WinPSX v1.1

WinPSX Copyright © 1991, Costas Kitsos

Contents

Introduction:

WinPSX is a PostScript Soft Font Downloader that runs under Microsoft Windows. It supports PostScript Type 1 and Type 3 soft fonts. Bitstream QEM PostScript soft fonts are supported under the Type 3 option. In addition, WinPSX gives you the ability to print device information reports that list available fonts in the printer and general printer statistics, as well as font samples of your Type 1 soft fonts. New in this version is support for job lists (predefined lists of soft fonts), an enhanced Quick Font Sample, and support for Dennis Harrington's Font Manager through FMPSX.

When WinPSX downloads soft fonts to the printer they become resident until the printer is initialized or turned off. By making your soft fonts resident you can take advantage of font caching which greatly speeds up PostScript printing and also avoid long waiting periods while Windows' PostScript driver downloads soft fonts on a per job basis. It is best to use WinPSX to download soft fonts that you use frequently and let the PostScript driver download less frequently used soft fonts.

Installation:

Hard Disk Installation:

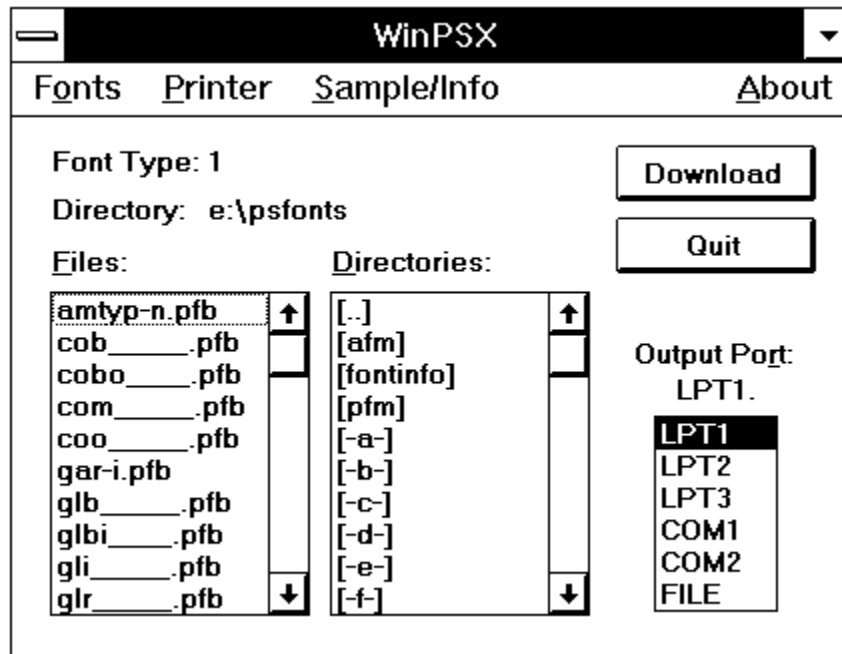WinPSX may be installed in any subdirectory on your hard disk.

Windows Installation:

> a.   Start Program Manager.
>
> b.   Select File / New.
>
> c. Add WinPSX as a Program Item to an existing group. Select new
>
>   Program Item.
>
> d.   Under Description type: WinPSX
>
> e.   Under Command Line type: [drive]:[\ path\]winpsx.exe Substitute
> [drive] and [\path\] for the correct drive and path.

Running WinPSX:

To start WinPSX double-click on the WinPSX icon. The WinPSX screen will look similar to this:

```
┌─────────────────────────────────────────────────────┐
│ ▬          WinPSX                               ▼    │
├─────────────────────────────────────────────────────┤
│  Fonts    Printer   Sample/Info         About       │
├─────────────────────────────────────────────────────┤
│  Font Type: 1                    ┌──────────────┐    │
│                                  │  Download    │    │
│  Directory:  e:\psfonts          └──────────────┘    │
│                                  ┌──────────────┐    │
│  Files:           Directories:   │    Quit      │    │
│  ┌──────────┬─┐  ┌──────────┬─┐  └──────────────┘    │
│  │amtyp-n.pfb│↑│  │[..]      │↑│                      │
│  │cob____.pfb│ │  │[afm]     │ │   Output Port:       │
│  │cobo___.pfb│ │  │[fontinfo]│ │      LPT1.           │
│  │com____.pfb│ │  │[pfm]     │ │  ┌──────────┐        │
│  │coo____.pfb│ │  │[-a-]     │ │  │LPT1      │        │
│  │gar-i.pfb │ │  │[-b-]     │ │  │LPT2      │        │
│  │glb____.pfb│ │  │[-c-]     │ │  │LPT3      │        │
│  │glbi___.pfb│ │  │[-d-]     │ │  │COM1      │        │
│  │gli____.pfb│ │  │[-e-]     │ │  │COM2      │        │
│  │glr____.pfb│↓│  │[-f-]     │↓│  │FILE      │        │
│  └──────────┴─┘  └──────────┴─┘  └──────────┘        │
└─────────────────────────────────────────────────────┘
```

Selecting an Output Port:

First select the appropriate port. There are no special considerations for downloading to the parallel ports.

If you are downloading to COM1 or COM2, please note that WinPSX will not initialize the COM port for you. It assumes that you have already done so. Consult your printer's manual for the manufacturer's recommended COM port parameters. Usually, all it takes is adding a line to your autoexec.bat file that reads something like this: MODE COM1:96,N,8,1,P.

If you are downloading to a file select FILE. WinPSX will assign a filename for you by adding the extension .PSX to the font's filename. For example, if the font is named CASLON.PFB the output file will be named CASLON.PSX. This file will be placed in the same drive and subdirectory as your font.

When you exit WinPSX it will save your port selection in a file called: WINPSX.INI. This

way, next time you start WinPSX you won't have to reconfigure your Output Port setting.

The Fonts Menu - Select a Font Type:

WinPSX defaults to PostScript Type 1 soft fonts. If you're downloading Type 3 soft fonts you may change the Font Type through the **Fonts** menu option. For Type 1 fonts WinPSX uses the filespec "*.pfb", for Type 3 fonts it uses "*.p*"

Mark Fonts and Download:

First, change to the correct drive and subdirectory. Mark the fonts you wish to download by clicking on the filename. To unmark a selection click on it again. When you're ready, click on **Download** and WinPSX will download your selections. WinPSX has an internal limit of 25 soft fonts per batch job which is probably way more fonts than you'll be downloading at any one time. If you mark more than 25 soft fonts only the first 25 will be downloaded. To download more than 25 soft fonts you'll need to download them in two or more sessions.

While WinPSX is downloading, the title bar will read: **Downloading... [filename]** . When the download is complete, the title bar is reset to the normal caption.

WinPSX performs font verification before downloading a font. If you receive a Font Failed Verification message it means that WinPSX could not verify the font as a valid binary Type 1 font (when downloading Type 1s) or a valid Type 3 font (when downloading Type 3s).

If at any point you need to abort a download hit the **Escape** key. WinPSX will prompt for confirmation and cancel the download.

Note: If you use Windows' Print Manager make sure that it has finished printing before downloading your fonts. Also, users of PrintCache will be happy to know that it is compatible with WinPSX and will spool soft font downloads.
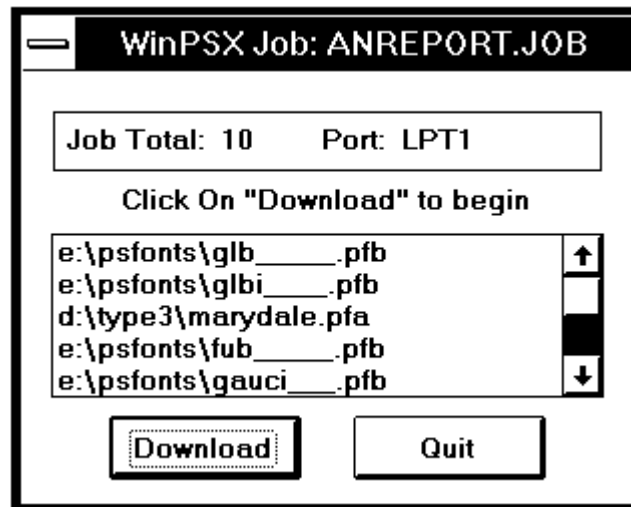
The Fonts Menu - Job Lists:

New in this version of WinPSX is the ability to use job lists. A job list is a collection of soft fonts to be downloaded to a particular port. Job lists are plain text files that can be created with Windows Notepad. The file format is simple and easy to remember. Here's an example:

```
Port=LPT1
e:\psfonts\glb_____.pfb
e:\psfonts\glbi____.pfb
d:\type3\marydale.pfa
e:\psfonts\fub_____.pfb
e:\psfonts\gauci___.pfb
```

The first line is always the output port in the format **Port=[PortName]** where PortName is a valid output port. It is important to not include a colon after the PortName, e.g. LPT1: is wrong,
LPT1 is correct. Port Names should be output device ports, like LPT1, LPT2, LPT3, COM1, and COM2. A job list can contain a mixture of Type 1 and Type 3 fonts, WinPSX wil autosense the correct method of downloading. The expected file extension for job lists is **.JOB** and the total number of soft fonts that can be specified is 25.

When you select Job Lists from the Fonts Menu you will see a display of filenames with the extension ".job" and the Output Port feature will be unavailable (job lists contain the correct output port). The multi-pick feature is supported for marking and downloading a variety of job lists. When you select a file and click on Download you will see something like this:

```
┌─────────────────────────────────────────────┐
│ ▬  WinPSX Job: ANREPORT.JOB                  │
├─────────────────────────────────────────────┤
│                                              │
│  ┌────────────────────────────────────────┐  │
│  │ Job Total: 10      Port: LPT1          │  │
│  └────────────────────────────────────────┘  │
│         Click On "Download" to begin          │
│  ┌──────────────────────────────────────┬──┐ │
│  │ e:\psfonts\glb_____.pfb             │ ↑│ │
│  │ e:\psfonts\glbi_____.pfb             │  │ │
│  │ d:\type3\marydale.pfa                │  │ │
│  │ e:\psfonts\fub_____.pfb             │  │ │
│  │ e:\psfonts\gauci____.pfb             │ ↓│ │
│  └──────────────────────────────────────┴──┘ │
│       ┌──────────┐      ┌──────────┐          │
│       │ Download │      │   Quit   │          │
│       └──────────┘      └──────────┘          │
└─────────────────────────────────────────────┘
```

When you are ready to start downloading click on Download. WinPSX will download the soft fonts in the list and return you to the main screen. If at any point you need to abort a download hit the **Escape** key.

Command Line:

Another new feature in this version of WinPSX is support for command line job list downloading. For example, you can choose Run from the Program Manager's File Menu and specify "c:\psutil\winpsx.exe d:\psjobs\anreport.job" This bypasses WinPSX 's main screen and brings up the job list screen. After the list is downloaded, WinPSX ends. Also, you may add **job=[drive:][**

path\]winpsx.exe ^.job to the extensions section of your WIN.INI to be able to select job lists from the File Manager and have WinPSX download them.
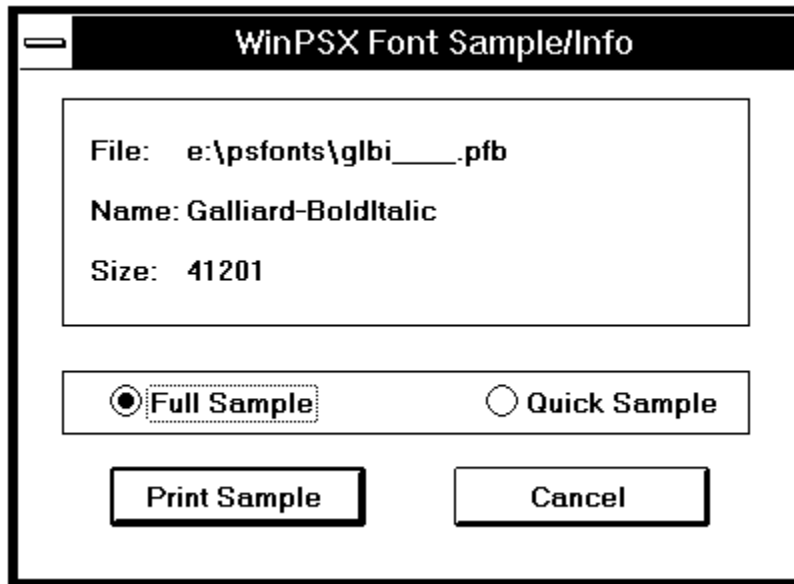
The Printer Menu:

The Printer Menu contains two options: **Initialize Printer** and **Device Info**.

Initializing the printer will cause the printer to return to the power on state. It will remove from the printer's memory all resident soft fonts, error handlers, prep files, etc. If your current output selection if **File** then a file called **INITPR.PSX** will be created in the current directory. This file will contain the necessary commands to initialize the printer and may be copied to the printer with the DOS copy command. This version of WinPSX uses a new initialization command to support the line of QMS printers.

Selecting Device Info will print a page of information on the current printer status. This page includes a font directory, memory status, page count, etc. Note: The Total Memory reported by WinPSX is the memory beyond that used by the PS interpreter. If your current output selection is **File** then a file called **DEVINFO.PSX** will be created in the current directory. This file may be copied to the printer with the DOS copy command.

Sample/Info Menu:

This menu option is only available for Type 1 soft fonts. There are two uses for the Sample/Info Menu. One is if you want to find out information about a font e.g. PostScript Name, File Size, etc and the other is to print a sample using the selected font. First select a soft font from the file list and then click on Sample/Info. You'll see a window similar to this:

WinPSX Font Sample/Info

File: e:\psfonts\glbi____.pfb

Name: Galliard-BoldItalic

Size: 41201

◉ Full Sample   ○ Quick Sample

Print Sample   Cancel

If you are only interested in the Font Info part then click on Cancel (or press Escape).

To print a font sample select Print Sample or press Enter. Note: WinPSX assumes that you have already downloaded the soft font.

The Full Sample prints a quote from Aristotle's Ethics once in 12pt type and once in 15pt type, a font scaling sample, and a character set. The character set sample assumes that no characters are mapped between ASCII 0 and ASCII 32, but this seems to be the norm with most PostScript fonts (with the possible exception of some pi fonts). If this is a new soft font and if you work a lot with type then you'll find the Full Sample more complete. The full sample takes 1 to 3 minutes to print, depending on the speed of your printer.

The Quick Sample prints the same quote from Aristotle's Ethics in 12pt ,15pt, 18pt and 24pt type, the ASCII characters 33 - 126, and useful information about the font. It should take 30 sec. to 1 minute to complete, depending on the speed of your printer.

Note: When WinPSX prints font samples it generates its own PostScript code. In many cases the character set that you will see when you print the Full Sample will contain more characters than can be accessed . Also, the Full Sample character set assumes a text font and may not be complete for certain pi fonts. The line and word spacing in both samples is determined by certain PostScript routines that provide pleasant output most of the time. Under certain circumstances the line and word spacing will be off, but the resulting font sample should still be useful.

If your current output selection is **File** then a file called **FNTSAMPL.PSX** will be created in the current directory. This file may be copied to the printer with the DOS copy command.

Ending the WinPSX session:

To exit WinPSX select Quit. When you quit, WinPSX will save the current settings (Port and Font Directory) in a file called WINPSX.INI. These settings will be used next time you start WinPSX.

FMPSX - Linking WinPSX and FontManager:

Users of Dennis Harrington's excellent font management utility FontManager will be happy to know that the new versions of FontManager (v2.0 or higher) and WinPSX (v1.1 or higher) can be linked through Dennis Harrington' s FMPSX utility. With FMPSX you can mark fonts to be downloaded from

FontManager's Master library, launch WinPSX and download them, and have your WIN.INI automatically updated to reflect the resident status of the soft fonts. Details for the installation and operation of FMPSX are in the documentation included with FMPSX.

FMPSX is available in library 6 of the DTPFORUM as FMPSX.ZIP. If you don't use FontManager I strongly urge you to grab a copy from library 6 of the DTPFORUM. It will make your PostScript soft font management under Windows a pleasure. The current archive is FM200.ZIP. Note: If you use FMPSX please install WinPSX in your Windows directory.

Product Support:

If you have any questions or comments about WinPSX you may reach me via CompuServe Mail at: Costas Kitsos 73667,1755.

Bibliography:

PostScript Language Reference Manual Second Edition, Addison-Wesley Publishing.
Adobe Type 1 Font Format Version 1.1, Adobe Systems Inc., Addison Wesley Publishing.
Understanding PostScript Programming Second Edition, David A. Holzgang, Sybex Inc.
Learning PostScript - A Visual Approach, Ross Smith, Peachpit Press.
Running PostScript from MS-DOS, Gary Glover, Windcrest Books.

Legal Stuff:

This program is provided "as is" without warranty of any kind either express or implied. The entire risk related to the installation, performance and quality of the program is yours. In the event there is any defect the cost of all repairs, servicing or correction is up to you. In no event will I be liable for any damages caused from the use of this program or its documentation. WinPSX is free but it is Copyrighted. You have my permission to distribute it if you want but only in the original ZIP archive containing WINPSX.EXE, WINPSX.WRI and WINPSX.NEW. You may not alter WINPSX.EXE, WINPSX.WRI, WINPSX.NEW or the archive in any way and you should not charge anything for their distribution unless it's a modest fee covering duplication, shipping or transmission costs. BBS Sysops are granted permission to add their own BBS Telop.

PostScript and Adobe are trademarks of Adobe Systems, Inc.
Bitstream is a trademark of Bitstream, Inc.
Microsoft and Windows are trademarks of Microsoft Corporation.

If you find WinPSX useful and enjoyable please plant a tree (if you're anything like me you're probably using too much paper!).

Costas Kitsos, September 1991.