

TROUBLESHOOTING PRINTERS

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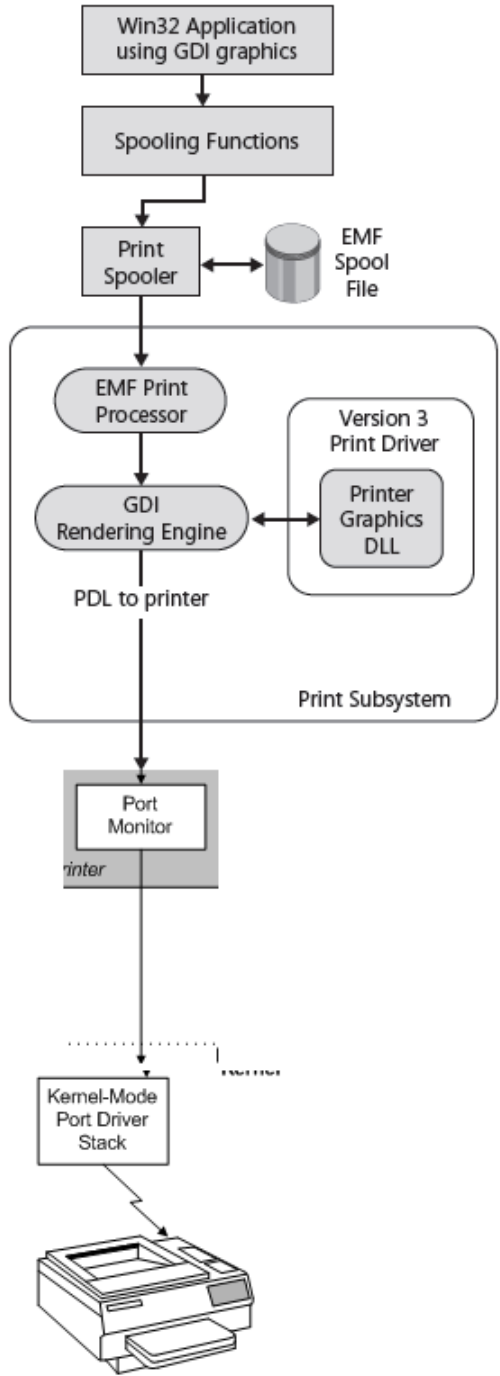


SUMMARY

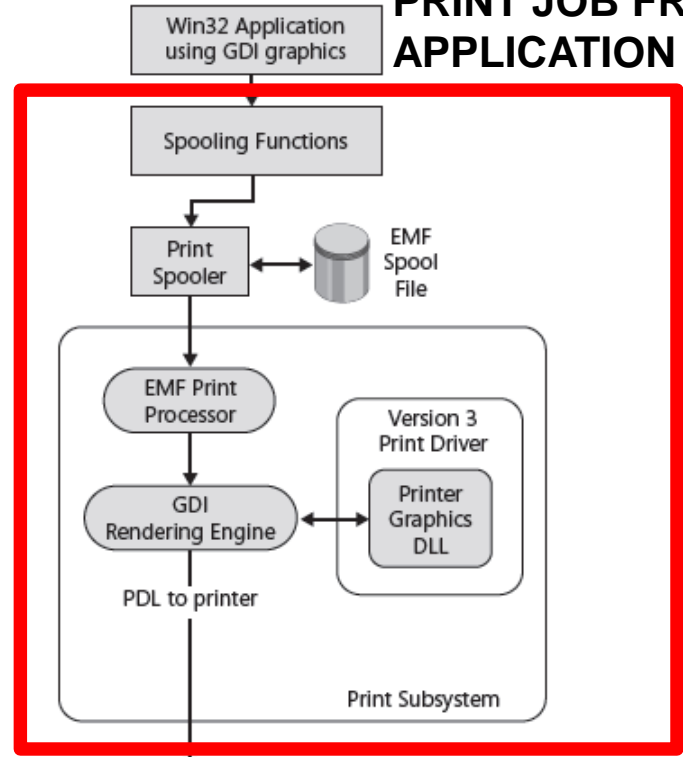
Here is a step-by-step description of how you can troubleshoot printer problems for a “Windows..” computer.

PRINTING PROCESS

USER USES SOFTWARE APPLICATION TO CREATE A PRINT JOB → GDI (Graphics Device Interface) → PRINT SPOOLER → SPOOL FILES → PRINT PROCESSOR + PRINTER DRIVER → PORT MONITOR → PORT DRIVER → ACTUAL PHYSICAL PRINTER



PRINT JOB FROM YOUR SOFTWARE APPLICATION PROGRAM



VIRTUAL PRINTER IN "PRINTERS" OR "DEVICES AND PRINTERS" (= "PRINT QUEUE") PROVIDES CONTROL INTERFACE FOR END-USER

PORT MONITOR (A SOFTWARE PROCESS) PROVIDES VIRTUAL USB PORTS OR VIRTUAL NETWORK PORTS

PORT DRIVERS TO INTERFACE THE ABOVE SOFTWARE WITH THE ACTUAL USB PORT OR THE ACTUAL WIFI ADAPTER

ACTUAL USB PORT OR ACTUAL WIFI ADAPTER OF COMPUTER

USB CABLE OR WIFI CONNECTION

REAL PHYSICAL PRINTER



STRATEGY FOR TROUBLESHOOTING PRINTERS

Run tests on various components of the printing process, starting with the most common problems to the more complex problems.

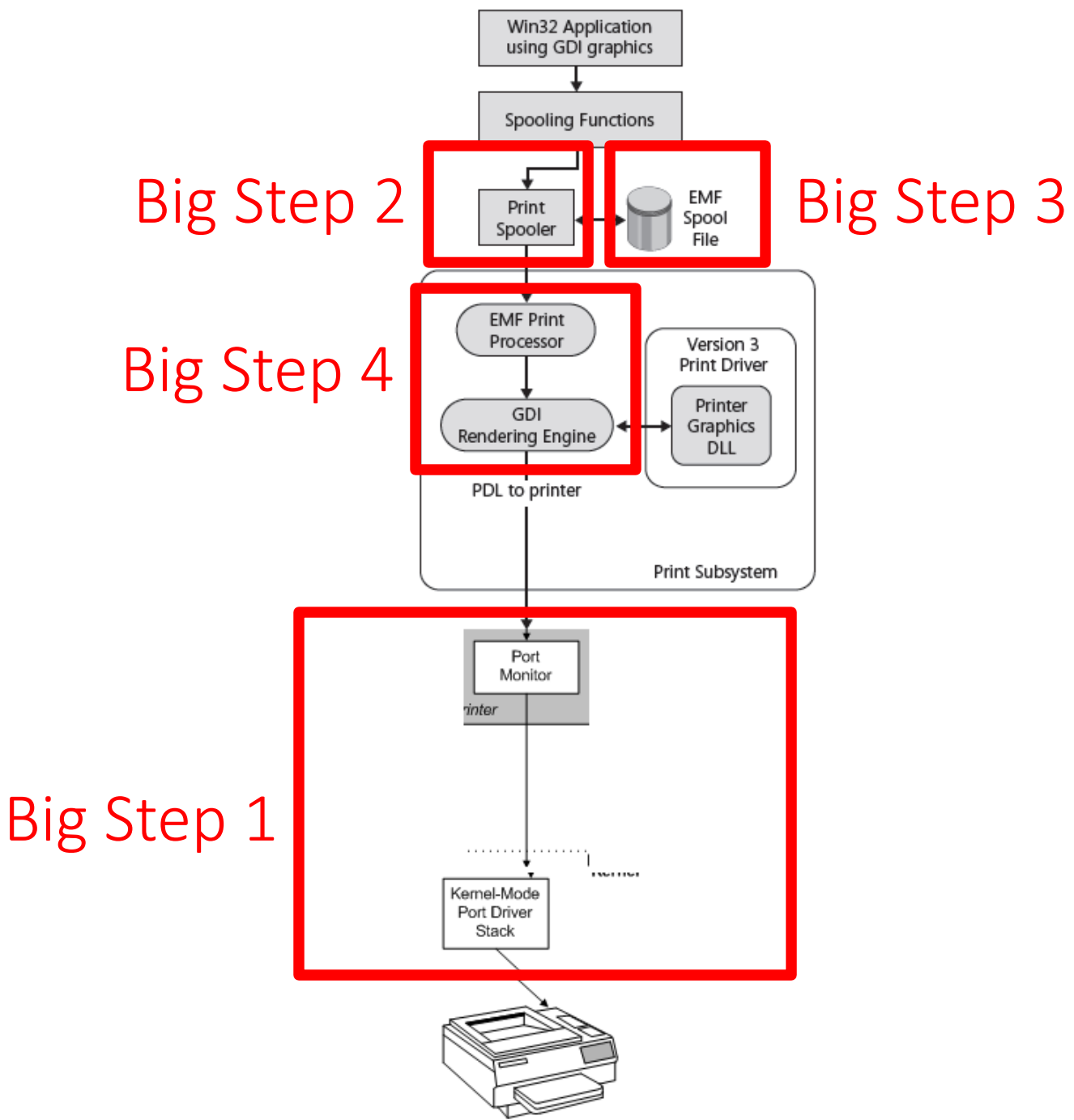
STRATEGY FOR TROUBLESHOOTING PRINTERS (continued)

Big Step 1: Check the port monitor

Big Step 2: Check the print spooler

Big Step 3: Check the creation of
print spooler files

Big Step 4: Check the print
processor and the GDI rendering
engine



Big Step 1: Check the Port Monitor

Go to “Devices and Printers”

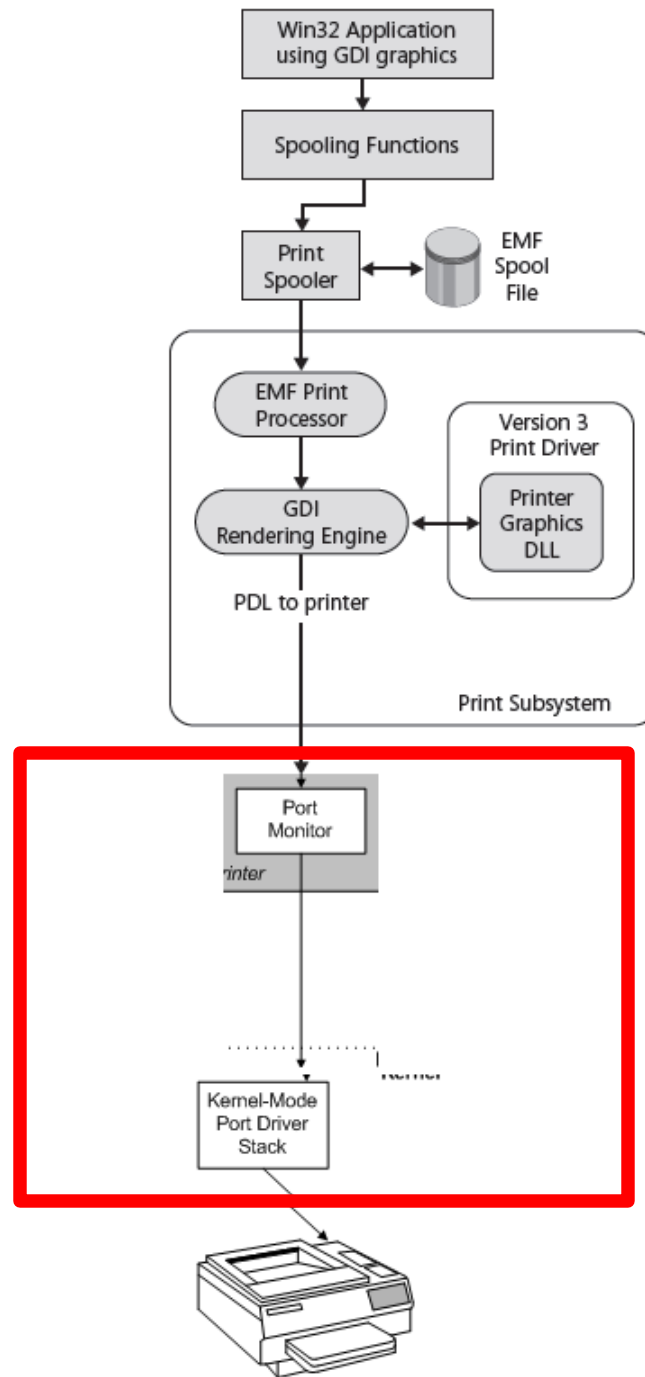
Locate the (virtual) Printer.

Right-click on the Printer.

Click on “Properties”.

Click on the “Ports” tab.

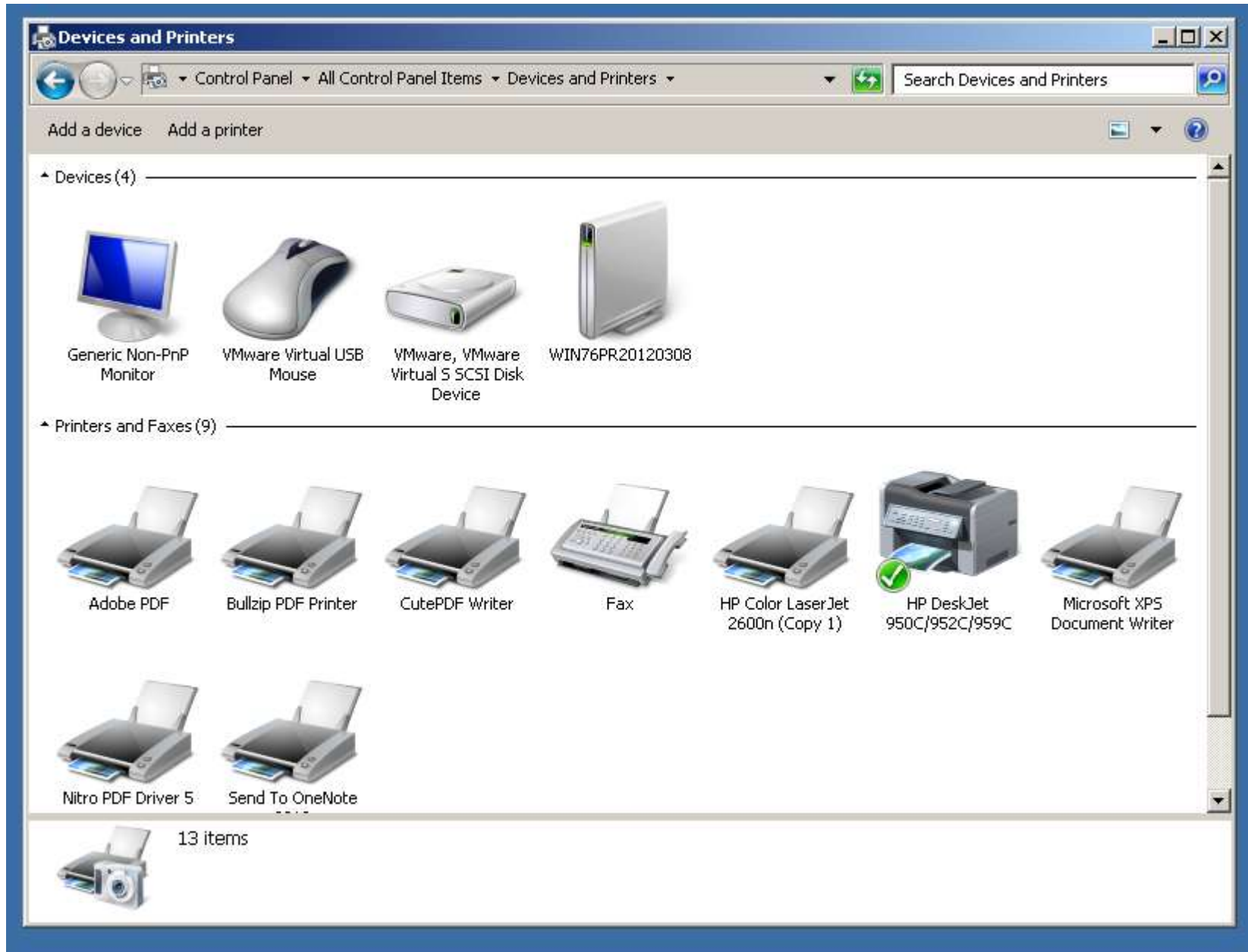
See if the correct (virtual) port is checked.



Small Step 101:

Go to “Devices and Printers” in the “Control Panel (Windows 7 or Windows 8) or go to “Printers and Faxes in the “Control Panel” (Windows XP)

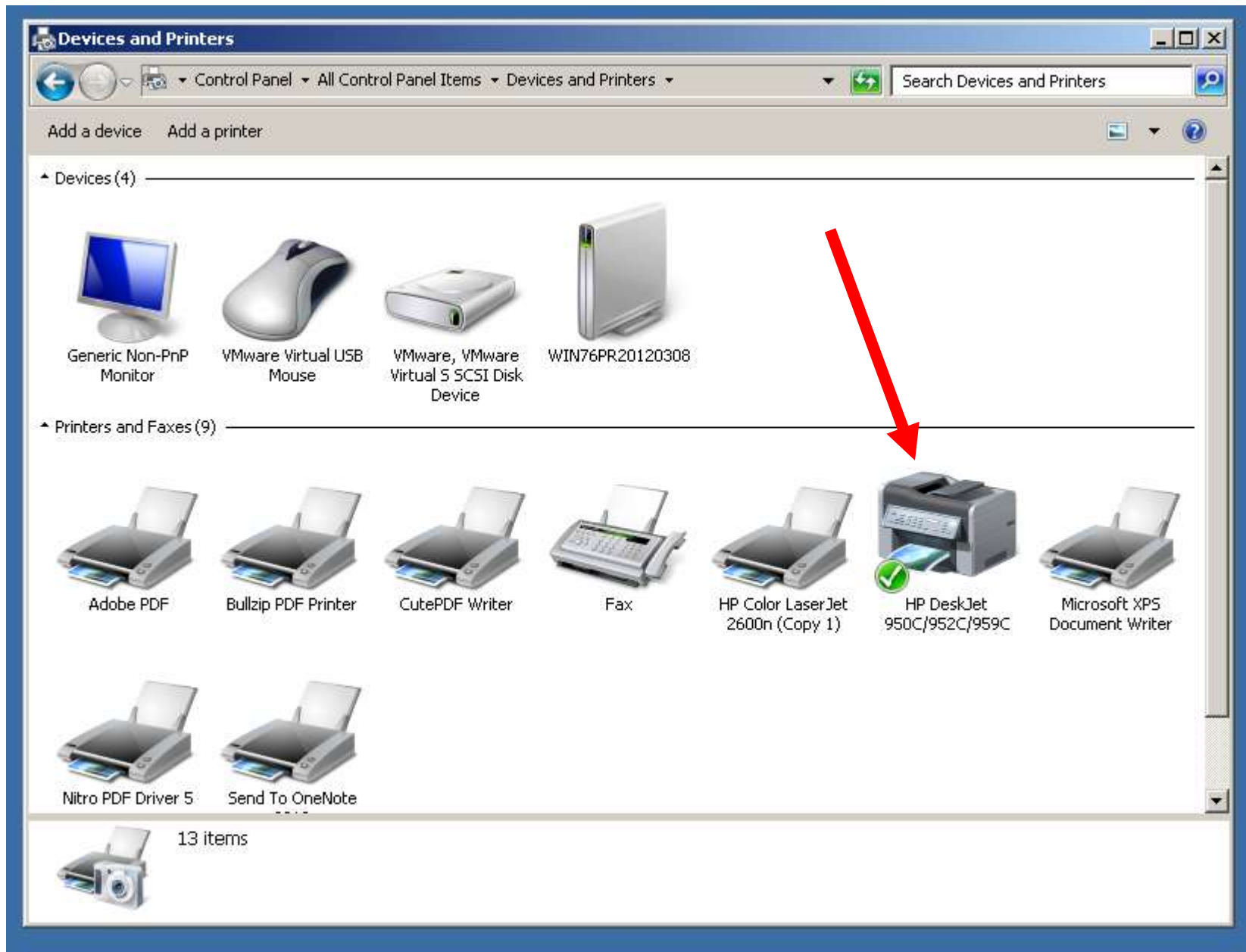
Screen Shot of Small Step 101:



Small Step 102:

Locate the (virtual) printer
(="print queue" in Microsoft
terminology) :

Screen Shot of Small Step 102:



Small Step 103:

Use the RIGHT mouse button to right-click on the (virtual) printer:

Screen Shot of Small Step 103:



Small Step 104:

Click on “Printer Properties”:

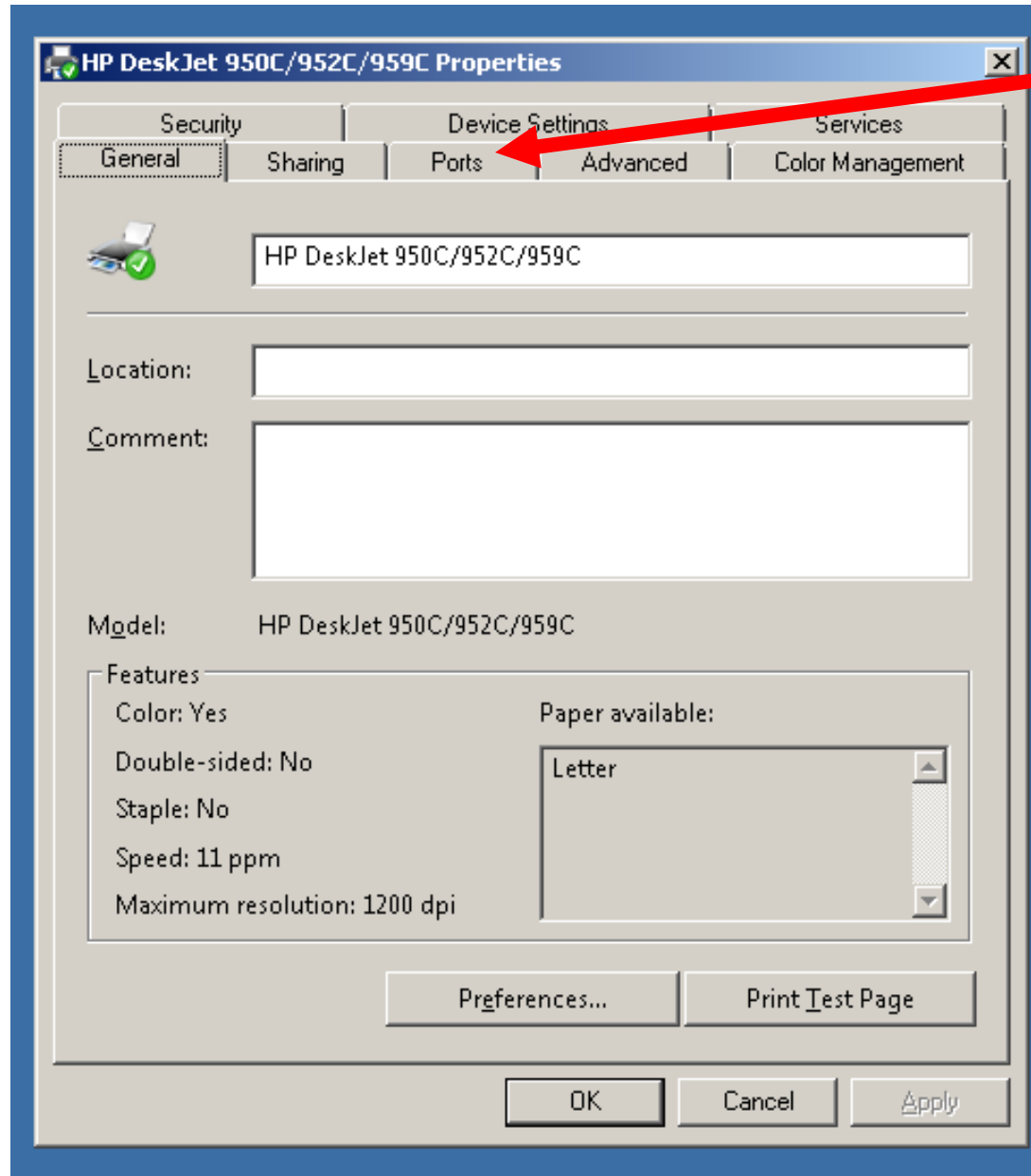
Screen Shot of Small Step 104:



Small Step 105:

Click on the “Ports” tab:

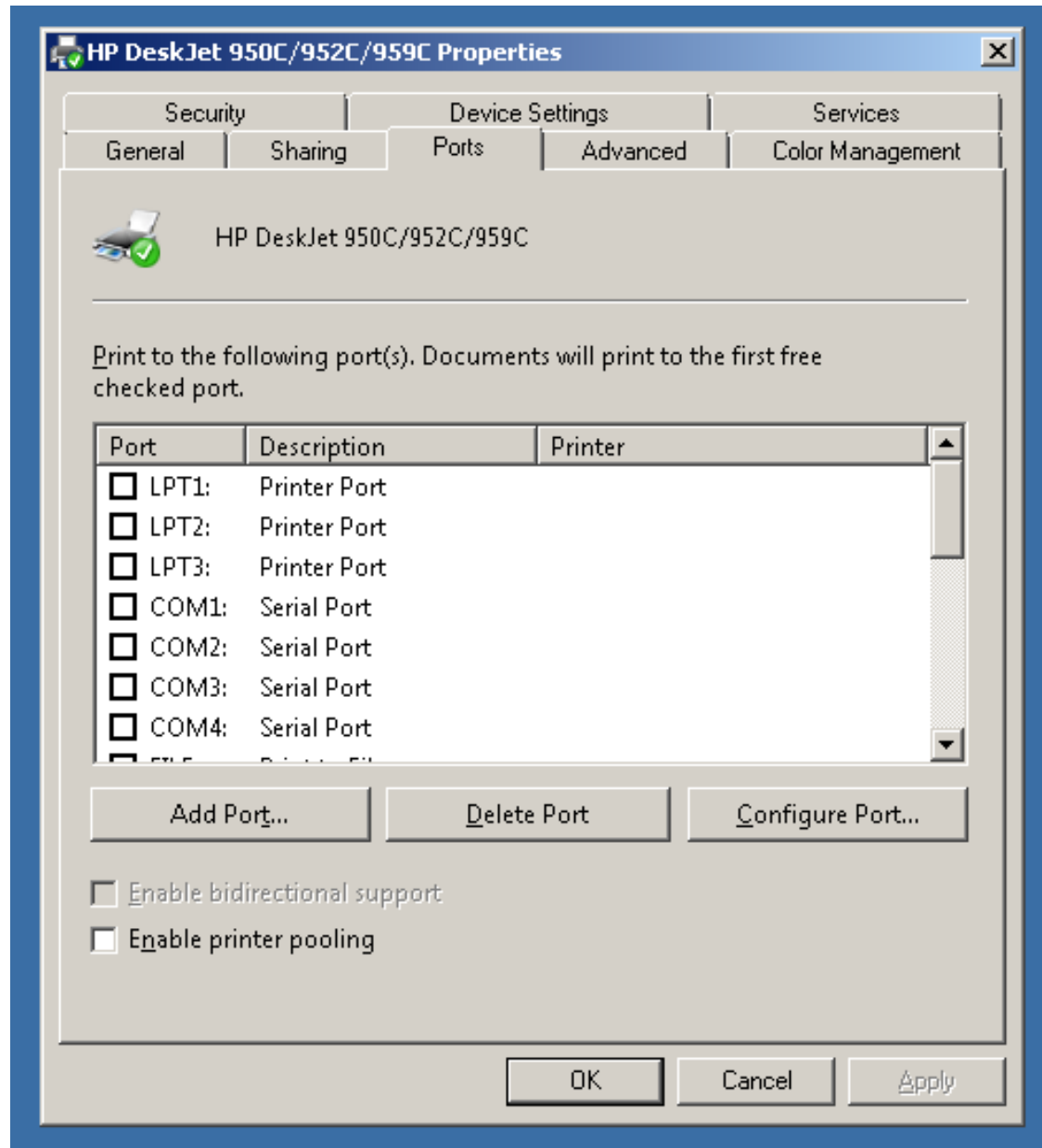
Screen Shot of Small Step 105:



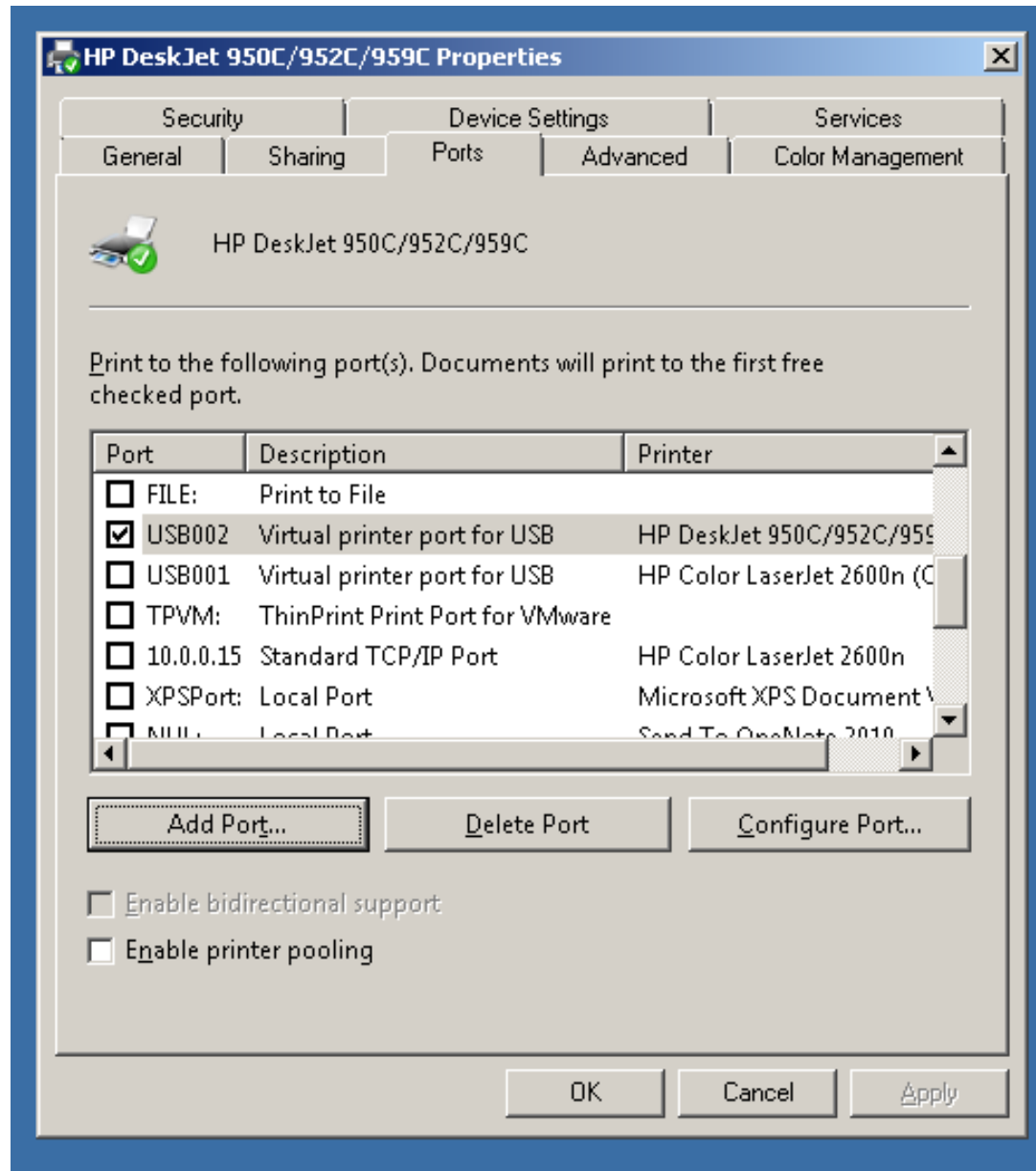
Small Step 106:

See if the correct Port is
checked:

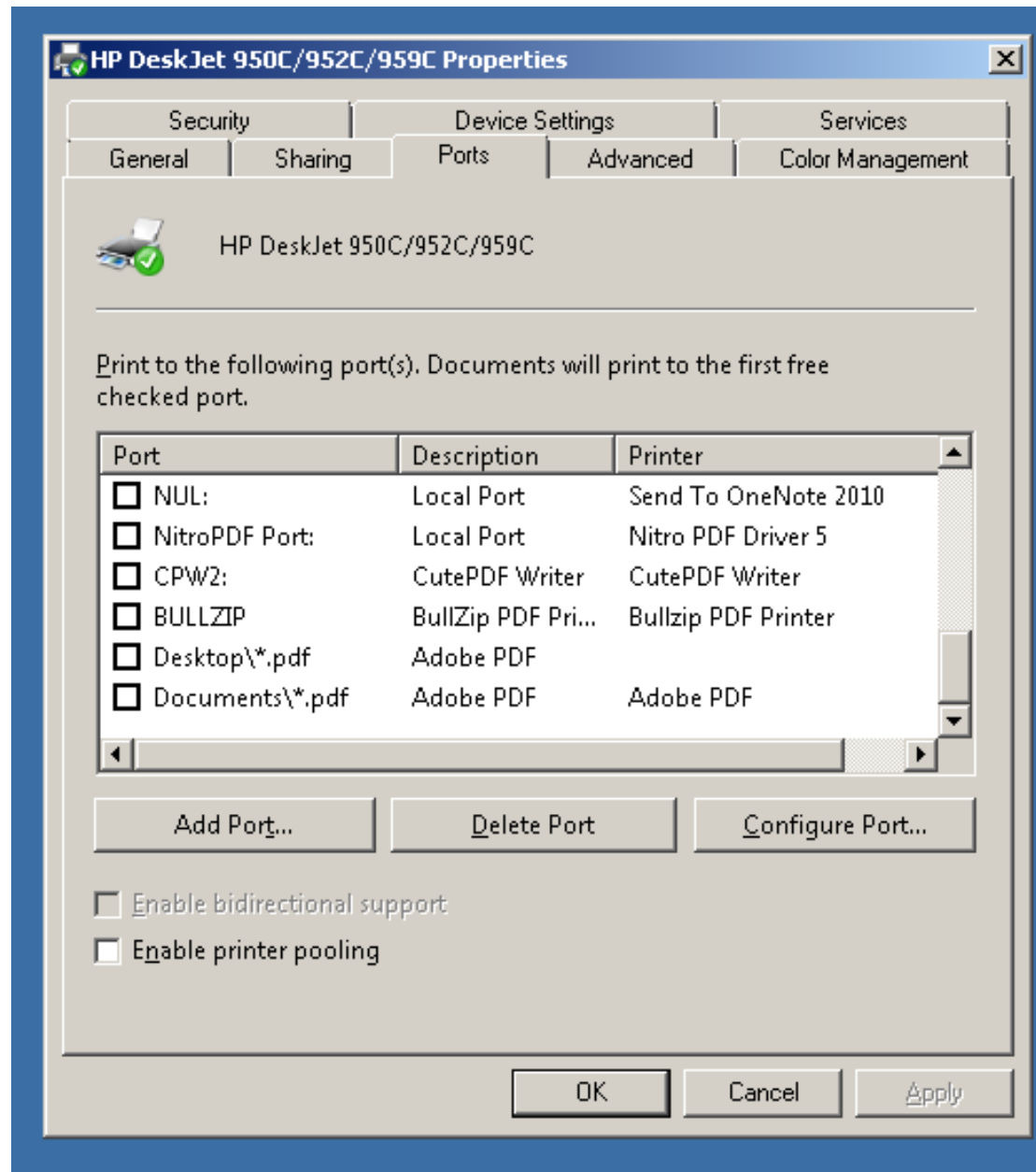
Screen Shot of Small Step 106:



Screen Shot of Small Step 106:



Screen Shot of Small Step 106:



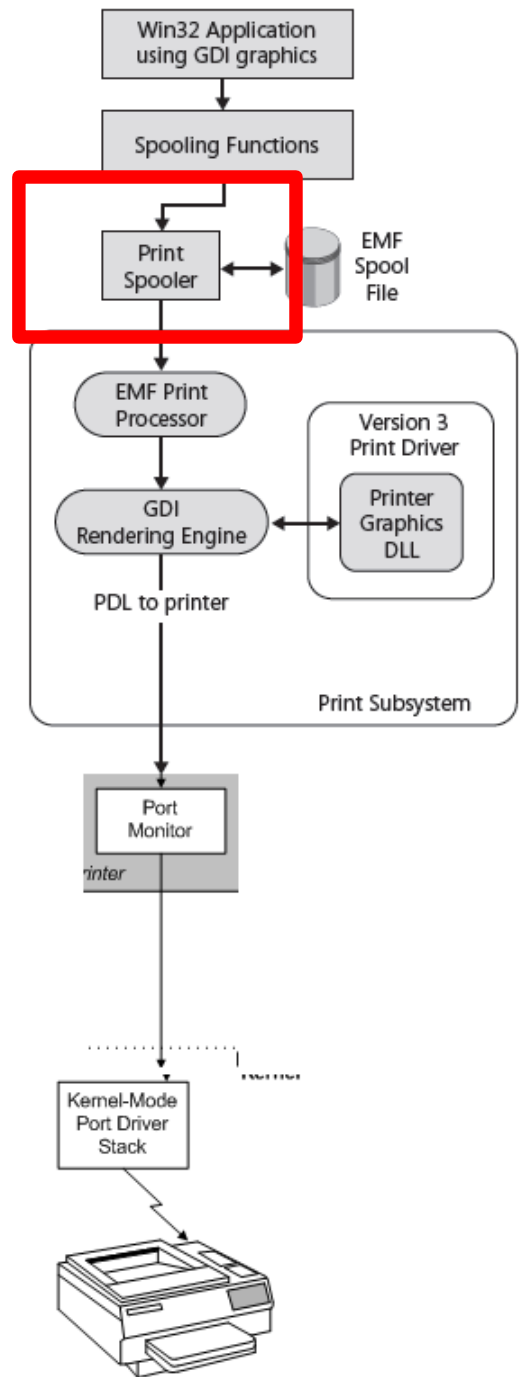
Big Step 2: Check Print Spooler

Go to a Search box, a Run box, or an elevated Command Prompt.

Type in “services.msc” (without the quotation marks and press the “Enter” key.

Locate the Print Spooler service.

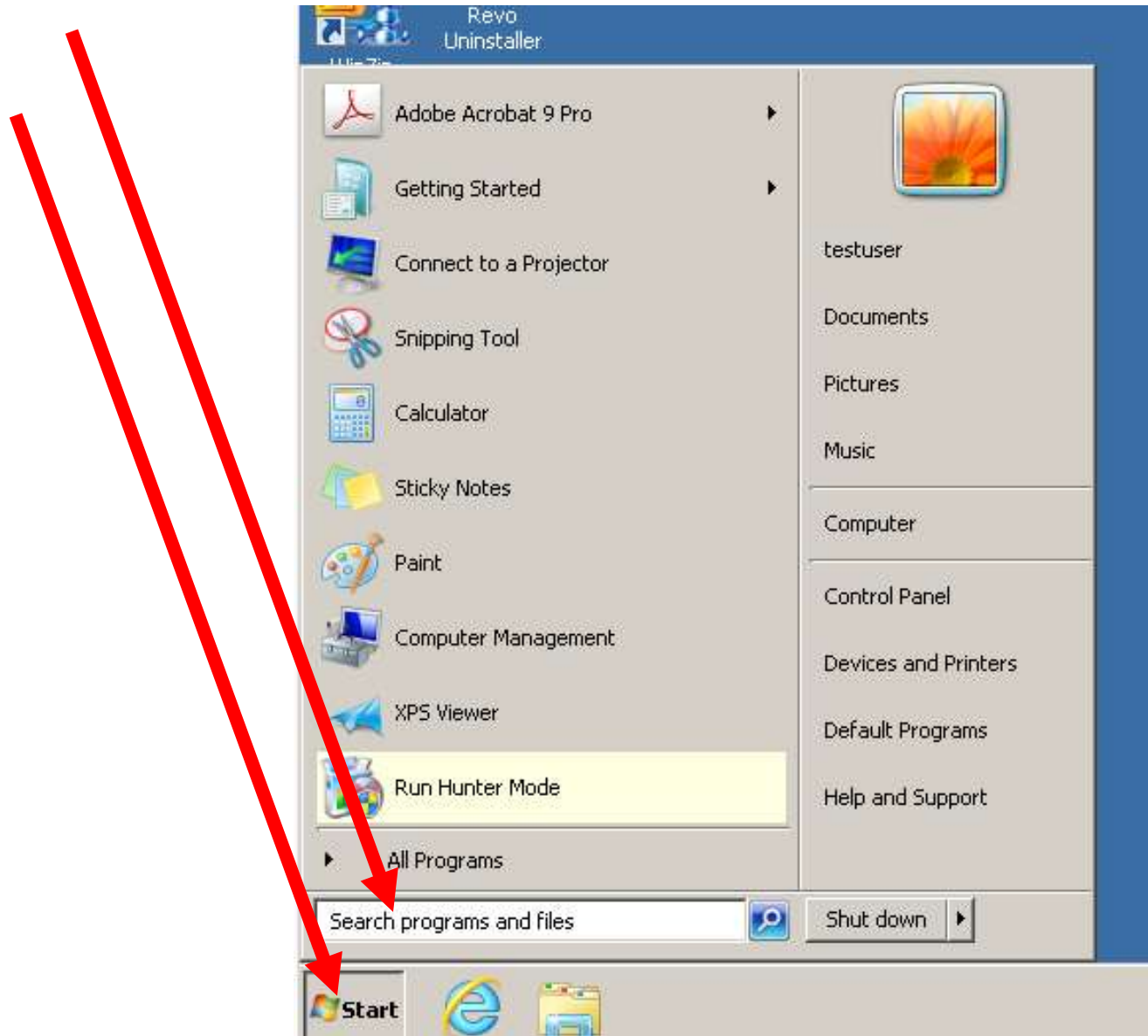
Make sure that it is “Started” and “Automatic”



Small Step 201:

Go to a Search box, a Run box,
or an elevated Command
Prompt:

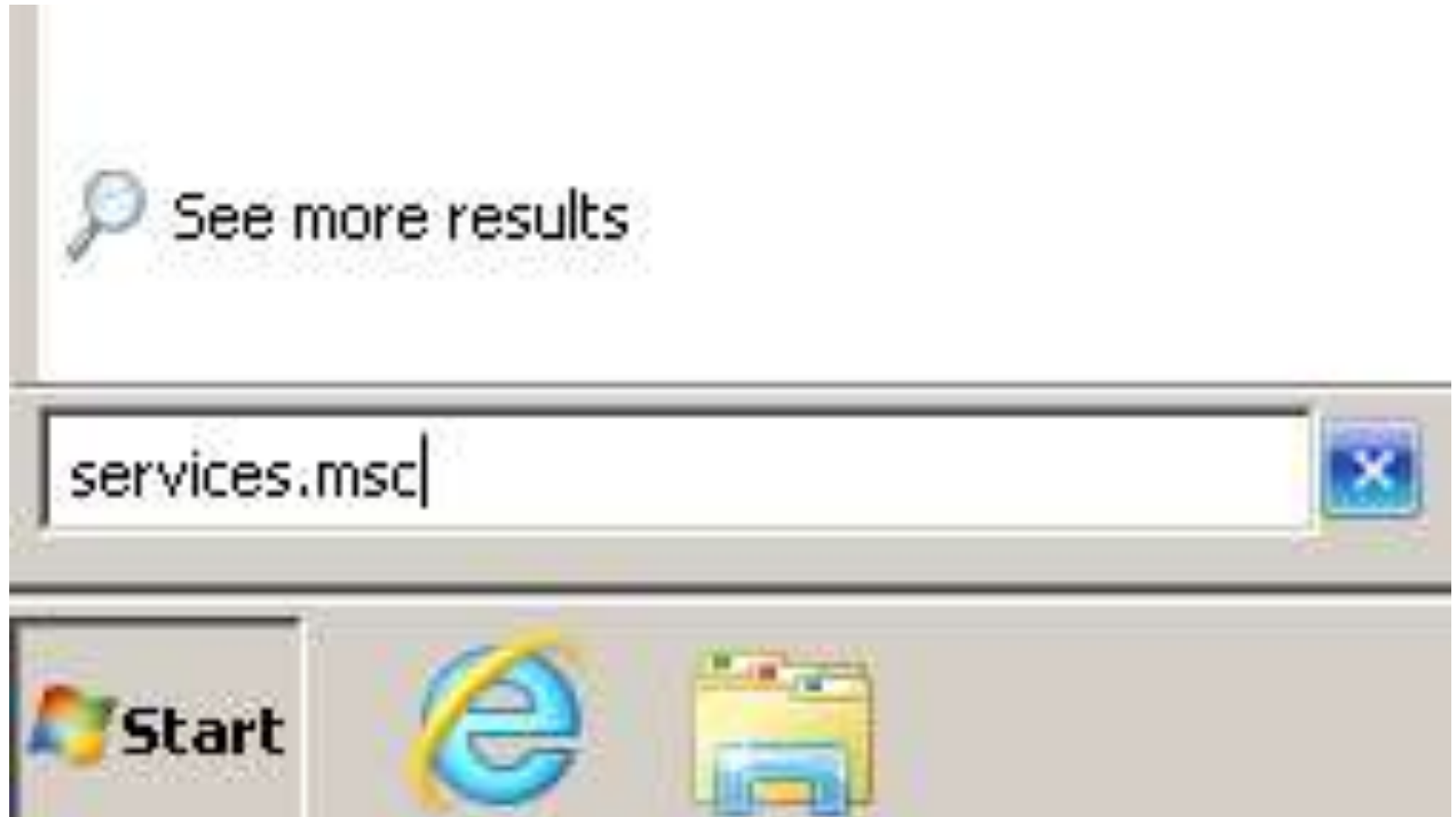
Screen Shot of Small Step 201:



Small Step 202:

Type in “services.msc” and press the Enter key:

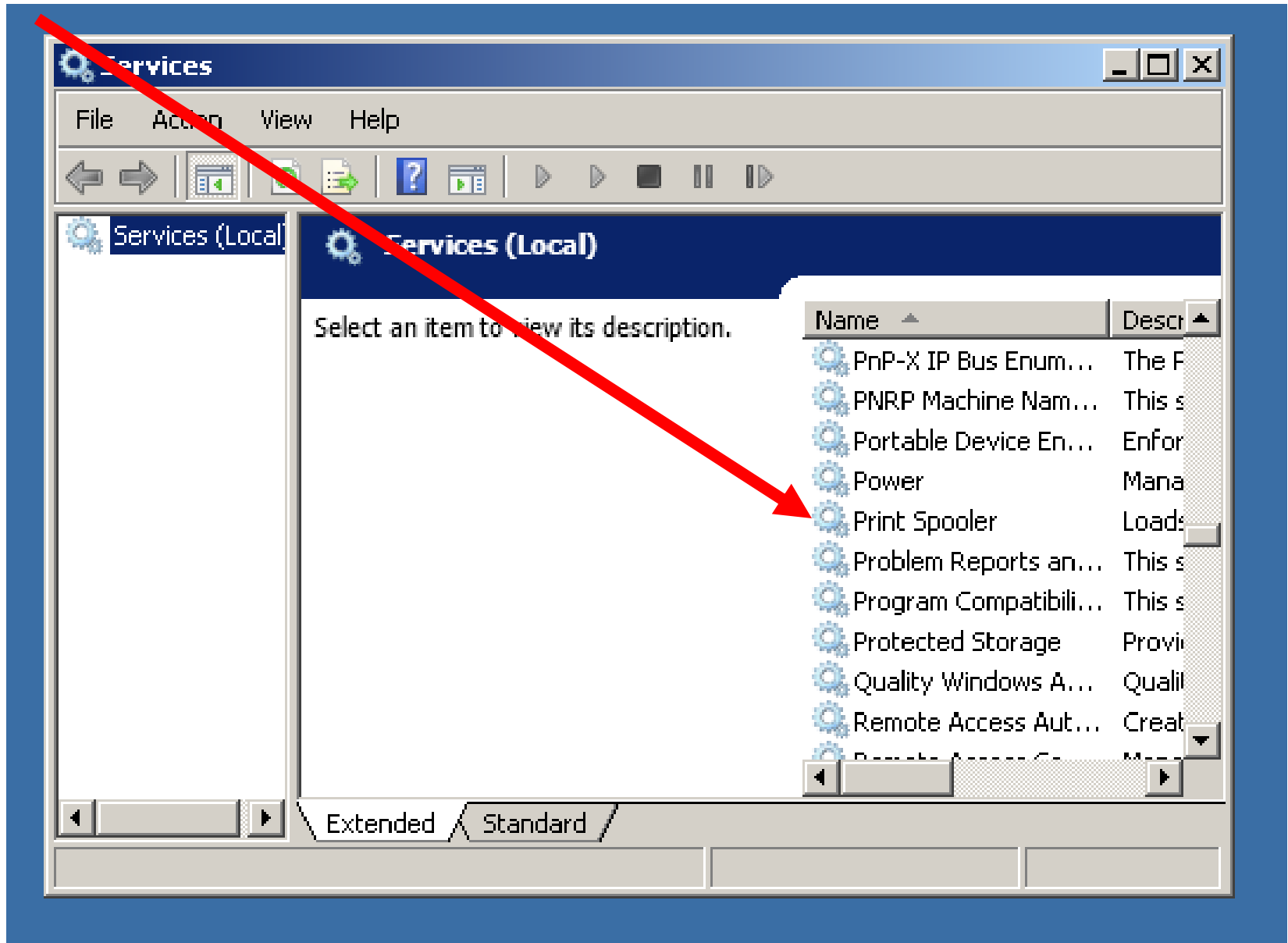
Screen Shot of Small Step 202:



Small Step 203:

Locate the “Print Spooler”
service:

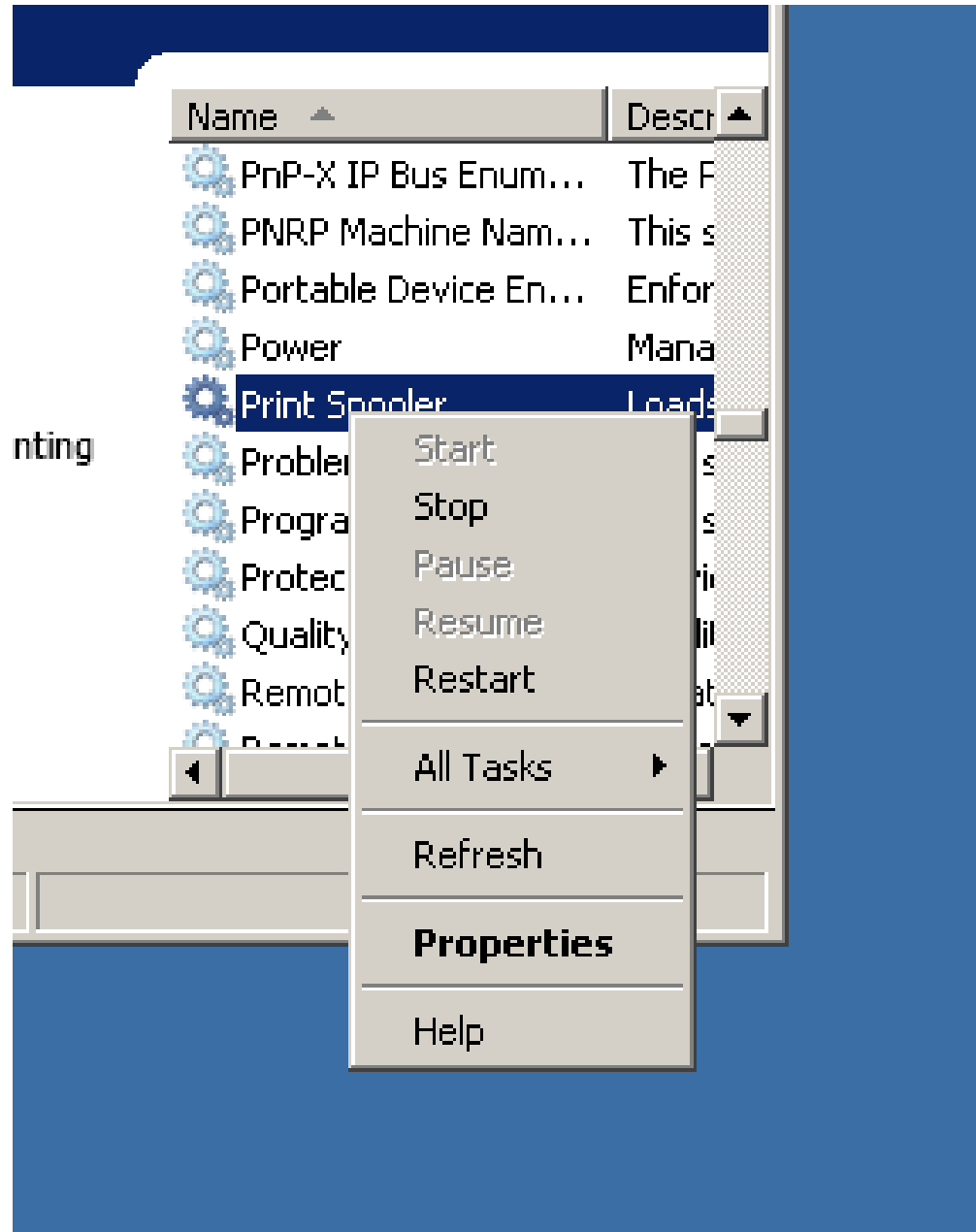
Screen Shot of Small Step 203:



Small Step 204:

Use the RIGHT mouse button to right-click on the “Print Spooler” service:

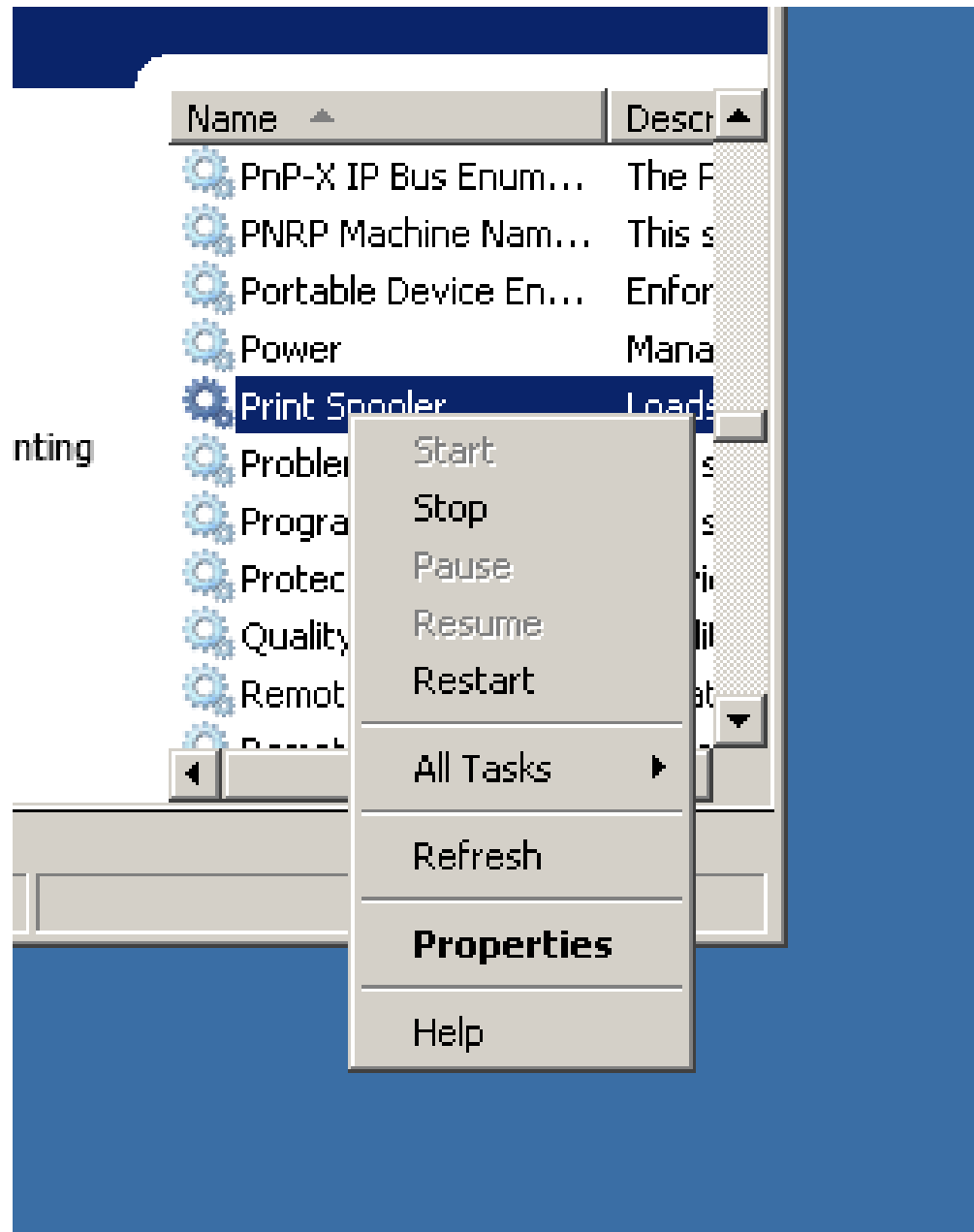
Screen Shot of Small Step 204:



Small Step 205:

Use the RIGHT mouse button to right-click on the “Print Spooler” service:

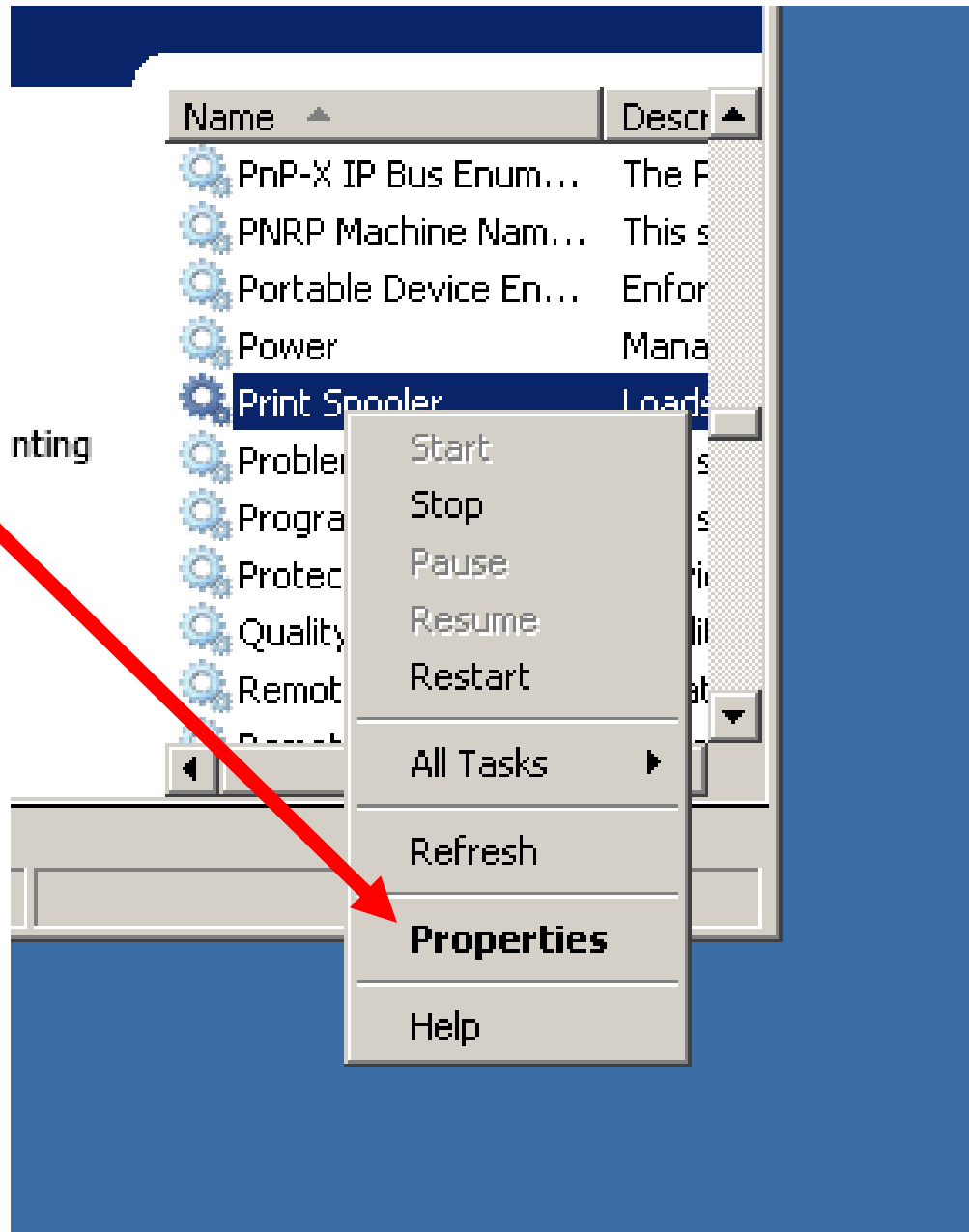
Screen Shot of Small Step 205:



Small Step 206:

Click on “Properties”:

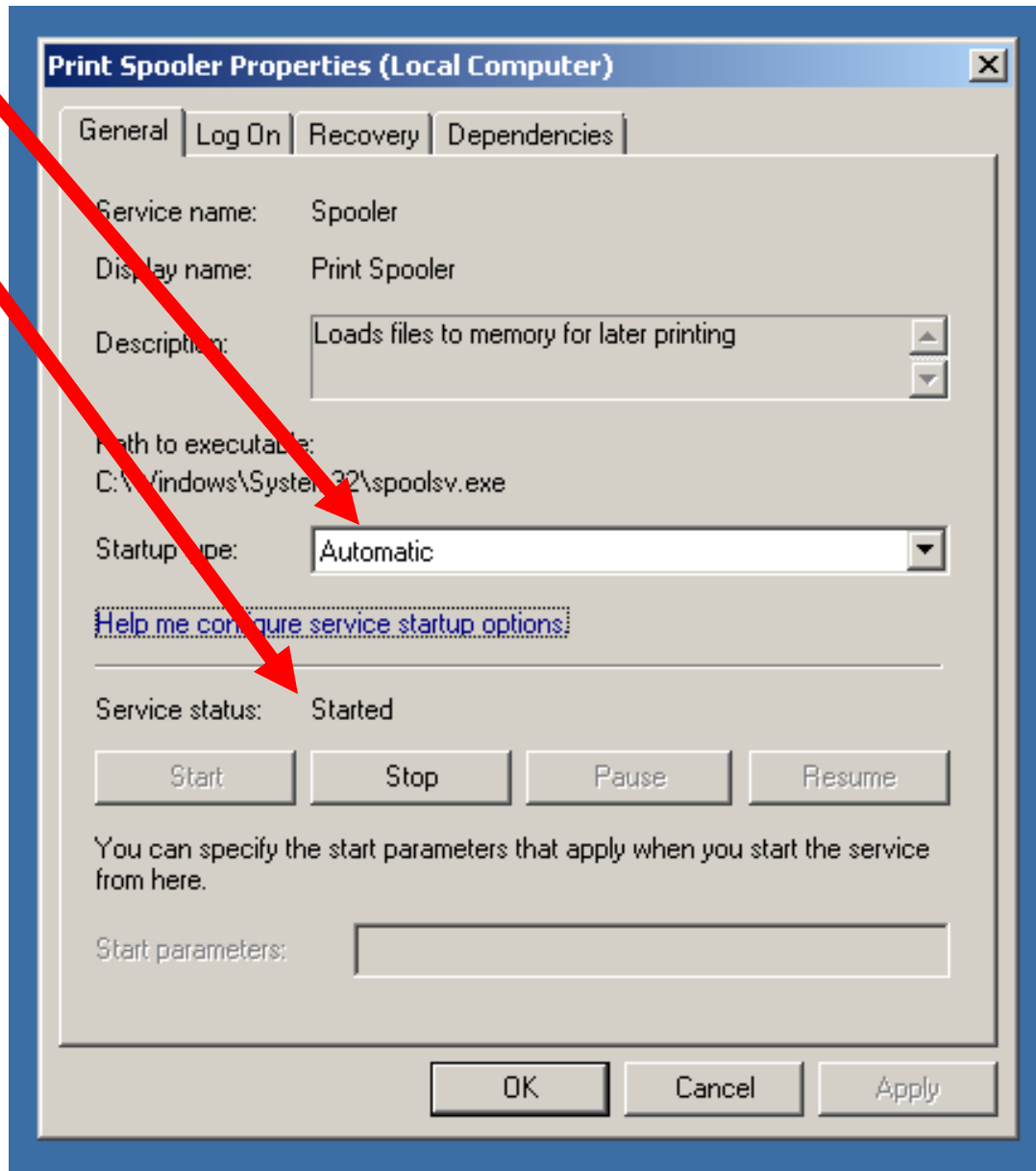
Screen Shot of Small Step 206:



Small Step 207:

Make sure that the “Print Spooler” service is “Started” and “Automatic”:

Screen Shot of Small Step 207:



Big Step 3: Check the Creation of Print Spooler Files

Start “Windows Explorer”.

Go to

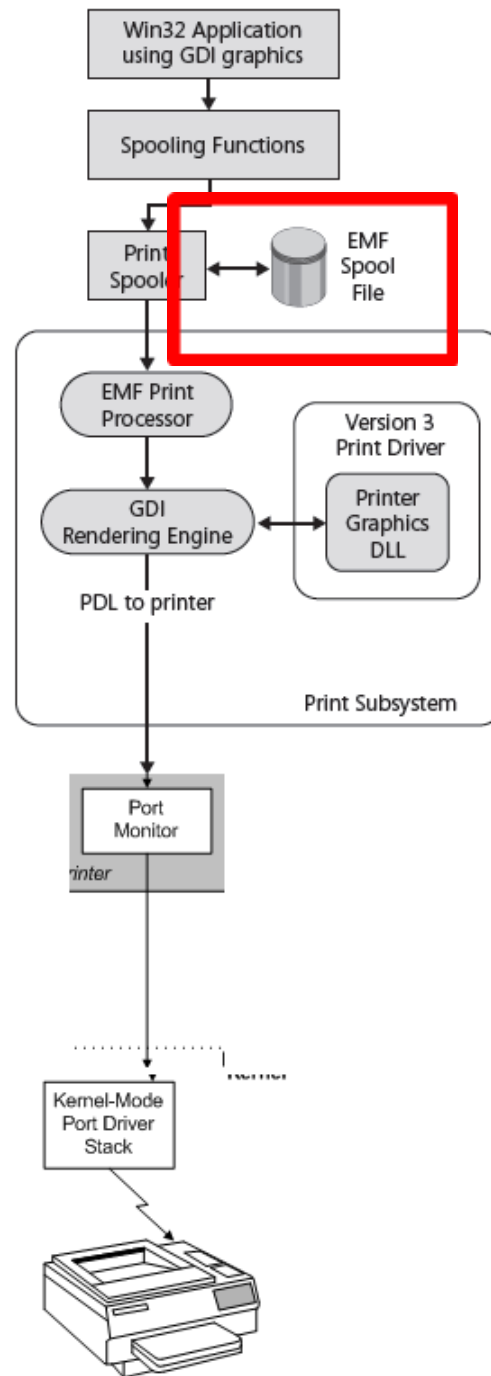
C:\Windows\System32\
Spool\PRINTERS\

Big Step 3: Check the Creation of

Print Spooler Files

Go to the (virtual) Printer in “Devices and Printers” and print a test page.

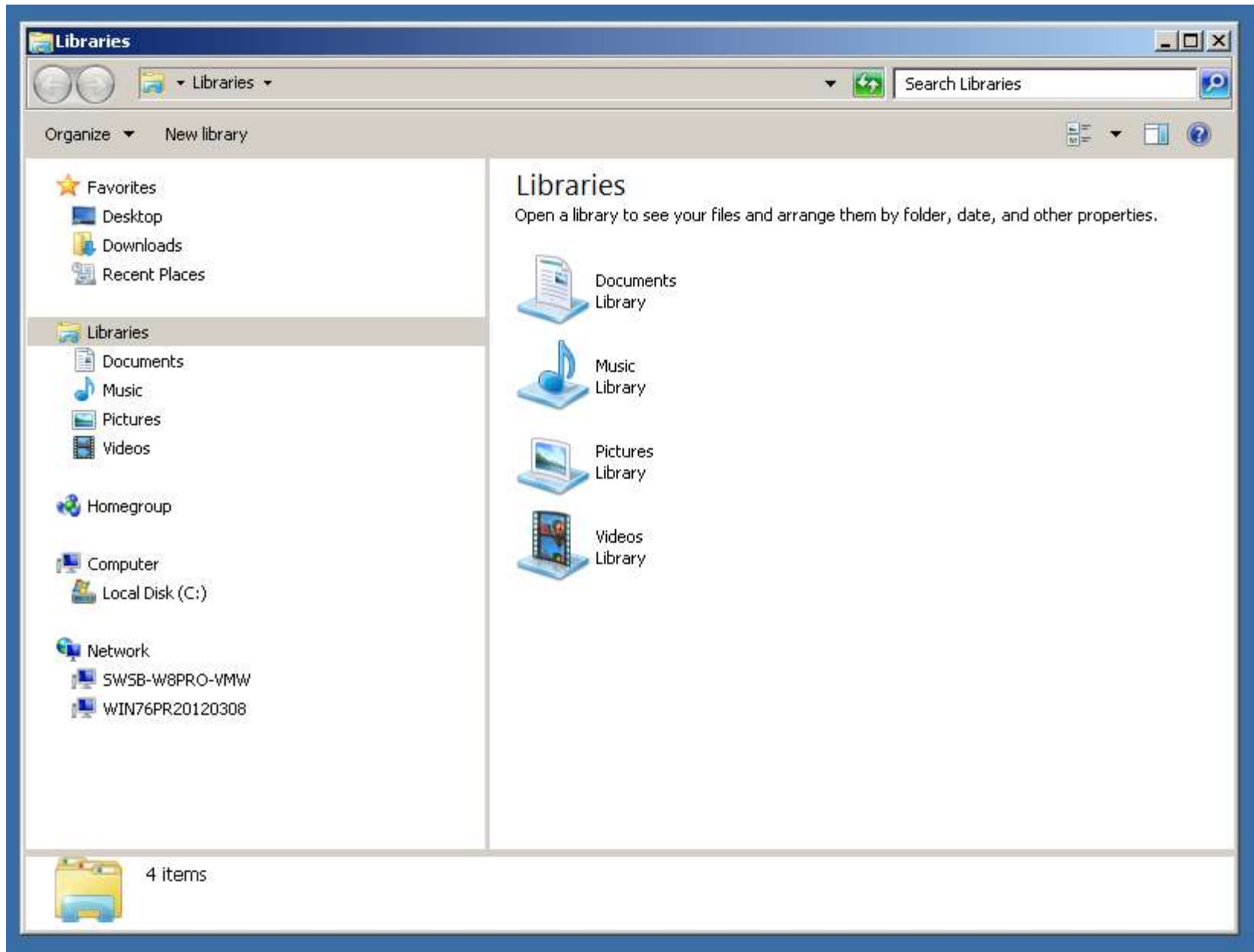
A .SHD and a .SPL file will be temporarily created in the “PRINTERS” folder.



Small Step 301:

Start “Windows Explorer:

Screen Shot of Small Step 301:

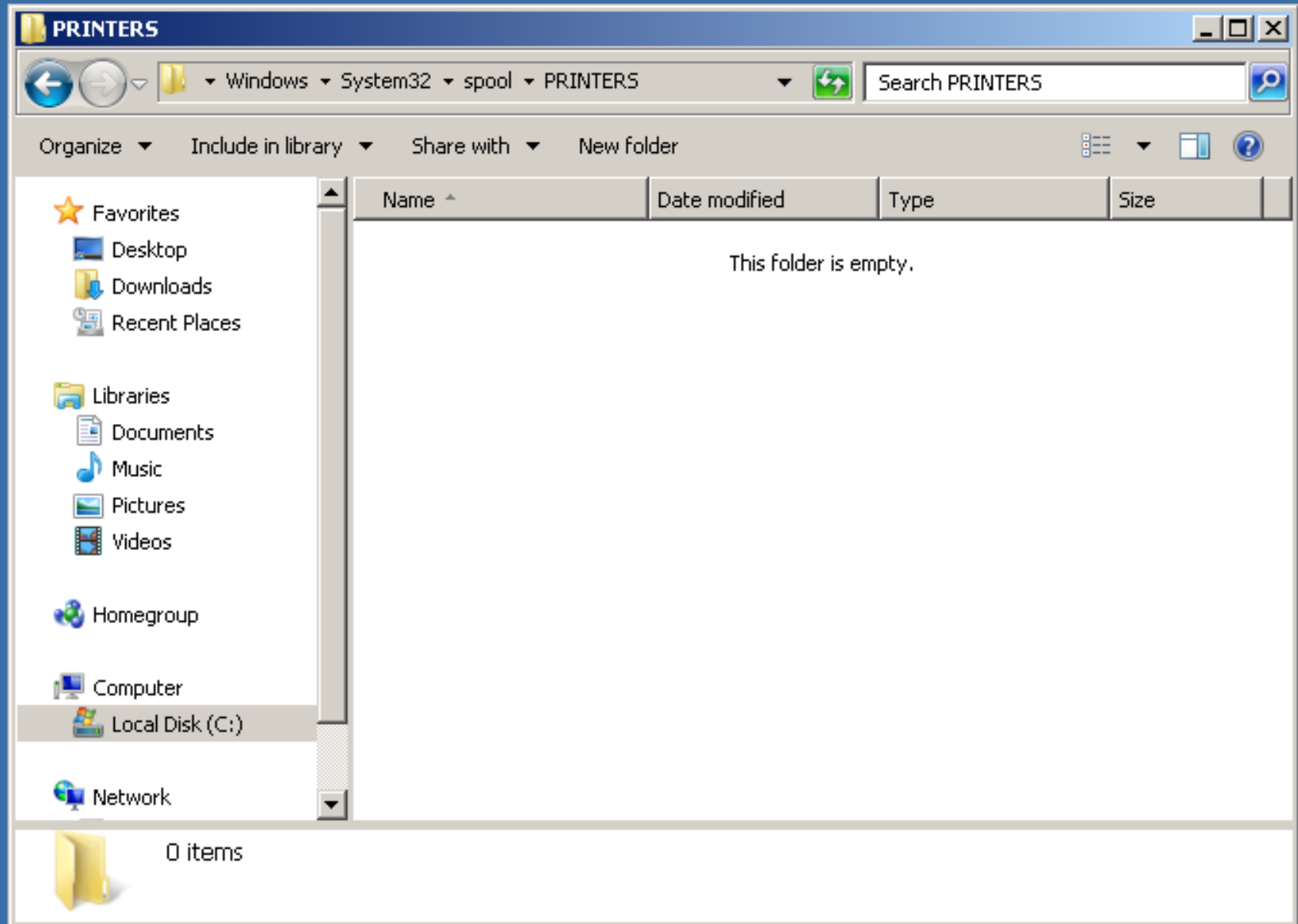


Small Step 302:

Go to

C:\Windows\System32
\Spool\PRINTERS\

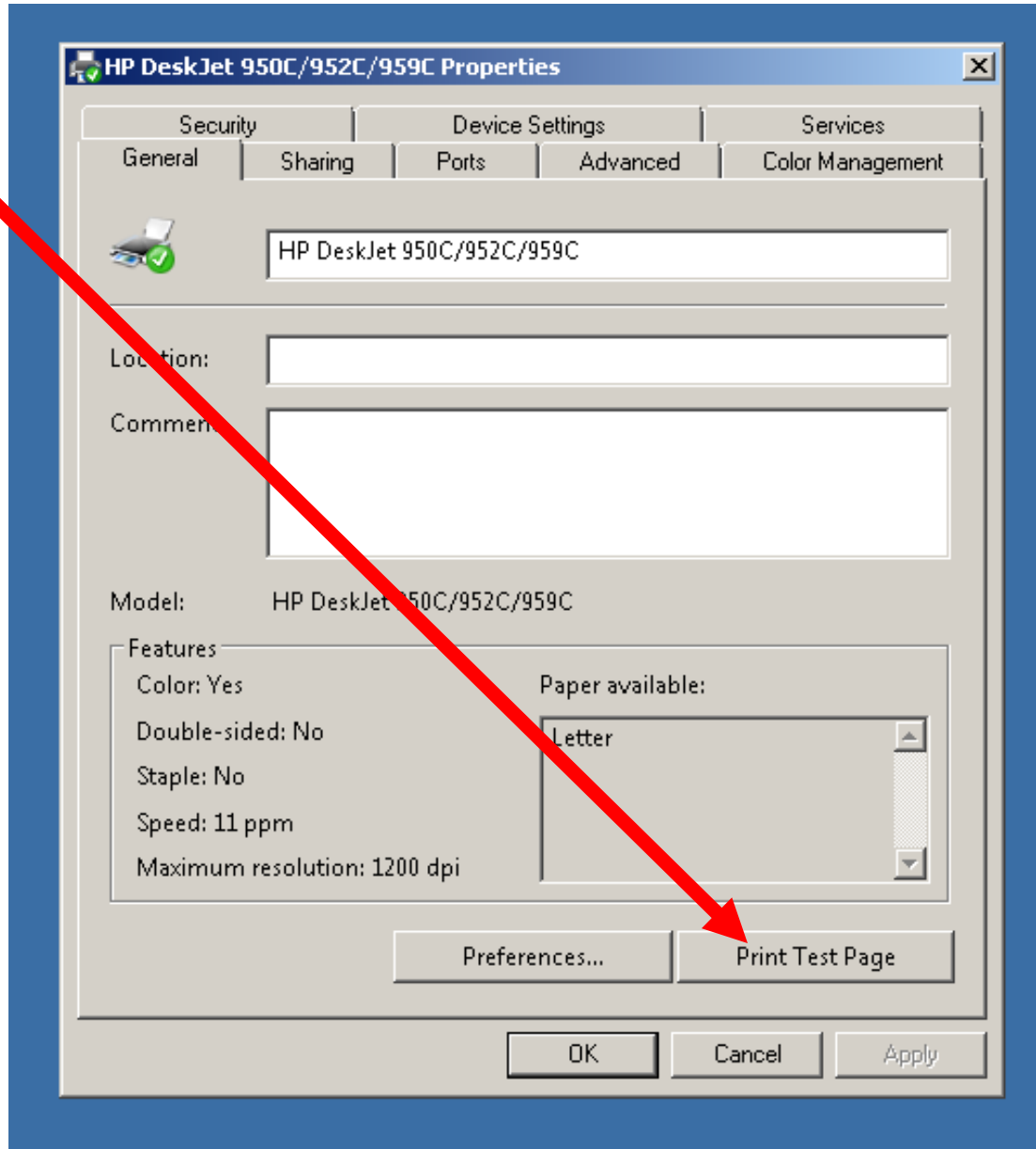
Screen Shot of Small Step 302:



Small Step 303:

Go to the (virtual) Printer in “Devices, right-click on the (virtual) printer, click on “Printer properties”, and click on “Print Test Page” :

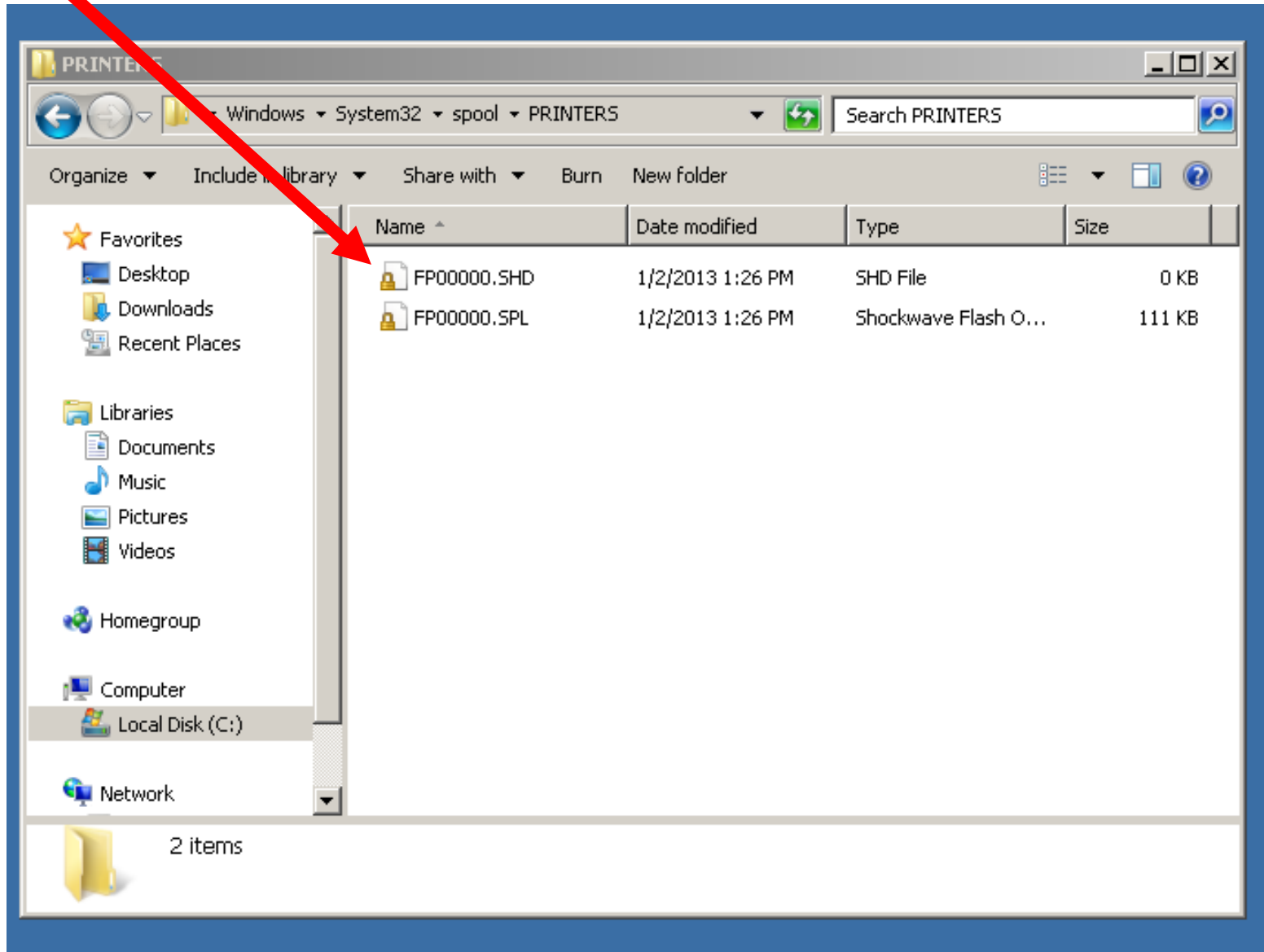
Screen Shot of Small Step 303:



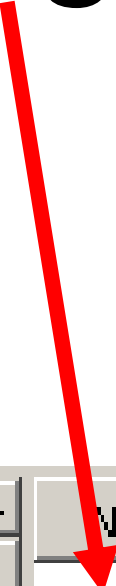
Small Step 304:



A .SHD and a .SPL file should have be temporarily created in the “PRINTERS” folder.

Screen Shot of Small Step 304:



Screen Shot of Small Step 304:

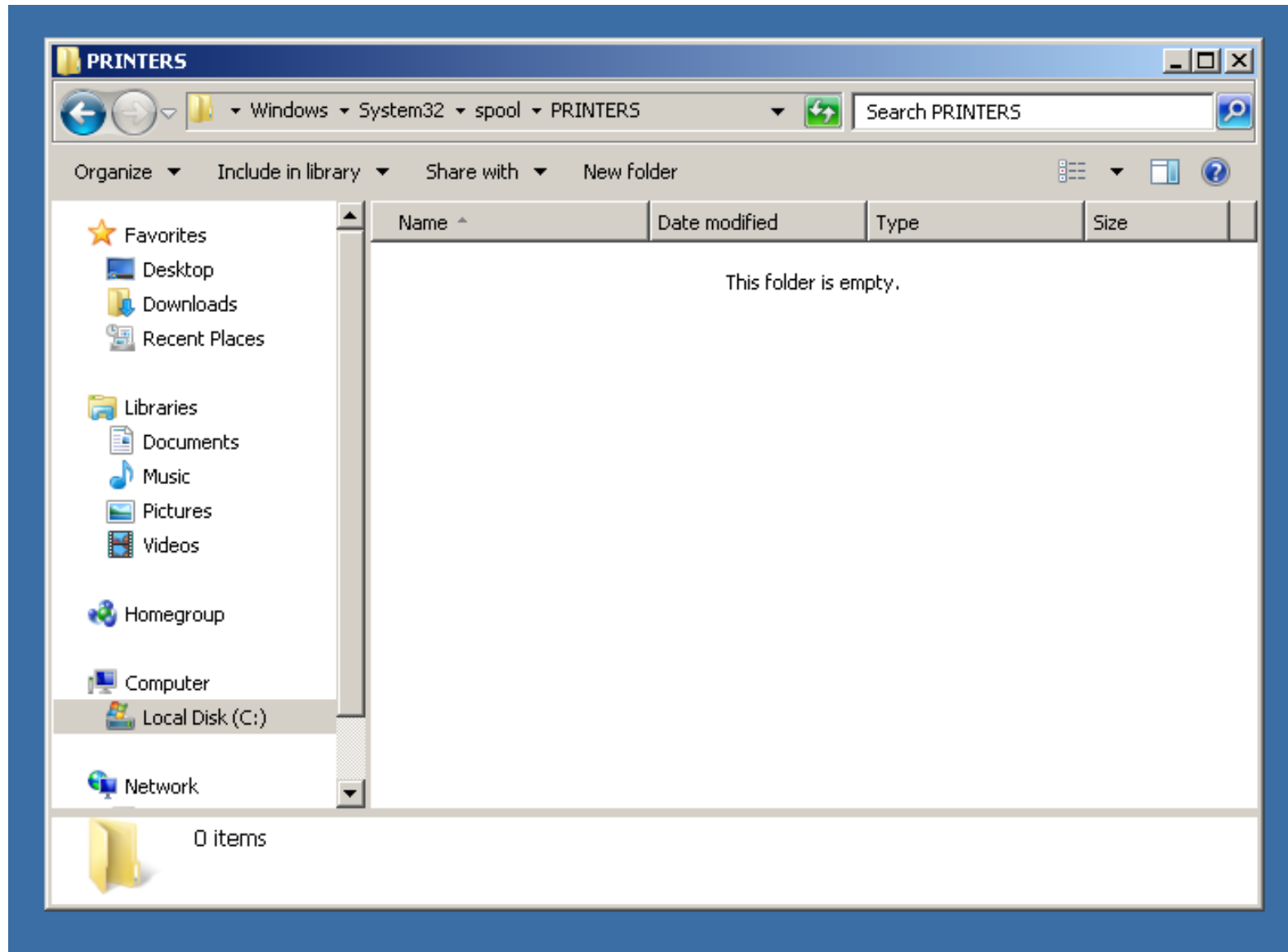


Name	Date modified	Type	Size
 FP00000.SHD	1/2/2013 1:26 PM	SHD File	0 KB
 FP00000.SPL	1/2/2013 1:26 PM	Shockwave Flash O...	111 KB

Small Step 305:

When the test print job finishes, the .SHD and a .SPL file in the Printers folder should disappear:

Screen Shot of Small Step 305:



Big Step 4: Check the “Print Processor” and the “GDI Rendering Engine”

If you have not already done so, go
to

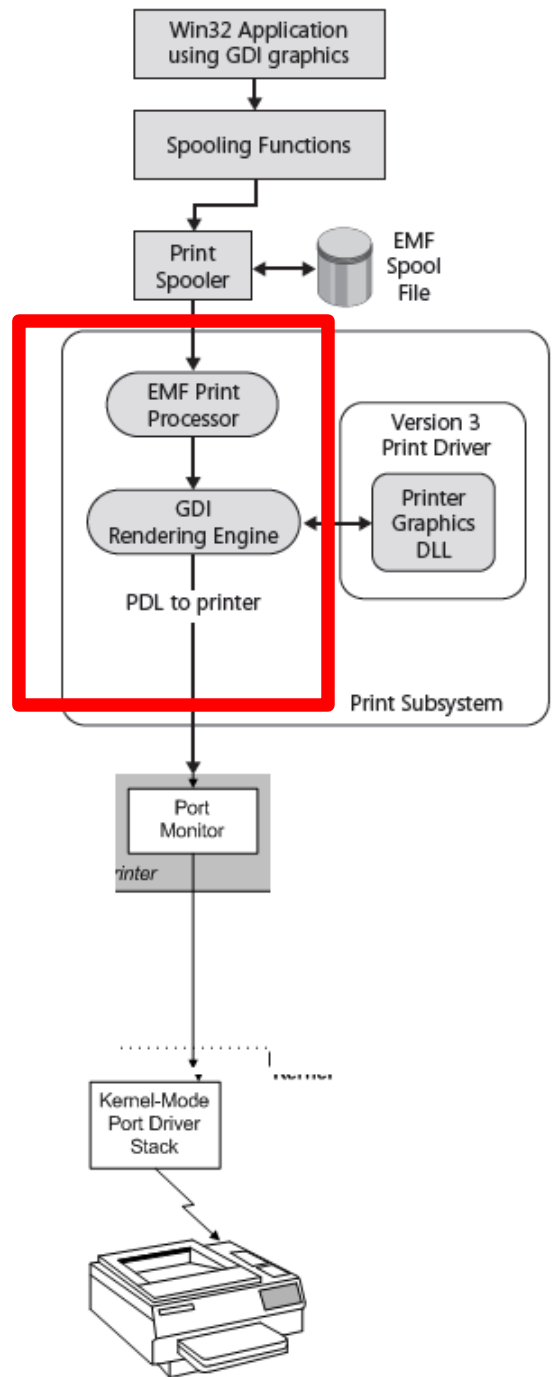
<http://cutepdf.com/products/CutePDF/writer.asp>

Download and install both the free
“Converter” and “CutePDF”.

Big Step 4: Check the “Print Processor” and the “GDI Rendering Engine” (continued)

Use the “CutePDF Writer” printer to print a test page.

If the “Print Processor” and the “GDI Rendering Engine” are both working, “CutePDF” should let you make a PDF file.



Small Step 401:

If you have not already done
so, go to

[http://cutepdf.com/products/
CutePDF/writer.asp](http://cutepdf.com/products/CutePDF/writer.asp)

Screen Shot of Small Step 401:

The screenshot shows a web browser window displaying the CutePDF website. The address bar shows the URL <http://cutepdf.com/products/CutePDF/writer.asp>. The page features a blue header with the CutePDF logo and navigation links. A sidebar on the left lists product options, with 'Free PDF Writer' highlighted. The main content area is titled 'CutePDF™ Writer' and includes a sub-header 'Convert to PDF documents on the fly — for Free!'. The text describes the software as a free version of a commercial PDF converter. Below this, there are three download options: 'Free Download' (Ver. 3.0; 1.82 MB), 'Free Converter' (GPLGS8.15; 5.01 MB), and 'Get Zipped Setup'. A 'FAQs' link is also present. The 'Installation Requirements' section lists supported operating systems and the need for Ghostscript. A 'What's New' section mentions support for Windows 8. A badge in the bottom left corner states 'Selected as One of the "50 Best free downloads" by Computer Shopper'.

http://cutepdf.com/products/CutePDF/writer.asp

CutePDF™ ideas for PDF

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CutePDF Products

- Overview
- CutePDF Professional
- PDF Form Filler
- Free PDF Writer

Free Download
(Ver. 3.0; 1.82 MB)

Free Converter
(GPLGS8.15; 5.01 MB)

Get Zipped Setup

FAQs

CutePDF™ Writer

Convert to PDF documents on the fly — for Free!

Portable Document Format (PDF) is the de facto standard for the secure and reliable distribution and exchange of electronic documents and forms around the world. CutePDF Writer is the free version of commercial **PDF converter** software. CutePDF Writer installs itself as a "printer subsystem". This enables virtually any Windows applications (must be able to print) to convert to professional quality PDF documents - with just a push of a button!

FREE for commercial and non-commercial use! No watermarks! No Popup Web Ads!

Have specific and advanced needs above and beyond that of other users? Integrate PDF creation ability into any application, solution, service or terminal server (e.g. Citrix) environment and more. [Custom Redistribution](#) now available!

Installation Requirements

- Supports Microsoft Windows 98/ME/2000/XP/2003/Vista/7/8 (x86/x64).
- Requires PS2PDF converter such as Ghostscript (recommended). You can get the free GPL Ghostscript 8.15 [here](#).

▶ GNU Ghostscript is an open-source interpreter for the PostScript language and the PDF file format. It is distributed under the [GNU General Public License](#). You may obtain the source code for GPL Ghostscript 8.15 [here](#).

What's New

- Added support for both 32-bit and 64-bit Windows 8. **NEW**

Selected as One of the "50 Best free downloads" by Computer Shopper

Small Step 402:

Download and install the free “Converter” AND then download and install from the “Download” hyperlink:

Screen Shot of Small Step 402:

The screenshot shows a web browser window displaying the CutePDF website. The address bar shows the URL <http://cutepdf.com/products/CutePDF/writer.asp>. The page features a blue header with the CutePDF logo and navigation links. A sidebar on the left contains a 'CutePDF Products' menu with 'Free PDF Writer' highlighted. The main content area is titled 'CutePDF™ Writer' and includes a 'Convert to PDF documents on the fly — for Free!' headline. Below this, there is a detailed description of the software, its benefits, and installation requirements. A red arrow points from the top left towards the 'Free PDF Writer' link in the sidebar menu.

CutePDF™ ideas for PDF

Home | Products | Developer | Support | Purchase

CutePDF Products

- Overview
- CutePDF Professional
- PDF Form Filler
- Free PDF Writer**

CutePDF™ Writer

Convert to PDF documents on the fly — for Free!

Portable Document Format (PDF) is the de facto standard for the secure and reliable distribution and exchange of electronic documents and forms around the world. CutePDF Writer is the free version of commercial **PDF converter** software. CutePDF Writer installs itself as a "printer subsystem". This enables virtually any Windows applications (must be able to print) to convert to professional quality PDF documents - with just a push of a button!

FREE for commercial and non-commercial use! No watermarks! No Popup Web Ads!

Have specific and advanced needs above and beyond that of other users? Integrate PDF creation ability into any application, solution, service or terminal server (e.g. Citrix) environment and more. [Custom Redistribution](#) now available!

Installation Requirements

- Supports Microsoft Windows 98/ME/2000/XP/2003/Vista/7/8 (x86/x64).
- Requires PS2PDF converter such as Ghostscript (recommended). You can get the free GPL Ghostscript 8.15 [here](#).

▶ GNU Ghostscript is an open-source interpreter for the PostScript language and the PDF file format. It is distributed under the [GNU General Public License](#). You may obtain the source code for GPL Ghostscript 8.15 [here](#).

What's New

- Added support for both 32-bit and 64-bit Windows 8. **NEW**

Free Download
(ver. 3.0; 1.82 MB)

Free Converter
(GPLGS8.15; 5.01 MB)

Get Zipped Setup

FAQs

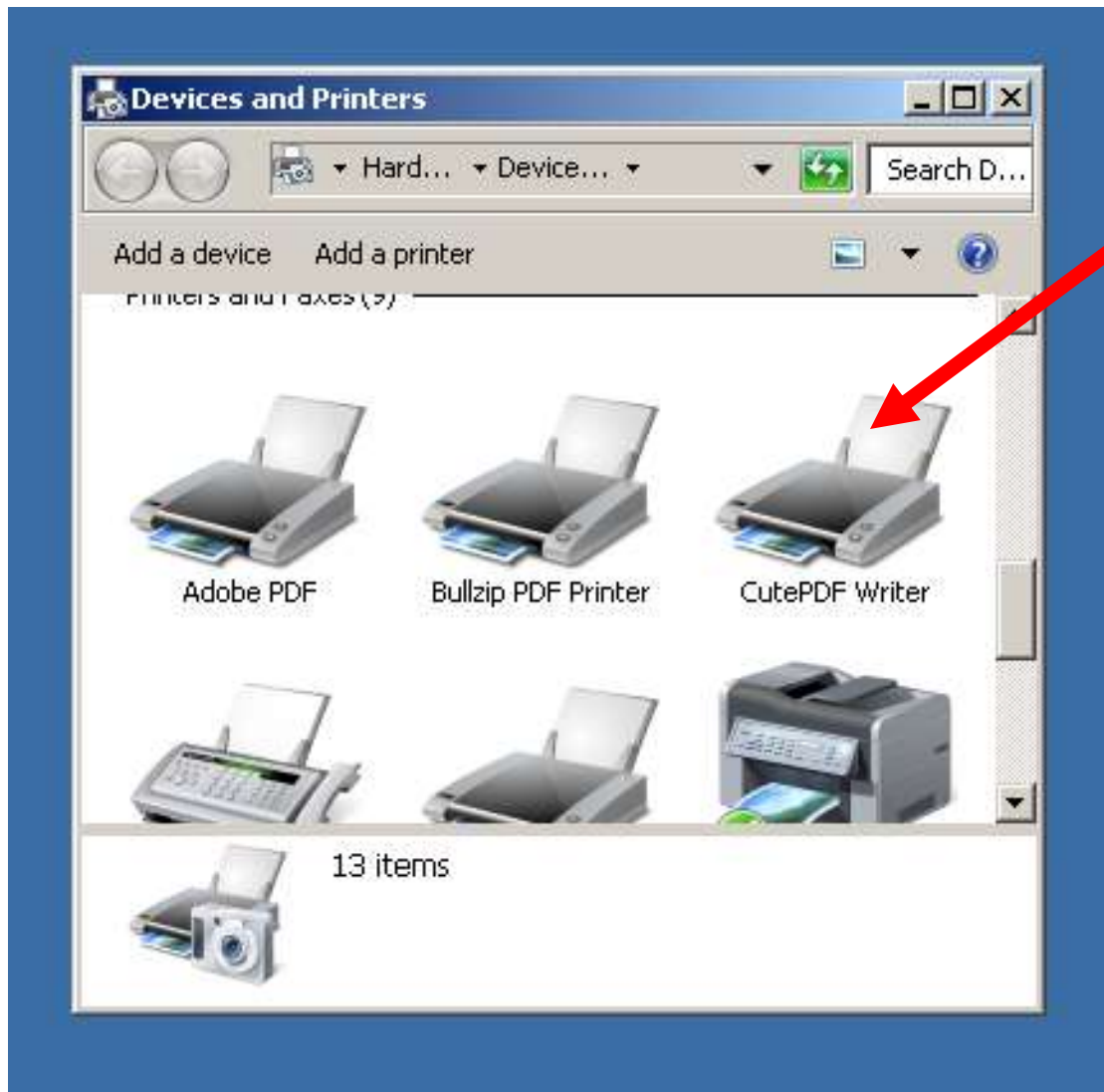
Selected as One of the "50 Best free downloads" by Computer Shopper

COMPUTER SHOPPER
50 FREE Downloads

Small Step 403:

Go to “Devices and Printers”
in the “Control Panel” and
locate the “CutePDF Writer”
printer:

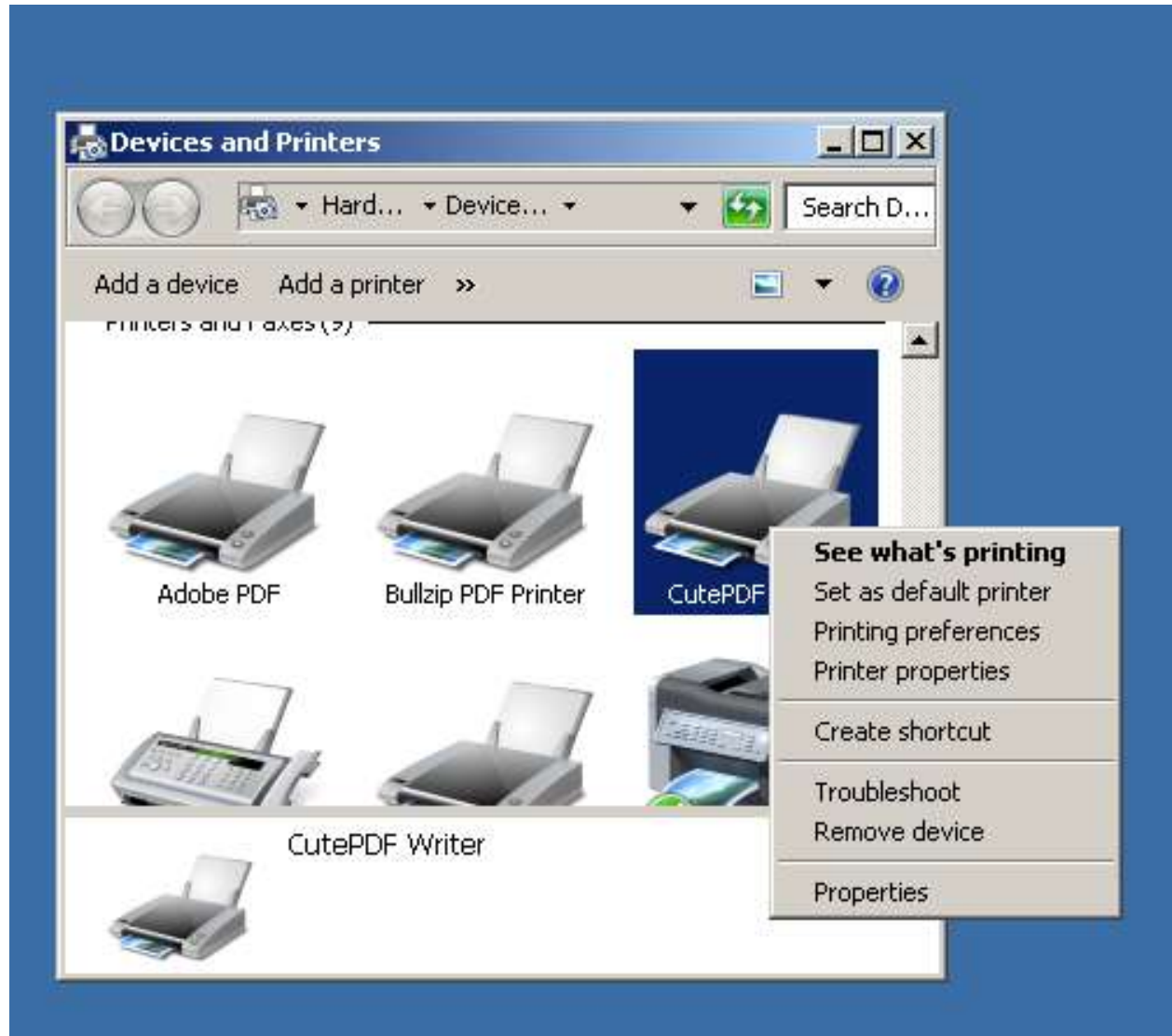
Screen Shot of Small Step 403:



Small Step 404:

Use the **RIGHT** mouse button to right-click on the “CutePDF Writer” printer:

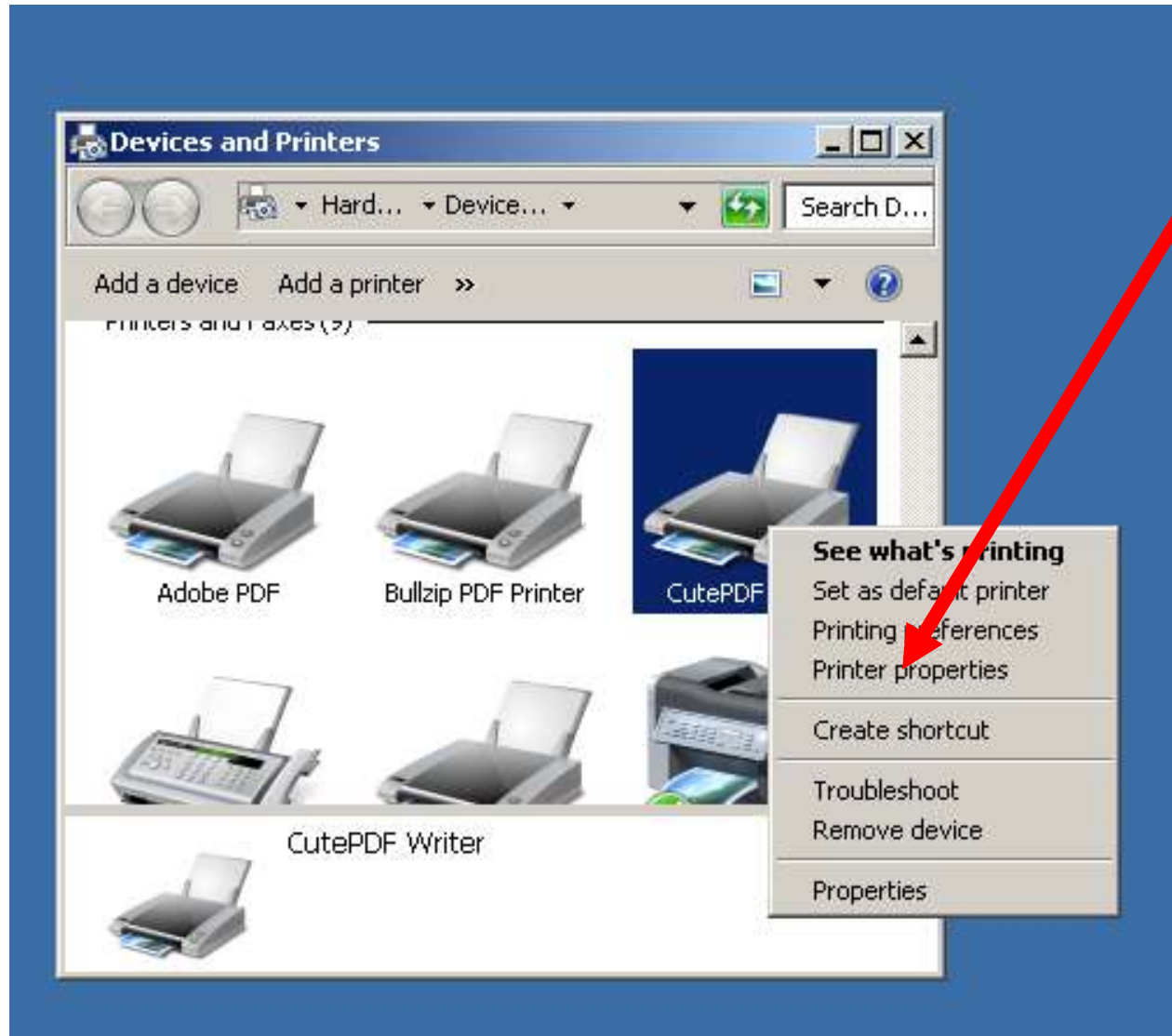
Screen Shot of Small Step 404:



Small Step 405:

Click on “Printer properties”:

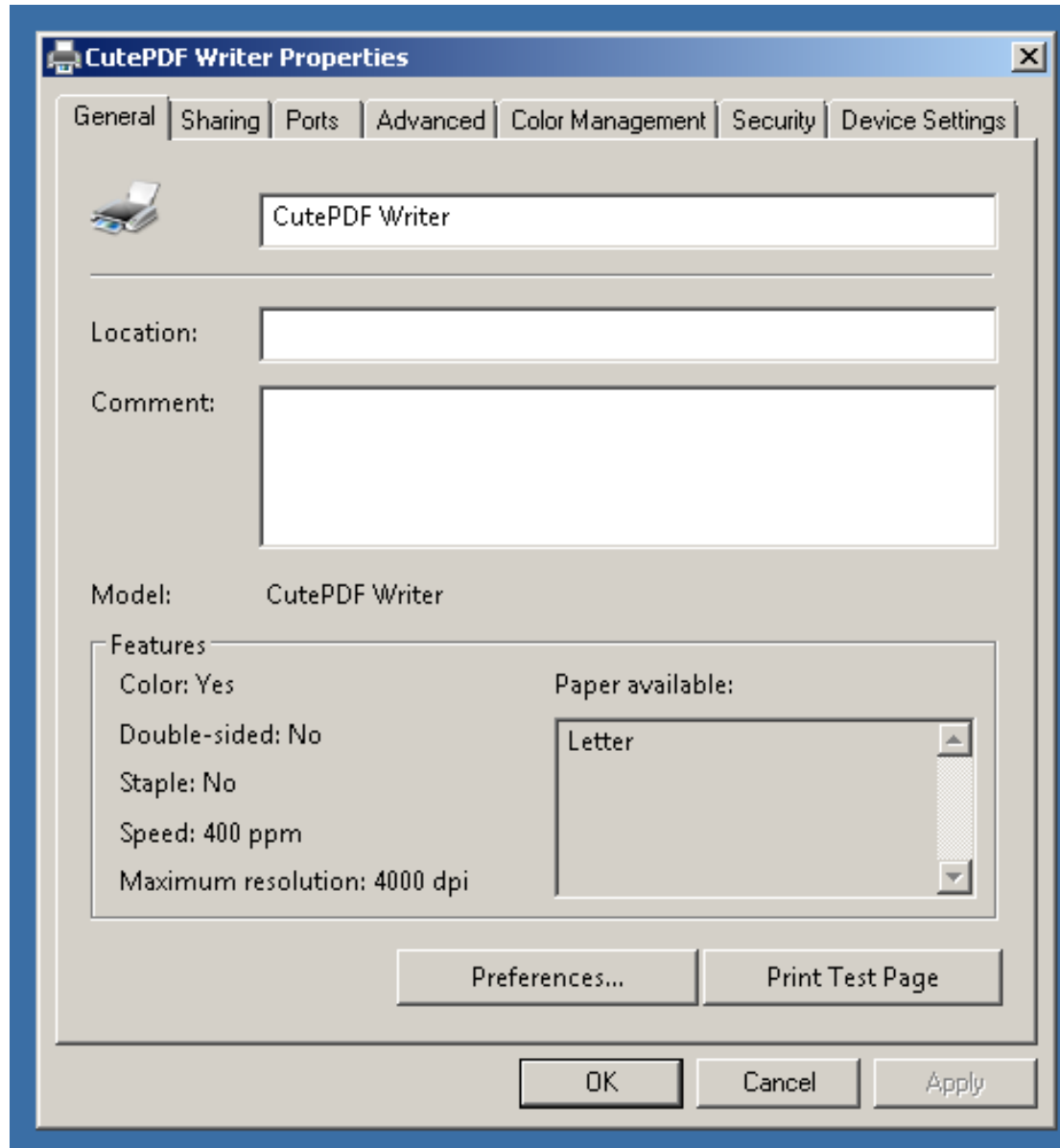
Screen Shot of Small Step 405:



Small Step 406:

Click on “Print Test Page”:

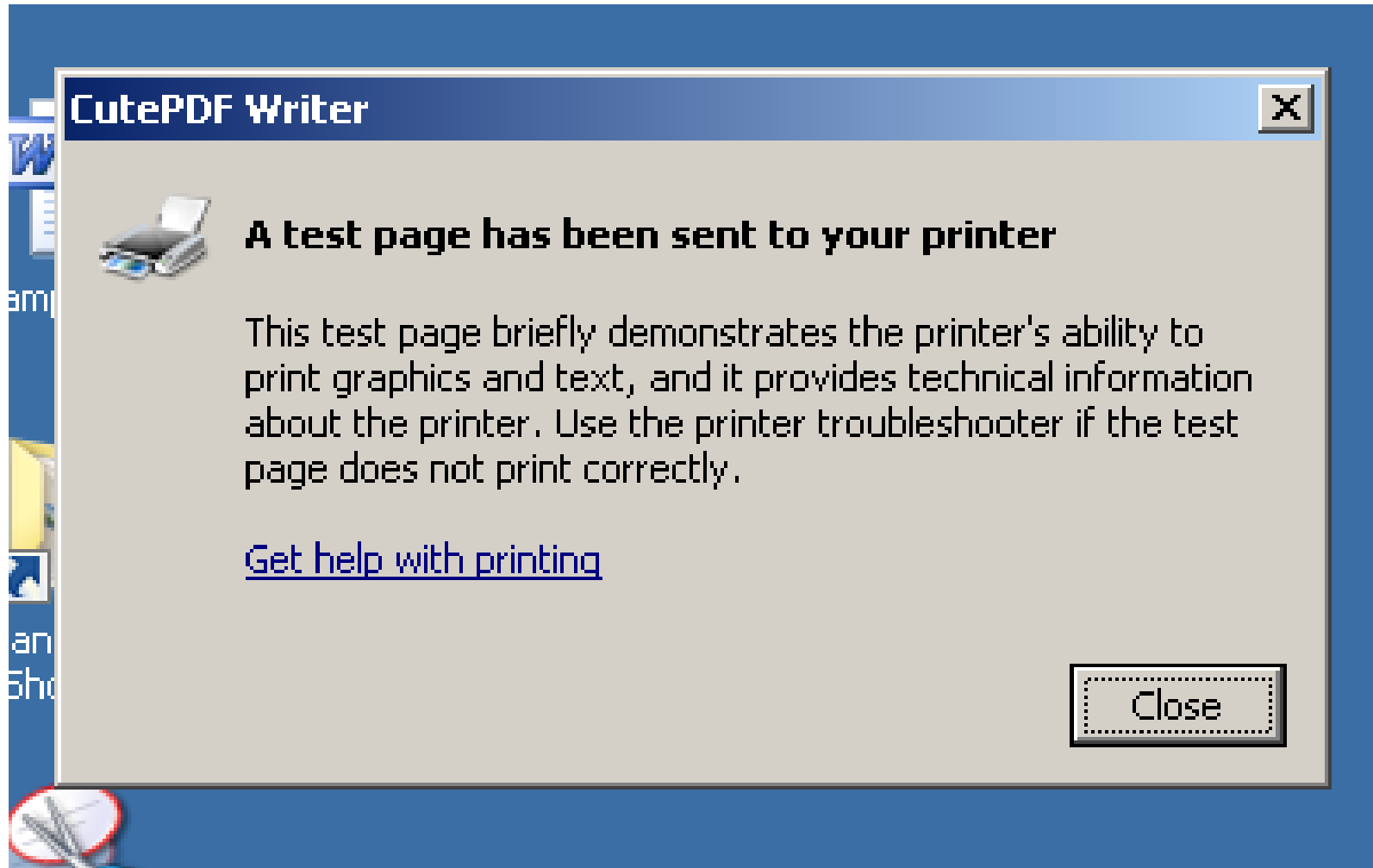
Screen Shot of Small Step 406:



Small Step 407:

If the “Print Processor” and the “GDI Rendering Engine” are both working, “CutePDF” should let you make a PDF file.

Screen Shot of Small Step 407:



Screen Shot of Small Step 407:

