

Overview:

This document outlines how to implement a free PDF Printer for Windows based systems. The PDF Printer works by redirecting printer output to a program (similar to how Adobe Distiller functions).

Requirements:

In order to implement the PDF creation tool you need to following products. Both products are open source and are available via Public Licenses (see websites for license information).

Download and install the following products (remember where you installed Ghostscript eg: c:\gs\gs8.13):

Ghostscript	from http://www.ghostscript.com/
RepMon	from http://www.cs.wisc.edu/~ghost/redmon/index.htm

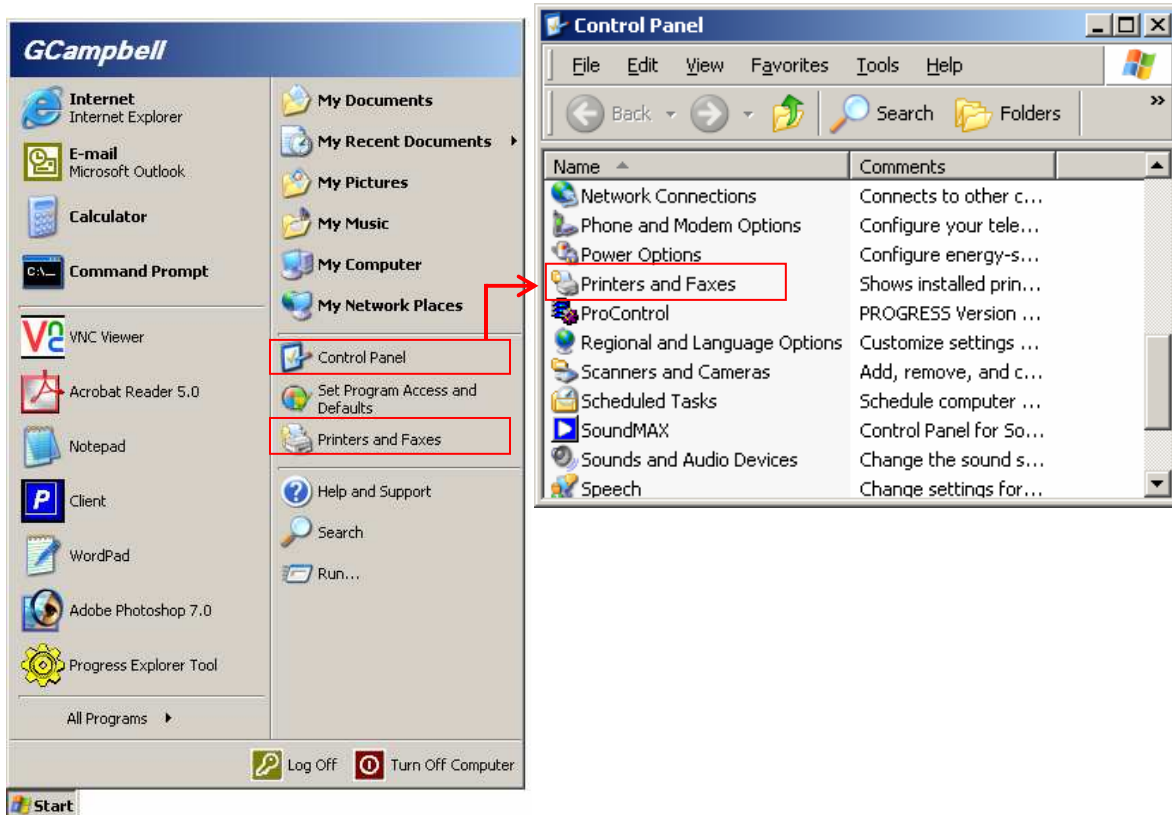
Ghostscript is used to convert a Postscript file to the Portable Document Format (PDF). RepMon is used to redirect a special printer port to a program, in this case redirecting the printer output to Ghostscript.

Setup

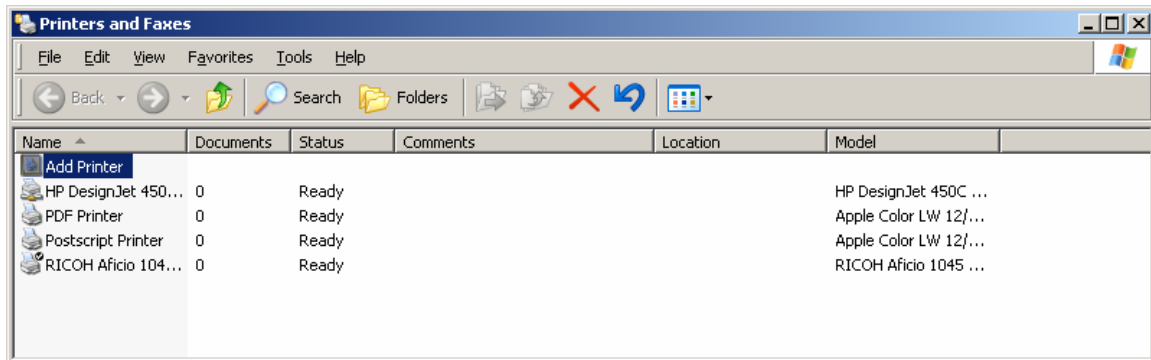
After downloading and installing the above mentioned two products, you need to perform the following steps in order to configure your PDF printer.

1. Add a New Printer

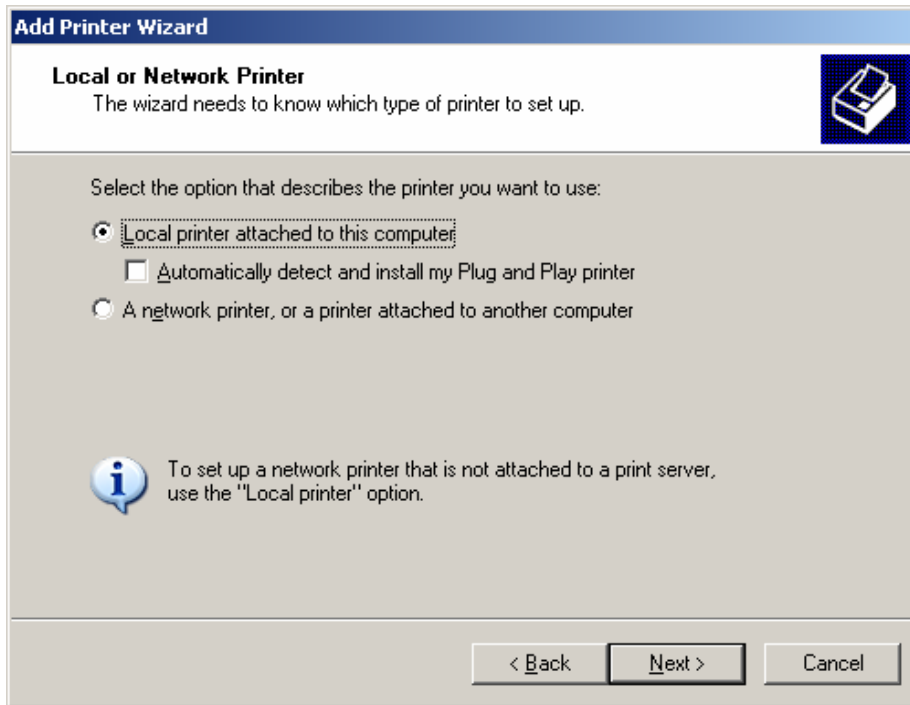
Access the 'Printers and Faxes' window from either your 'Control Panel' or directly from the 'Printers and Faxes' option on the 'Start' programs interface.



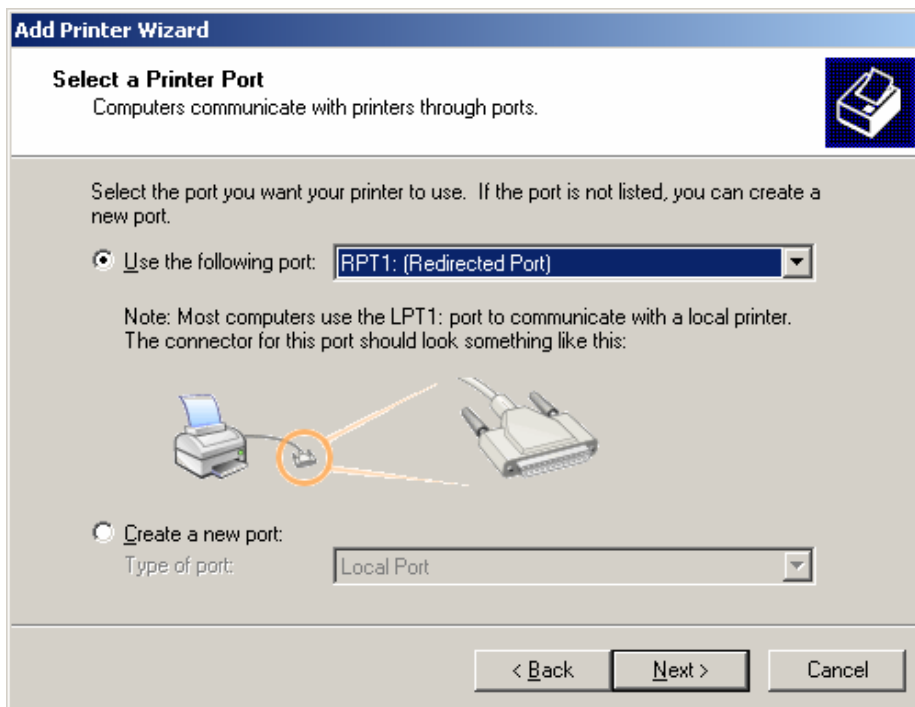
Either way will lead you to a window such as below:



Now either double-click on 'Add Printer' or right-click and select 'Add Printer'. You will see the following screen.

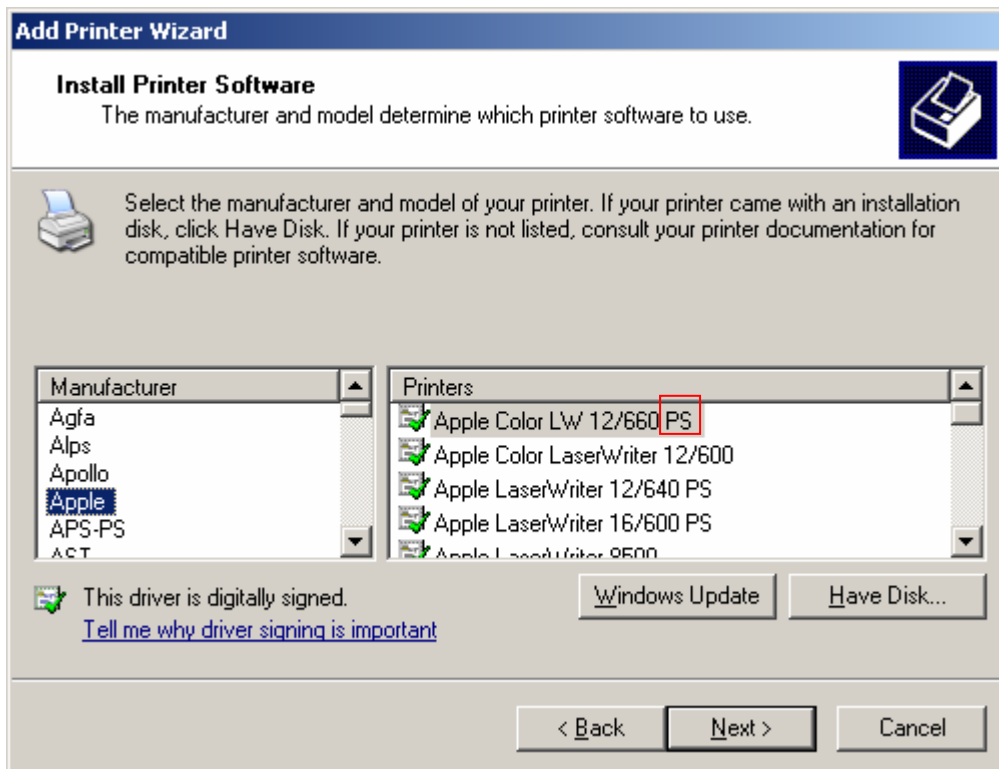


Ensure that you select the options exactly as illustrated. Press the 'Next' button. You will now see the following screen.

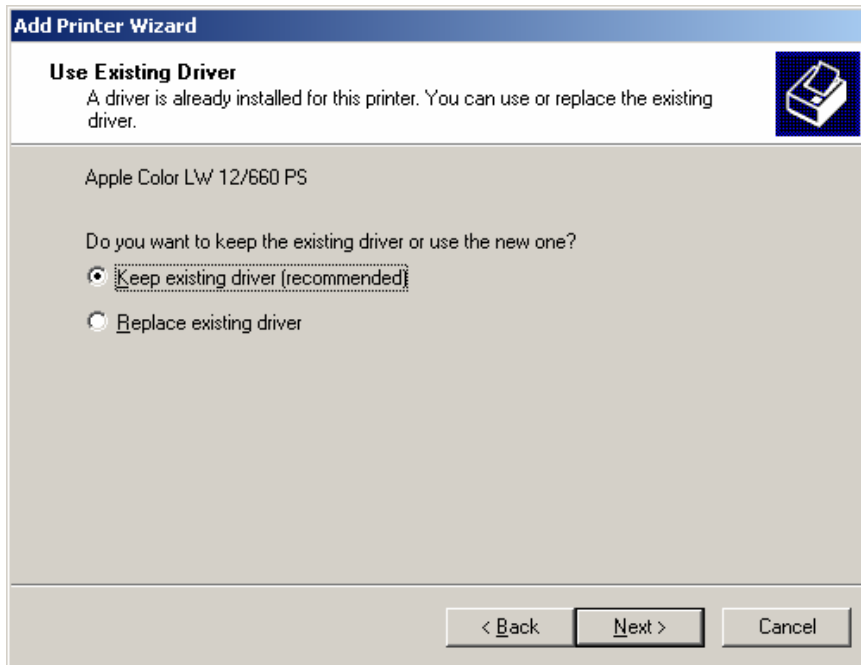


Ensure that the 'Use the Following Port' is selected and then drop down the list of available ports. You will need to select 'RPT1: Redirected Port'. This is the port that was created with the RepMon product that you installed earlier. Again, press the 'Next' button.

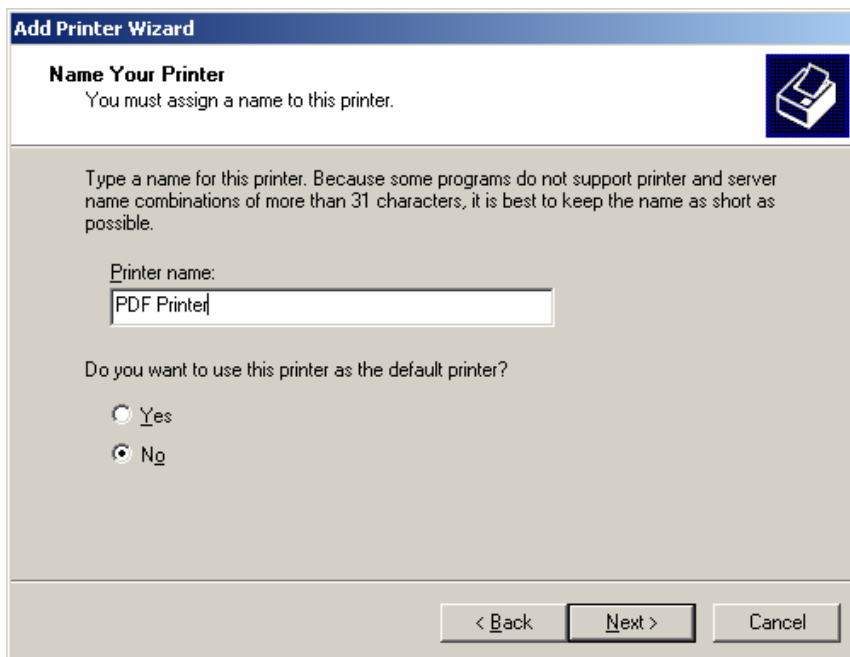
You will see the following screen. This screen allows you to select a printer. You want to ensure that you select a POSTSCRIPT COLOUR Printer. If you don't select colour then you will only receive black-and-white PDF output. Most Postscript printers have the 'PS' indication in the Printer Description (as indicated below).



Now select the 'Next' button. Bypass the following screen ...



Just ensure that you have 'Keep existing driver (recommended)' selected'. Now on the following screen, enter a Printer Name that makes sense (eg: 'PDF Printer').



You can either select as the 'Default Printer' or not. That is your choice. But on the next page I'd suggest that you don't print a test page. Now you've finished adding a PDF printer. But you haven't completed the association (or redirection) of the printer port to Ghostscript.

2. Configure 'PDF Printer' Port

Firstly, you need to create a parameter file in your Ghostscript installation directory. This parameter file allows you to define some information for Ghostscript. So, create a parameter file ... call it what you want (eg: pdfwrite.cfg) ... in your c:\gs directory. Then cut-and-paste the following text into your file.

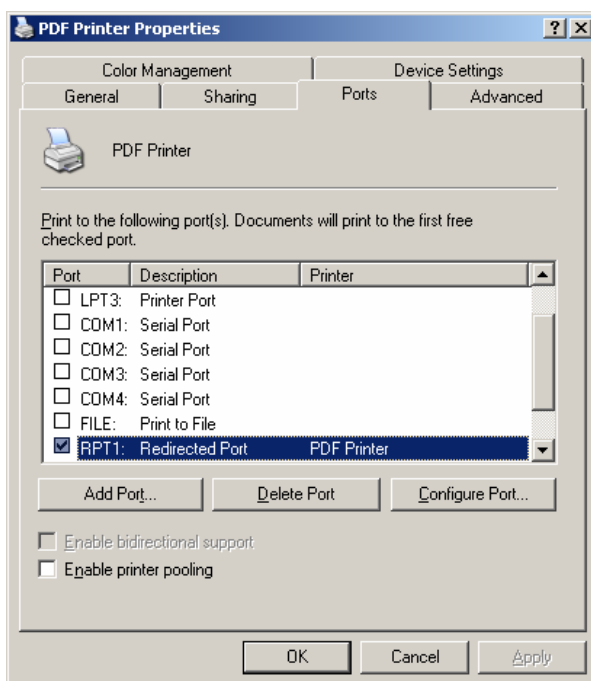
```
-IC:\ghostscript\gs8.13\lib;C:\ghostscript\fonts  
-sDEVICE=pdfwrite  
-r300  
-dNOPAUSE  
-dSAFER
```

The text that is **highlighted and bolded** must be changed to point to the directory where you installed Ghostscript.

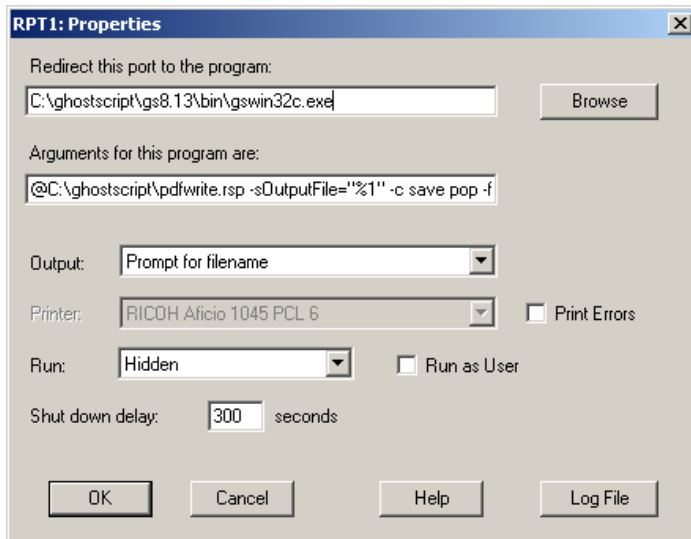
This text just tells Ghostscript where it's default files are located, that it must use the 'pdfwrite' output device, that it shouldn't pause for prompts (if any), and that the final output should be rendered in 300 dpi. Save this updated file.

Next, you need to configure the Port associated with the printer. So go back to the 'Printers and Faxes' window, highlight the 'PDF Printer' printer, right-click and select the 'Properties' option from the drop-down menu.

Go to the 'Ports' tab of the Printers properties (see below) and select the 'Configure Port' button.



The 'Configure Port' button will show the following screen.



You need to modify the following options:

Option	Change To:
Redirect this port to the program	C:\ghostscript\gs8.13\bin\gswin32c.exe Again, you need to change the highlighted and bolded text to point to the correct location.
Arguments for this program are	@ C:\ghostscript \pdfwrite.cfg -sOutputFile="%1" -c save pop -f – (the last dash is required and there should be no spaces after it). You need to change 'pdfwrite.cfg' to the name of the text file that you created earlier.
Output	'Prompt for filename' This is required so that the user has the option to specify the name and location of the PDF file.
Run	'Hidden' This is required so that a DOS Command window doesn't popup whenever the 'PDF printer' is selected.

Once the options have been changed, hit the 'OK' button and close the 'Printer Properties' dialog.

3. Test the Setup

Now that you have setup the printer, open a document (Word, Excel, etc) and try printing the document using the 'PDF printer' (ensure that you have a backup of your test document ... just in case something goes wrong). By selecting, the 'PDF Printer' print option, you will redirect the output to Ghostscript and it will convert the output to a PDF document.