

Guide To The Creation Of PDF Files

Introduction

Besides the distribution of MS Word documents, there is another popular format of file exchange called 'Acrobat' (files ending in .PDF). The software is likely to be installed on your home PC already if it is fairly modern. Many commercial software packages already make extensive use of it for documentation, and bundle the PDF file reader software with their own installation CDs. Failing that it can be downloaded for free (see below).

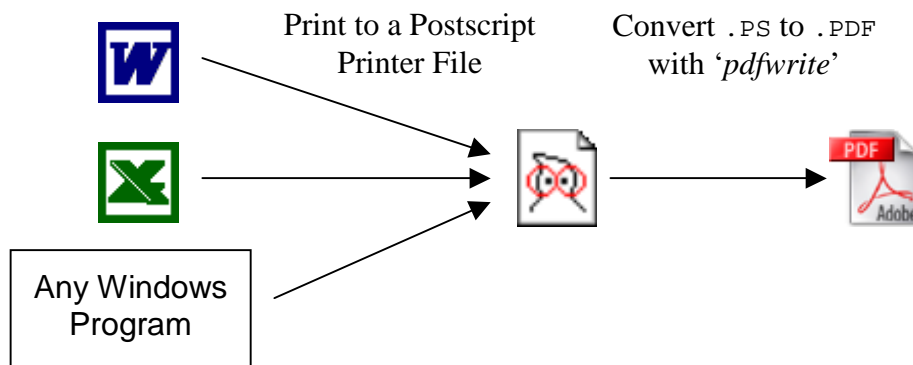


The advantages of this format over others is

- It is read only, so cannot be altered by recipients
- Because it cannot be altered, the page layout intended by the author remains the same as when it was sent. This is not true for MS Word, where the layout may change on receipt due to the use of a different page layout enforced by the use of a different (local) printer.

PDF file creation can be made to work directly from the print dialogue boxes of Windows applications, providing you are prepared to spend a significant amount of money. This document outlines how you may achieve this for *free*, but you will have to be prepared for a less convenient production route.

Overview



- 1) From the print dialogue box of any Windows program, choose a 'Postscript' printer, and print to a file. *i.e.* create 'file.ps'.
- 2) Convert the Postscript printer file to Adobe Acrobat using Ghostscript (which includes the 'pdfwrite' utility). *i.e.* convert 'file.ps' to 'file.pdf'.
- 3) You can now read the file in Acrobat, and email it to friends and colleagues, or publish it on the web.

Installation

Postscript Printer Driver

Use a colour postscript printer driver set to print to file, *i.e.* 'HP C LaserJet 4500-PS'. This (or another Postscript printer driver) can be found on your Windows installation CD if they are not already pre-loaded onto your hard disc (as is most likely with WinXP). To help you identify this new printer driver more easily, you might like to name the printer "Postscript File Printer".

Ghostscript

Visit <http://ghostscript.com/> to download two Windows installation files:

- GSView (1.44 MB)
- AFPL Ghostscript (9.92 MB).

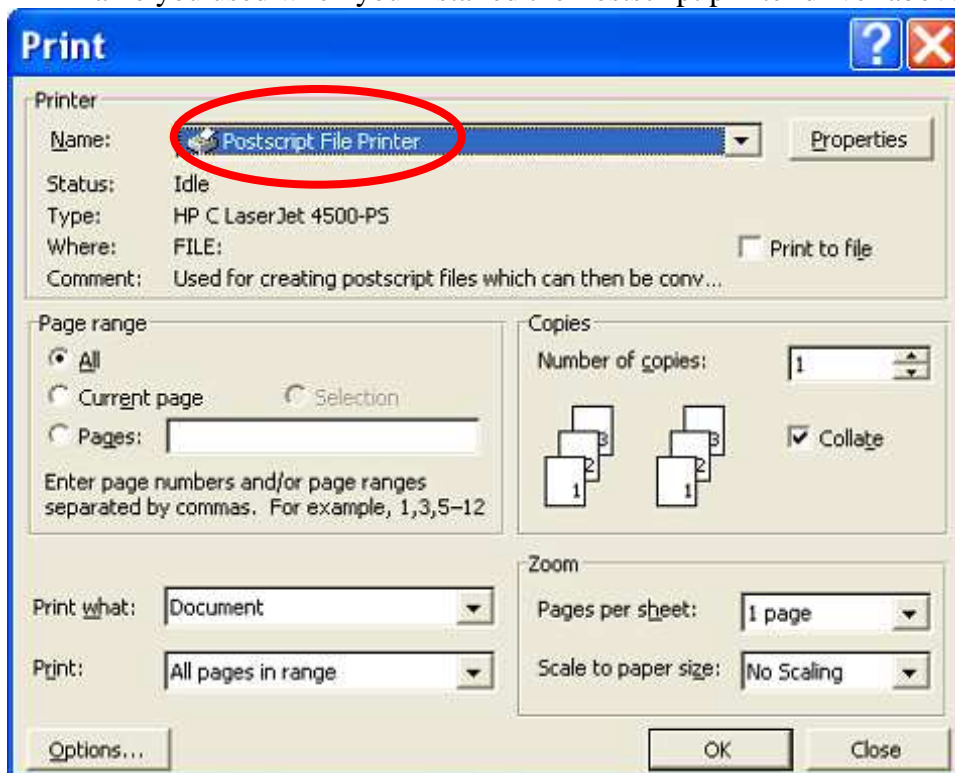
Get the latest non-‘beta’ versions. Links are provided from the above URL (web page link) to these versions, but you will have to read the page and follow the appropriate links.

Adobe Acrobat

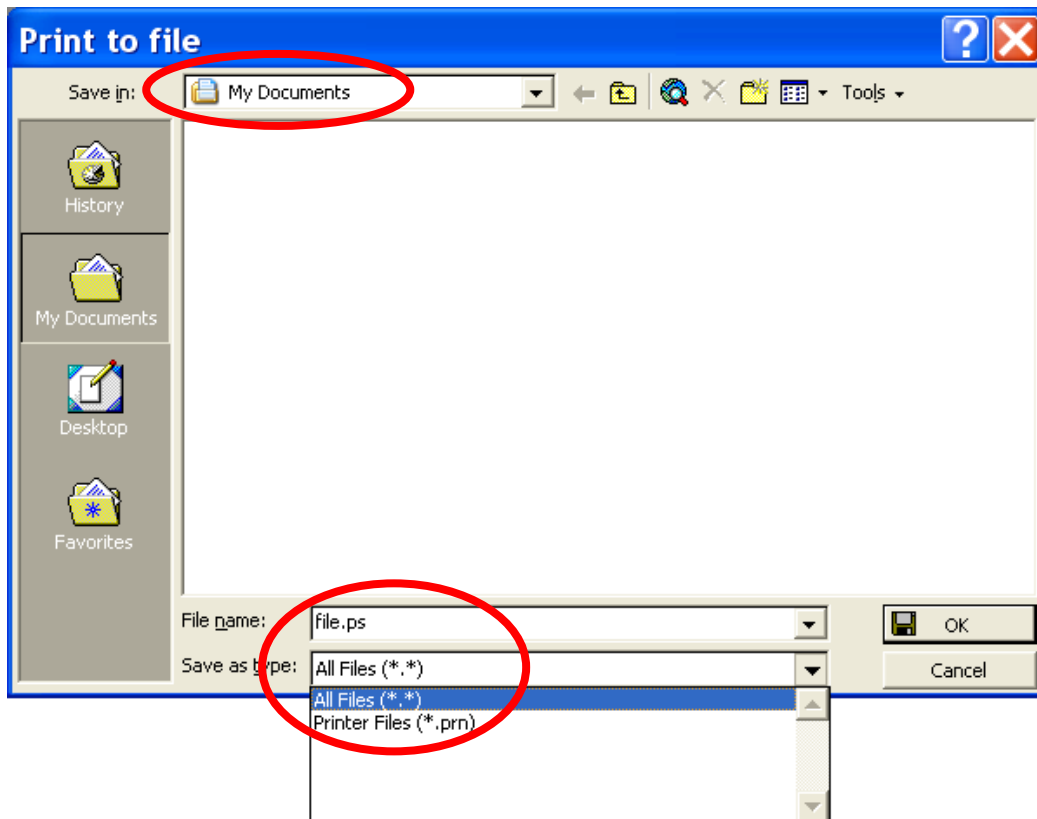
Download from <http://www.adobe.com/products/acrobat/readstep2.html> (8.7 MB for the basic version).

PDF File Creation

- 1) Create the Postscript File from your application.
 - a. On the ‘File’ menu select the ‘Print...’ item to be presented with the dialogue box shown below.
 - b. Select the correct printer, in this case “*Postscript File Printer*” or whatever name you used when you installed the Postscript printer driver above.



- c. Click ‘OK’ to continue. You will be presented with another dialogue box as shown below.

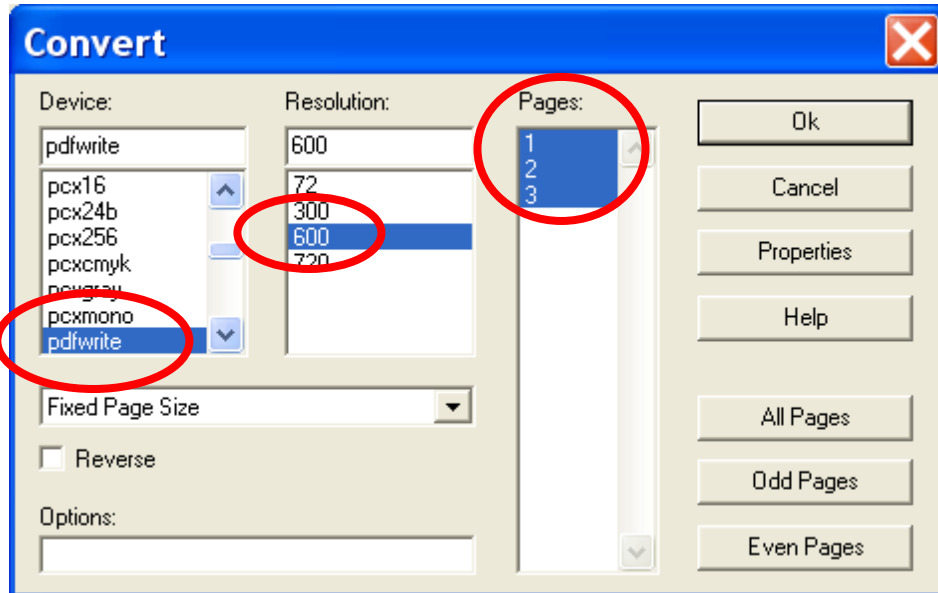


- d. Select the required directory to save in, this field defaults to 'My Documents'.
 - e. Type the file name you wish to use with an extension of '.ps', e.g. 'file.ps', in the "File name:" field. The '.ps' extension will ensure that the created file is associated with the GSView software so that you can double click the file to view it after creation.
 - f. Select the "Save as type:" field to be "All Files". If you do not, no matter, but your intended file name will end up with '.prn' appended unintentionally, e.g. 'file.ps.prn'. If this happens, you can simply *rename* the file to 'file.ps' to correct it rather than deleting it and starting again (details later).
 - g. Click 'OK' to continue. This will create the requested Postscript file in the requested directory.
- 2) Open the file in GSView.
- a. In order to find the file you have just created, open 'Windows Explorer' (Shortcut 'Win + E', or click on the 'Start' menu and select items in the following sequence, 'All Programs', 'Accessories', 'Windows Explorer'). Now navigate to the directory where you saved your Postscript file (e.g. 'file.ps').
 - b. Double click the file you have just created to open it in GSView. *Note* that if you have Windows Explorer setup up to "Hide extensions for known file types"¹, then you may not see the '.ps' file extension after the file name you created. But, if you made a mistake you will see 'file.ps.prn' even

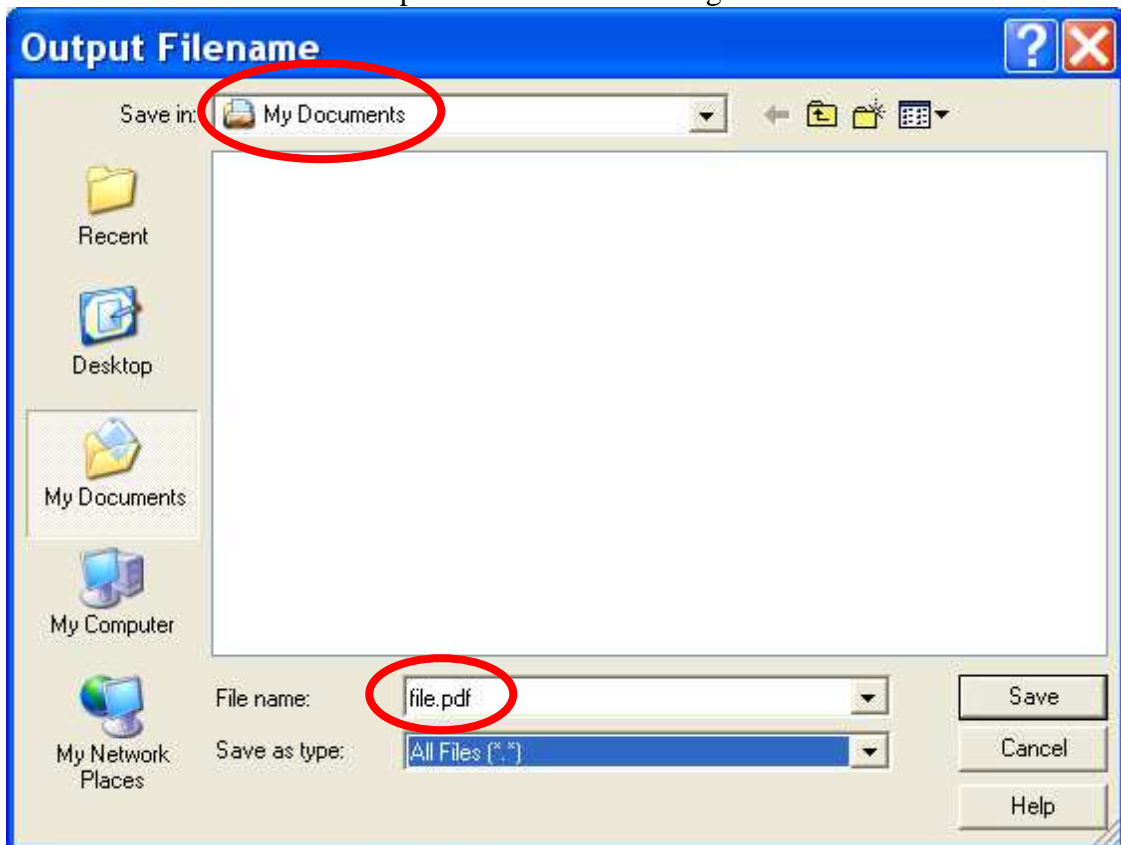
¹ Click on the 'Tools' menu, the 'Folder Options' item, then click the 'View' tab and uncheck "Hide extensions for known file types" to see the file name extensions in Windows Explorer.

when the option is enabled. To correct the file name, rename it by selecting the file, pressing 'F2' and delete the '.prn' extension to leave a file name ending in '.ps'.

- 3) Convert the file to Adobe Acrobat (.pdf)
 - a. Now the file is open in GSView, click on the 'File' menu and select 'Convert...' You will be presented with the dialogue box shown below.



- b. Select 'Device:' 'pdfwrite', '600' for the 'Resolution:' option and all 'Pages:'. You may choose another resolution option if you wish. Click 'OK'. You will be presented with the dialogue box shown below.



- c. Select the required directory to save in, this field defaults to 'My Documents'.
 - d. Type the file name you wish to use with an extension of '.pdf', e.g. 'file.pdf', in the "File name:" field. The '.pdf' extension will ensure that the created file is associated with the Adobe Acrobat software so that you can double click the file to view it after creation.
 - e. Close GSView.
 - f. Navigate to the '.pdf' file you just created in 'Windows Explorer' and double click the '.pdf' file to open it. It should now open in Acrobat.
- 4) Note that the '.ps' file is just an intermediate file format used on the way to '.pdf'. As such it is only a *temporary* file, and can and should be *deleted* at the end of the creation process. The '.pdf' file will be much smaller in file size than the Postscript file ('.ps') from which it was created.

Philip Abbey
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