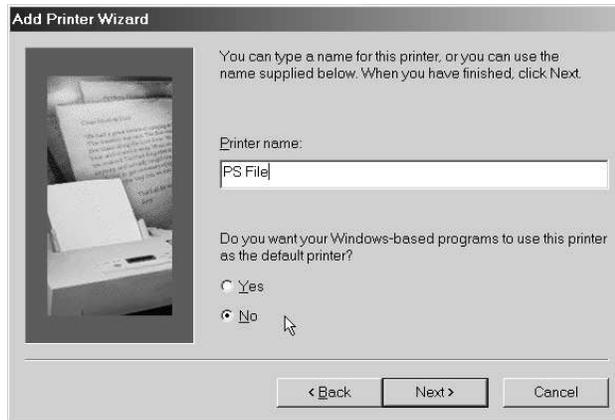
5. If you have previously installed the same type of printer, you may see this dialog box. Select **Keep existing driver** unless you know you are installing a new driver.



6. You will be given a choice of printer ports. Select **FILE:**.



7. The final step is to name the printer. It does not matter what you call it, as long as the name is meaningful to you. Also, if you normally use a physical printer, you probably will not want to use the virtual printer as the default, so you should select **No** here.

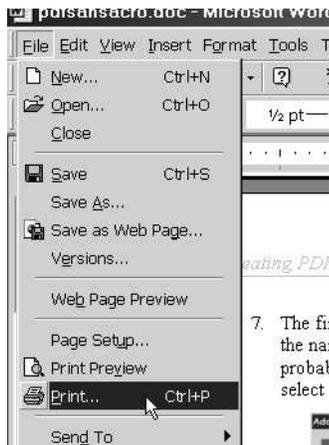


When you have completed the above steps, you should have a virtual PostScript printer that you can use from any Windows application.

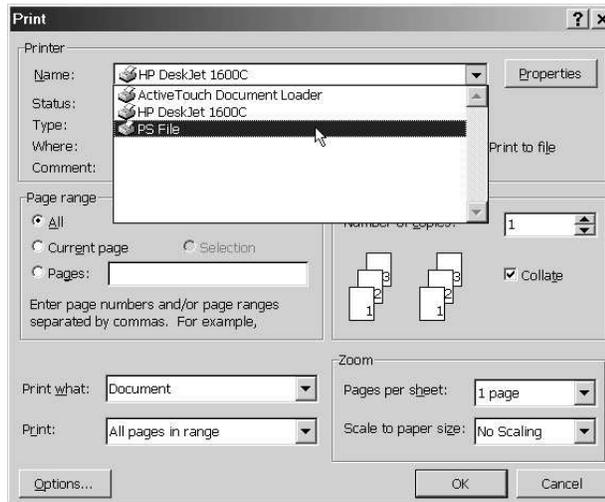
3. Printing to a PostScript File

This section uses examples from Microsoft Word, but the procedure should be very similar for any Windows application.

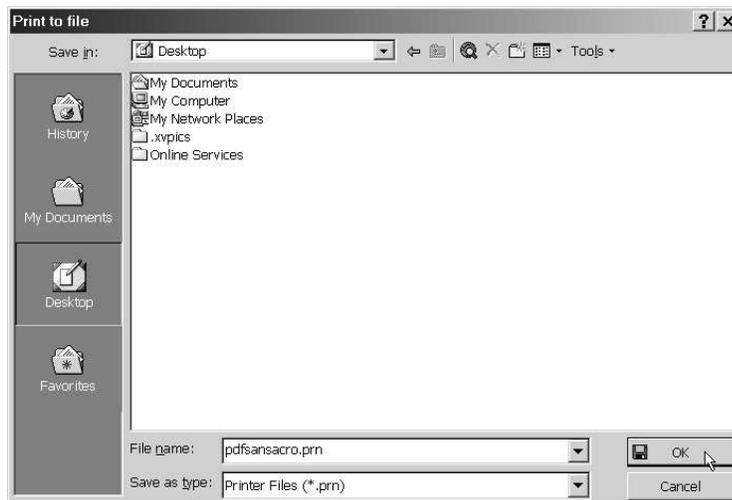
1. Select **File** ► **Print** from the main menu.



2. Select the virtual printer you created in Section 2.



3. Select any convenient location and name for the PostScript file (called simply a “printer file” in this example).



4. Click OK, and your document will be “printed” using the virtual printer, and the result will be saved to a file. Note that the printing procedure may take several seconds.

4. Converting PostScript to PDF

The final step is to convert your PostScript file to PDF. If you convert files on a regular basis, you may wish to install the Ghostscript package, freely available from <http://www.ghostscript.com/doc/AFPL/index.htm>. Ghostscript includes a PostScript-to-PDF conversion utility called **ps2pdf**. You should be aware that Ghostscript can take considerable effort to set up and use properly. Fortunately, however, there is a free and easy-to-use converter on the web. Here’s how to use it:

1. Start your web browser and go to <http://www.ps2pdf.com/>.
2. Select the Convert link from the main menu.



3. Use the web form to select a file, then press the Convert button.



4. When the conversion is finished, you should see a page like the following. Just click on the link, and you've got your document in PDF format!

