

Beyond PostScript . . .

Guidelines for Submitting **PDF Files**for High-Quality Printing

THE SHERIDAN PRESS

Printers and Publishing Services 450 Fame Avenue Hanover, PA 17331 Phone (717) 632-3535 Fax (717) 633-8900 A Sheridan Group Company

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The Sheridan Press– Our Approach to a PDF Workflow

IF YOU ARE tired of the problems associated with PostScript and are ready to process your jobs using a PDF (Portable Document Format) file workflow, The Sheridan Press is ready to go down this exciting new path with you. It will take a great deal of cooperation between us to navigate this path successfully, but by working together we are confident that the transition will be both smooth and beneficial. PDF files that are created properly for high-end imagesetters or computer-to-plate output are required. The Sheridan Press follows standardization guidelines published by Adobe, and recommended by Agfa, for constructing PDF files. You will need to review our PDF specifications before submitting files for printing.

BECAUSE imaging from PDFs involves software routines beyond the PostScripting stage, we will need to do some tests with your files. A suite of PDF files prepared to mutually agreed upon specifications will be needed for testing. The Sheridan Press will be glad to work directly with you or with your journal compositor. Our goal is to make the image output from a PDF file indistinguishable from that of a PostScript file.

WE WILL NEED to test items such as font character set embedding, resolution of graphics, accurate reproduction of tables and charts, page margins, and compression settings. These specific items, and others, are related to options incorporated in Acrobat Distiller, the software program that creates the PDFs from the parent PostScript. PDF red flag alerts (or problems) that we will check for, and that the customer should be aware of include duotone images, graduated screens (or vignettes), and detailed trapping. Current versions of PDF do not handle these types of situations reliably. A PostScript solution may be preferable if duotone, vignettes, or detailed trapping is required.

WHEN TESTING is complete and production begins, you may wish to preflight your files before sending them to us. We will recommend proven preflighting software so you will feel confident that what you are sending is precisely what you want printed. Call us for information on PDF preflight software programs.

Notes on PDF Files as Imaging Masters

PDF files as imaging masters have several advantages over their parent PostScript. PDFs are smaller in file size, cleaner in language construction, and tend to RIP (Rasterizing Image Processor) very reliably. Fonts and graphics can be embedded fully and page independence is an automatic feature. PDFs also can be edited in a limited fashion.

EVEN with advantages such as these, PDF files may still offer a challenge to film or plate imagers. Certain situations might arise in which the richness and complexity of PostScript language delivers the best results. For instance, complex color and trapping requirements may not image as expected from PDF files. Future versions of Acrobat Distiller will probably address the limitations of current PDF language. Until then, we should use caution and distinguish between material that is appropriate to PDF and that which is more suitable for a PostScript solution.

ANOTHER area of possible confusion resides in the decision to create either composite or preseparated PDF files. Generally speaking, the industry is moving toward composite files in which image data is separated at the RIP. However, some application programs may only support complex trapping, CMYK colors and spot color definitions in a preseparated PostScript file with its resulting preseparated PDF.

IT IS BEST to contact a Digital Services Specialist at The Sheridan Press with any questions you may have about proper PDF file preparation.

EQUIPMENT NEEDED to generate PDFs for printing includes:

- Adobe Acrobat Suite 3.0.2 or newer
- Acrobat Distiller PPD
- Plug-in software to edit and preflight PDFs

PostScript File Preparation

Standards for generating PostScript files for high-resolution PDFs

- The native application program should be pointed at the Acrobat Distiller PPD at the time of PostScript generation. If using the Acrobat Distiller 3.x PPD, you will need to customize the PPD to include 2400 dpi and CMYK color information. The Sheridan Press can instruct you in editing the PPD, or we can supply a pre-edited PPD to you.
- 2. All fonts should be embedded in the PostScript file.
- **3.** Set the correct dpi and lpi of final film output in the native application and/or the PostScript driver set-up program.
- 4. Data format should be binary.
- **5.** All images should be in EPS or TIFF format with high resolution graphic files embedded in the PostScripts. In some cases, arrangements for OPI procedures may be made with The Sheridan Press.
- 6. Files should be compatible with PostScript Level 2 if possible.
- 7. Set output percentage at 100%.

Acrobat 3.x Distiller Options

Refer to the screen captures for general guidelines on how to set up Distiller for quality high-resolution imagesetting to paper, film, or plate. Contact a Digital Services Specialist at The Sheridan Press for details about customizing Distiller options to match your specific output needs. The Sheridan Press can provide industry published technical documents for in-depth explanations of all Distiller options.

| General Compression Font Embedding Advanced | |
|---|--|
| –File Settings – | |
| Compatibility: Acrobat 3.0 | |
| 🗌 🗖 ASCII Format | |
| Device Settings | |
| Default Resolution: 2400 dpi | |
| Default Page Size: | |
| Width: 8.50 x Height: 11.00 Inches | |
| | |

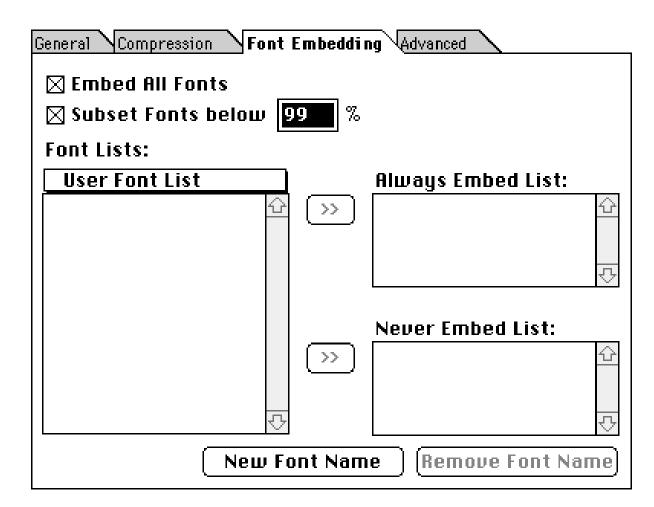
Under the GENERAL Tab

- 1. Set Compatibility for Acrobat 3.0
- 2. Clear the ASCII Format option box
- **3.** Set **Default Resolution** at 2400 and **Page Size** at 8.5 x 11 inches

| General Compression Font Embedding Advanced |
|---|
| 🖂 Compress Text and Line Art |
| Color Bitmap Images ———— |
| 🛛 Downsample to 350 dpi |
| 🛛 Automatic Compression: 🛛 ZIP/JPEG Low |
| ☐ Manual Compression: JPEG Low |
| Grayscale Bitmap Images |
| 🛛 Downsample to 350 dpi |
| 🛛 Automatic Compression: 🔤 ZIP/JPEG Low |
| Manual Compression: JPEG Low |
| Monochrome Bitmap Images |
| 🛛 Downsample to 1200 dpi |
| ⊠ Manual Compression: CCI∏ Group 4 |
| |

Under the COMPRESSION Tab:

- 4. Select Compress Text and Line Art
- 5. Downsample Color Bitmaps to 350 dpi
- 6. Downsample Grayscale Bitmaps to 350 dpi
- 7. Downsample Monochrome Bitmaps to 1200 dpi
- 8. Select compression modes as indicated



Under the FONT EMBEDDING Tab:

- 9. Select Embed All Fonts
- **10.** Select **Subset Fonts below** (and type in) 99%
- 11. Clear all font names from the User Font List and the Always Embed List

SPECIAL NOTE: The file "**superatm.db**" should be removed from the fonts folder inside the Acrobat 3.x application folder. This file should be moved to a folder which is outside the Acrobat 3.x application folder.

Under the ADVANCED Tab:

Select all option boxes as shown above.

For full explanations of each option see industry published technical guides for high-resolution PDF file construction or contact a Digital Services Specialist at The Sheridan Press.

NOTE: To benefit from the **Distill with prologue.ps / epilogue.ps** option, move the prologue.ps and epilogue.ps files from the Xtras/high_end directory into the directory containing the Distiller application and restart Distiller.

Acrobat 4.x Distiller Options

If using Acrobat 4.x for distilling PostScript be sure to select PressOptimized in the main window. Use the Job Options Settings file supplied by The Sheridan Press.

| Acrobat Distiller | E |
|--|---------------------|
| Job Options: PressOptimized Compatibility: Acrobat 4.0 Info File: none Size: Source: | Pause Cancel Job |
| Progress Status: Ready | |
| Acrobat Distiller 4.0 Started: Wednesday, April 7, 1999 at 3:00 PM Adobe PostScript software version: 3010.106 | ▲ ▼ /// |

Using the PressOptimized setting will allow you to create high-resolution PDFs for output to imposed film or plate. Some options under Settings/Job Options/Color and Advanced tabs will need adjustment depending upon the nature of the material to be printed. Contact a Digital Services Specialist at The Sheridan Press for details about customizing Distiller options to match your specific output needs.The Sheridan Press can provide a Job Options Settings file which will automatically configure all Acrobat 4.x Distiller options.

Technical Guide References

THE SHERIDAN PRESS can provide industry published technical guides to facilitate the transition from PostScript to PDF workflow solutions, and for in-depth review of Acrobat Distiller settings.

TO INVESTIGATE on your own, some helpful references are published by Adobe. These materials can be found by searching the support databases at adobe.com and from the technical documents included with the Acrobat installation CD-ROM.

Agfa Corporation has published technical guides for constructing PDFs meant for high-resolution film or plate output. Look on the web at www.agfa.com for information.

Acquired Knowledge at www.acquiredknowledge.com also has some very helpful references about PDF workflows. For useful information on Acrobat plugins for PDF editing and preflight go to the web site for Enfocus at www.enfocus.com.

Two useful books are:

PDF Printing and Publishing, The Definitive Guide to Adobe Acrobat 3.0 by Frank Romano, et al., published in 1997 by Micro Publishing Press.

The PDF Bible, The Complete Guide to Adobe Acrobat 3.0 by Mark Witkowski, published in 1998 by Micro Publishing Press.