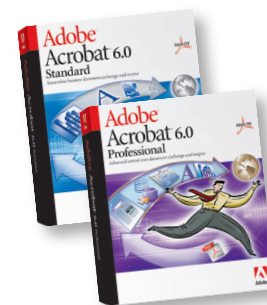




# Installing & Configuring Acrobat for Fun & Profit



**New & Improved!**  
Now Updated for **Adobe** Acrobat 6.0



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Principal Scientist,  
Publishing Technologies & Services Group  
Adobe Systems Incorporated  
November 10, 2003





# Agenda

- Introduction
- General Installation Considerations
- PDF File Creation
- PostScript Driver Setup
- Distiller Setup
- Acrobat 6 Print Configuration Issues
- Q&A

# Introduction





# Introduction

## *Some Simplifying Assumptions*



- We limit our discussion to the following operating system environments:
  - Windows NT 4, Windows 2000, Windows XP, and Windows Server 2003 for Acrobat 6 Professional plus Windows'98 SE for Acrobat 6 Standard;  
all Windows versions for Acrobat 5
  - MacOS 10.2.2 and above for Acrobat 6 (both versions);  
MacOS 9.x for Acrobat 5

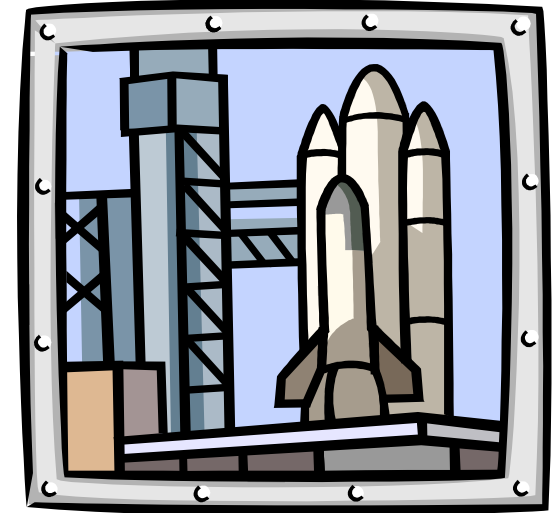






This is not ...

- **A sales pitch**  
*If you are attending this conference, you have already bought into Acrobat and PDF.*
- **A tutorial on Advanced Techniques**  
*Other sessions deal with the specifics of hyperlinks, indexing, multimedia, forms, collaboration, prepress, etc.*
- **Rocket Science**





We will ...

- Solve the puzzle as to simply configure Acrobat 6 such that you may reliably, consistently, and easily create PDF files without gurus and prepress experts — *mere mortals can do this!*

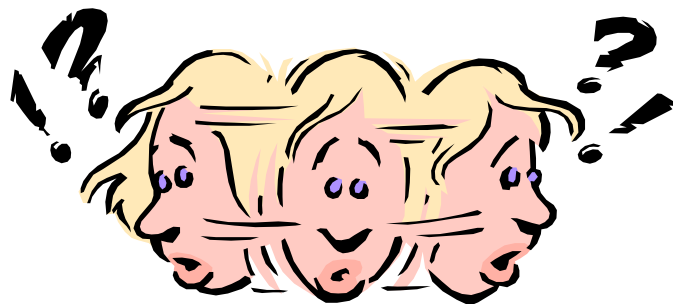




We will ...

■ **Discuss:**

- Limiting the number of settings, options files, and decisions necessary to create a PDF file
- Configuration techniques to create lean, mean, high quality PDF files suitable for:
  - Display (and web)
  - Printing
  - & Prepress



- Provide configuration background material for Wednesday morning's general session, *Reliable PDF Creation & Publishing Workflows*

# The Fine Print (pun intended) ...



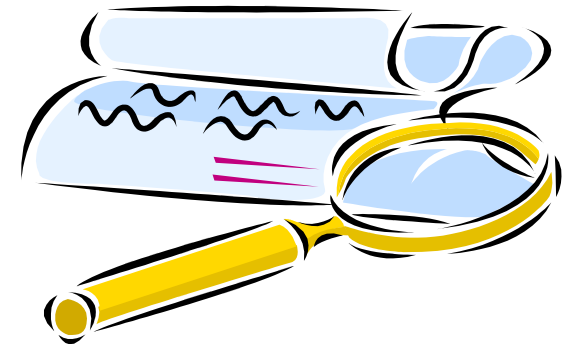
The material presented today may challenge long-held religious beliefs about how to create content and PDF.



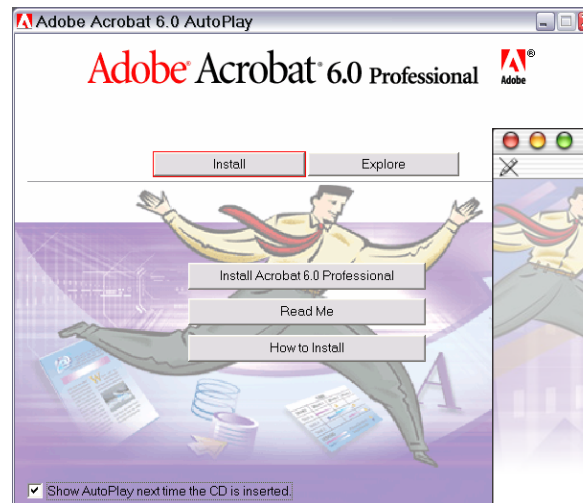
The opinions and techniques presented are those of the presenter, Dov Isaacs, and do *not* necessarily represent opinions held by or techniques officially endorsed by Adobe Systems Incorporated.



Your mileage may vary, but DO try this at home (and in your office, of course)!



# General Installation Considerations



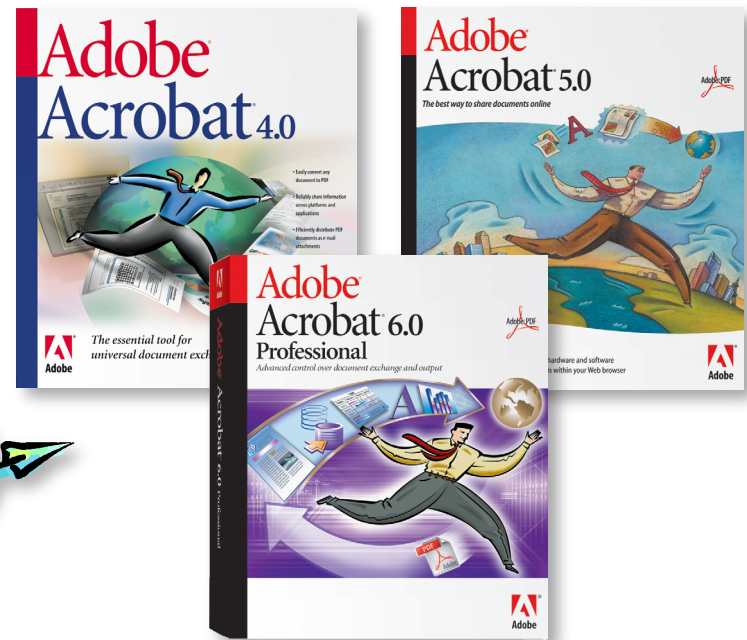
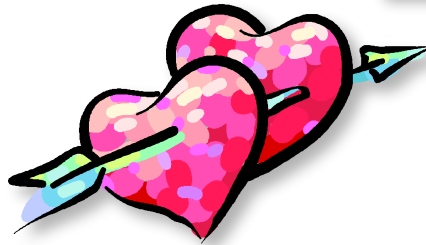


# General Installation Considerations

## *Concurrent Version Installation*

### *Question:*

How do you install and support multiple versions of Acrobat (or full Acrobat and Reader) concurrently on a single operating system configuration?





# General Installation Considerations

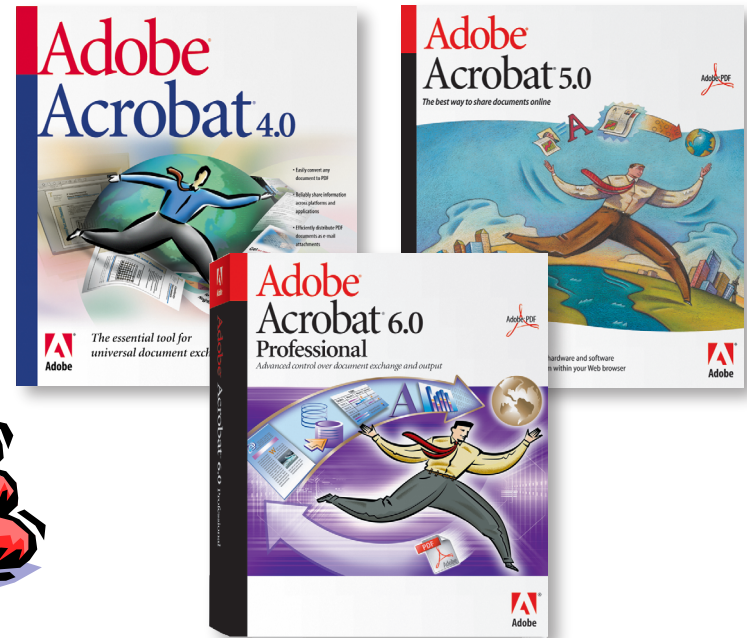
## *Concurrent Version Installation*



*Answer:*

**You don't!**

Acrobat and Acrobat / Adobe Reader cannot be safely installed to allow *full* and *safe* operation in this manner!





# General Installation Considerations

## *Concurrent Version Installation*

- **Why would you want this?**
  - Generation of “old” versions of PDF
  - Testing generated PDF files in an end-user environment (i.e., Reader) as opposed to in the full Acrobat product
  - Test and transition from one version to another
- **What are some of the problems?**
  - Browser integration
  - Integration with and plumbing for PostScript drivers and PDFMaker components
  - Operating system version support
  - What runs when .PDF or .PS files are double-clicked?





# General Installation Considerations

## *Concurrent Version Installation*

- For end-user PDF file “testing” purposes, a “system” stripped of resources (including fonts) should be used with Adobe / Acrobat Reader only!
- For other purposes, consider:
  - Separate computer systems
  - Multiple bootable disk partition system(s)
- Always fully uninstall one version of Acrobat before attempting to install another version of Acrobat on any single computer system!



# General Installation Considerations

## *Enterprise & Customized Installation*

Installation of Acrobat under Windows, especially in multiple user environments, may be customized and expedited via:

- The *Acrobat Enterprise Installation Tool* for Acrobat 5.0.5
- The *InstallShield Tuner 6.0 for Adobe Acrobat* for Acrobat 6.0 (all versions including Reader)

Both are available for customer free download from Adobe's web site

# PDF File Creation





# PDF File Creation

PDF files may be created by the following methods:

- Application Direct PDF Export
- PDF via Distillation of PostScript  
*(PostScript generated either directly by the application program itself or via the system's PostScript driver)*
- PDF via PDFWriter
- Third-party solutions



# PDF File Creation

## *Application Direct PDF Export*



Content



Direct PDF Export  
Capable Applications



PDF File





## PDF File Creation via Distillation of PostScript





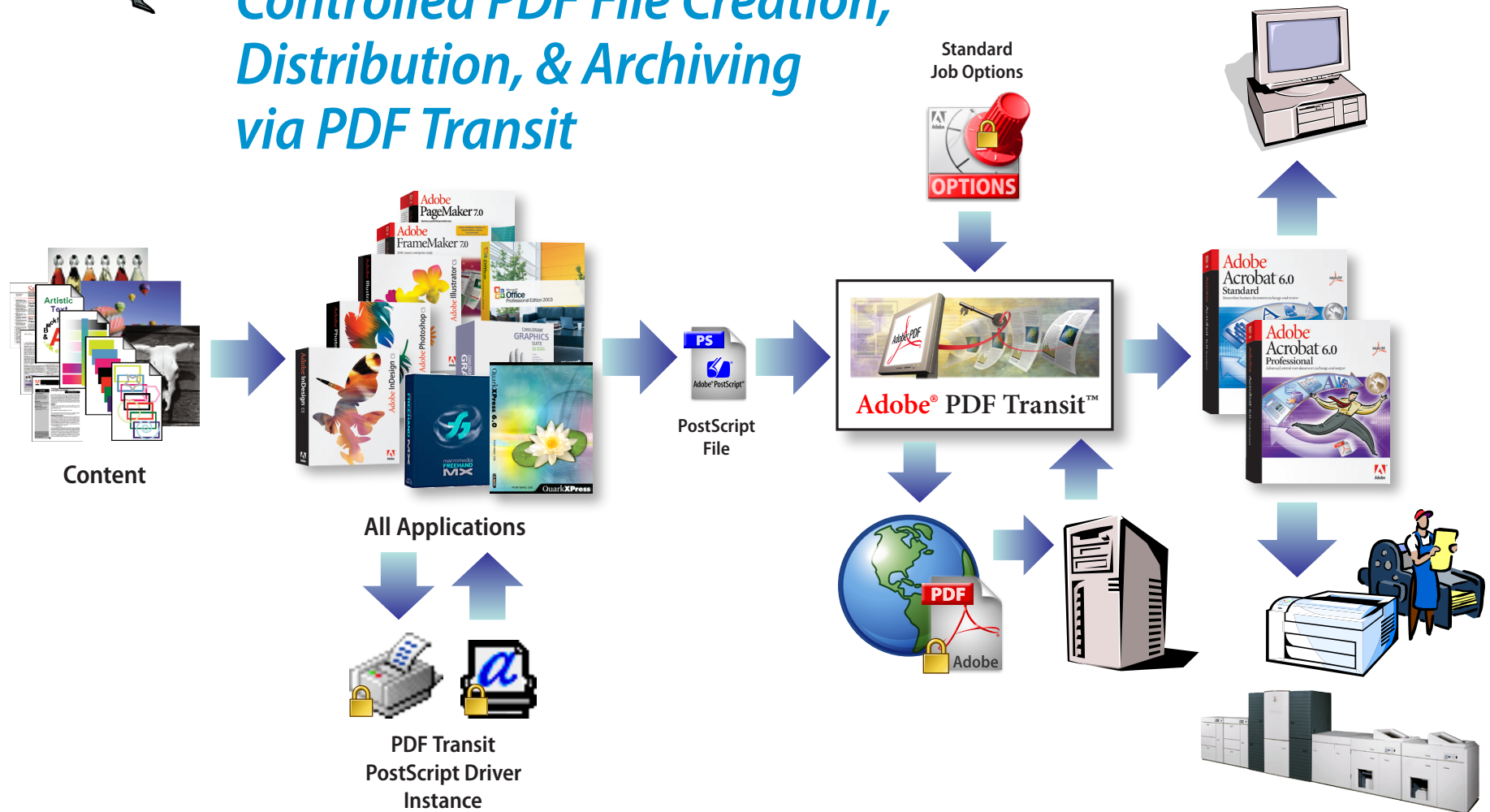
## PDF File Creation via PDFWriter Driver





# PDF File Creation

## *Controlled PDF File Creation, Distribution, & Archiving via PDF Transit*







# PDF File Creation

## *Application Direct PDF Export*

### Application Direct PDF Export

*trumps*

### PDF File Creation via Distillation of PostScript

- Applications with the capability of directly generating PDF from *all* content:
  - InDesign
  - FreeHand
  - Custom enterprise applications
  - Illustrator
  - CorelDRAW
  - Photoshop
  - WordPerfect
- Application Direct PDF Export is the preferred method of generating PDF from Adobe applications



## PDF File Creation



### *Application Direct PDF Export*

- Best support for PDF objects and attributes that have no corresponding feature in PostScript or difficult to “hack” with PDFMark (transparency, ICC color management, advanced tagging, etc.)
- QuarkXPress 6 does **not** provide direct PDF export – under the covers, it generates PostScript and converts to PDF either via a bundled third-party product or configured to Acrobat Distiller



# PDF File Creation

## *PDF via Distillation of PostScript*

### PDF File Creation via Distillation of PostScript *trumps* PDF File Creation via PDFWriter

- EPS graphics support for most applications requires a PostScript output stream
- Application, driver, and OS support for PostScript:
  - Highest level of graphics support for most applications
  - Most mature drivers
  - Documented “escape” mechanism by which *PDFMark* can supplement standard PostScript for PDF creation (tagging, bookmarks, hyperlinks, etc.)
  - Support for colorspaces other than RGB



# PDF File Creation

## *PDF via Distillation of PostScript*

- Generate PostScript per capabilities of PDF, not the capabilities of “final” target print device
  - Acrobat Distiller PPD in conjunction with the application program and the PostScript driver
  - PostScript Language Level 3
  - Native TrueType support

```
*PPD-Adobe: "4.3"  
% Adobe Systems PostScript(R) Printer  
% Copyright 1987-2002 Adobe Systems ...  
% All Rights Reserved.  
% ...  
% PPD file last updated 3 Dec 2002  
*FormatVersion: "4.3"  
*FileVersion: "1.0"  
*LanguageEncoding: ISOLatin1  
*LanguageVersion: English  
*PCFileName: "ADPDF6.PPD"  
*Manufacturer: "Adobe"
```

```
*Product: "(Adobe PDF)"  
*PSVersion: "(3015.102) 0"  
*ModelName: "Adobe PDF"  
*ShortNickName: "Adobe PDF"  
*NickName: "Adobe PDF 3015.102"  
% PPD for Adobe PDF 6, Roman  
% === Options and Constraints =====  
% ==== Device Capabilities =====  
*SuggestedJobTimeout: "120"  
*SuggestedWaitTimeout: "0"  
*ADTrueGray: True  
*ColorDevice: True
```

```
*DefaultColorSpace: CMYK  
*FileSystem: True  
*?FileSystem: "(True) == flush"  
*LanguageLevel: "3"  
*FreeVM: "4194304"  
*VMOption None/Standard: "4194304"  
*FCacheSize None/Standard: 204800  
*Throughput: "400"  
*VariablePaperSize: True  
*TTRasterizer: Type42  
*?TTRasterizer: "(Type42) ="  
*% ...
```



# PDF File Creation

## *PDF via Distillation of PostScript*

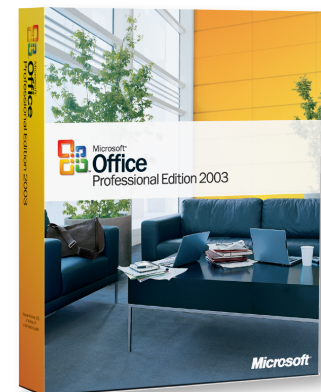
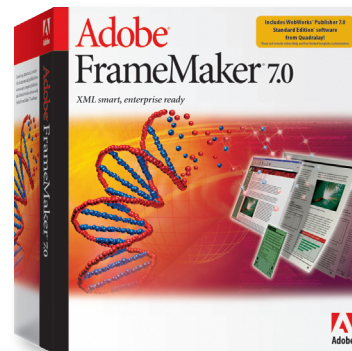
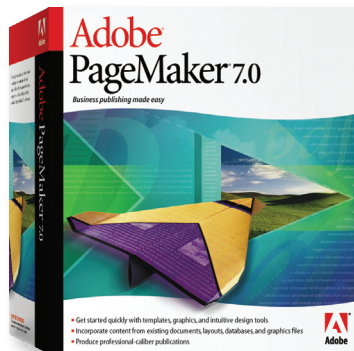
- ***Adobe PDF (Acrobat 6), Acrobat Distiller (Acrobat 5 Windows), & Create Adobe PDF (Acrobat 5 Macintosh) printer driver instances***
  - Created by Acrobat Installer with correct PPD file
  - Obviates most any need to manually create and distill PostScript or to maintain the PostScript files
- ***Adobe PDF Transit***
  - Customizable OEM / VAR / Service Provider product
  - PDF generation, encryption, distribution, archiving, and printing based upon tightly controlled PostScript generation and normalization into PDF



# PDF File Creation

## *PDF via Distillation of PostScript*

- *Export PDF* in PageMaker, *Save as PDF* in FrameMaker, and *PDFMaker* for Microsoft Office create PDF via “silent” creation and distillation of PostScript followed by post-distillation fixup and optimization of the resultant PDF



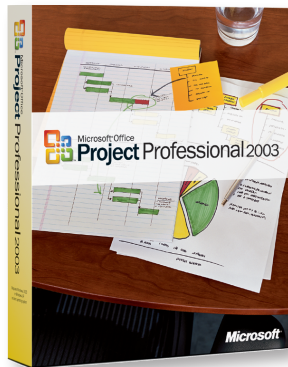


# PDF File Creation

## *PDF via Distillation of PostScript*



- Acrobat 6 Professional's *PDFMaker* adds support for:
  - Microsoft Project
    - Microsoft Visio
      - Visio layers translate to PDF layers
  - AutoDesk AutoCAD
    - AutoCAD layers translate to PDF layers





# PDF File Creation

## *PDF via PDFWriter*

- PDF support limited to features of the operating system imaging model (GDI - Windows, QuickDraw - MacOS 9 & earlier, etc.)
- PDFWriter support ends with PDF 1.2
  - default Acrobat 5 installation does *not* install PDFWriter!
- PDFWriter is *not* available with Acrobat 6





# PostScript Driver Setup

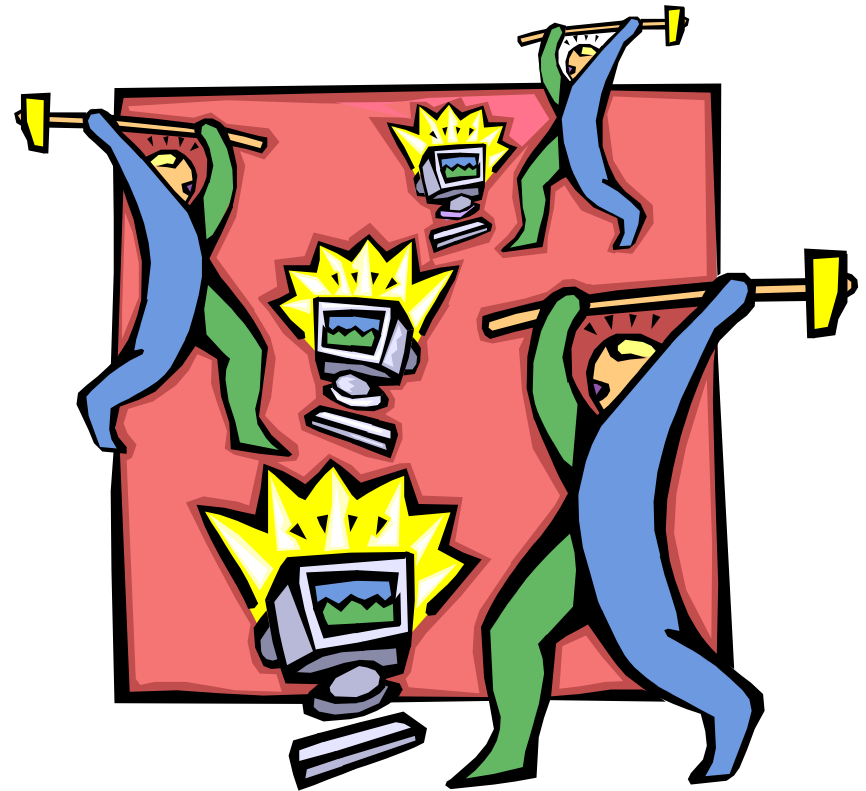




# PostScript Driver Setup

## *PDF Production & Otherwise*

- Some “as installed” default driver settings could use some serious “tweaking” for best (or even usable) results ...



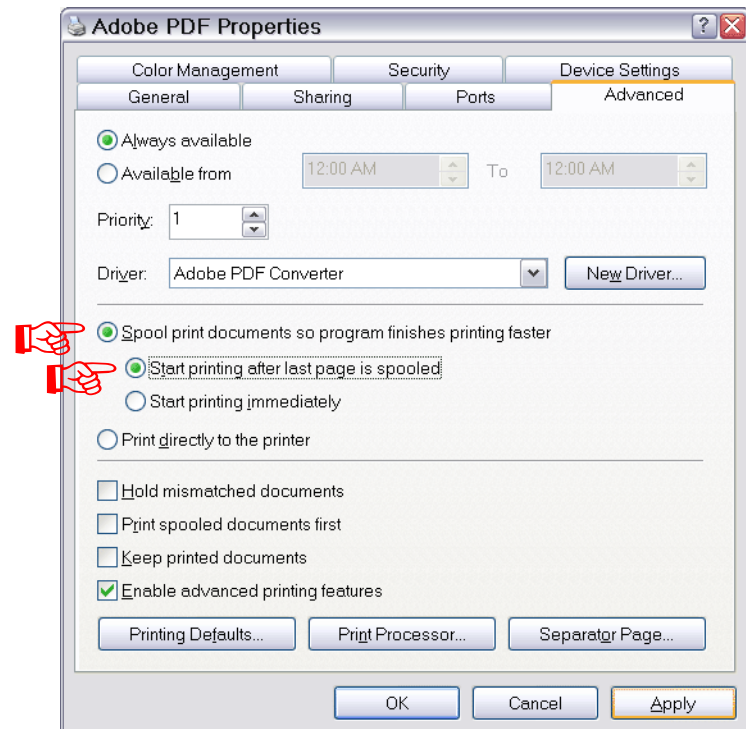
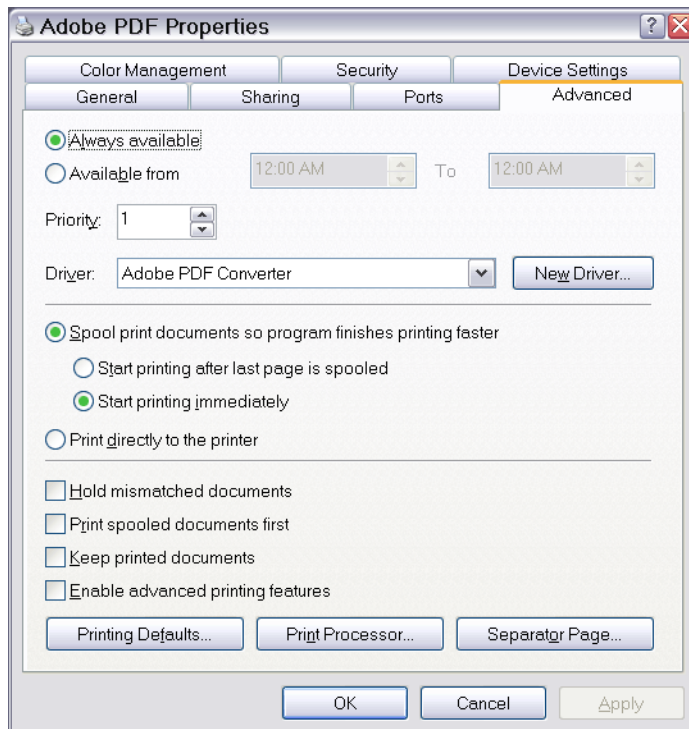


# PostScript Driver Setup

## *PDF Production & Otherwise*

Windows 2000/XP/2003 Server – *Properties* → *Advanced*

- Controls when and how “printing” occurs
- Change spool options





# PostScript Driver Setup

## *PDF Production & Otherwise*

Windows 2000/XP/2003 Server – *Properties* → *Advanced*

- *Spooling* dramatically improves “return control to application” time (Acrobat 6 finally defaults to spooling on)
- Printing *after last page is spooled* avoids possible PostScript wait timeout problems in the Distiller (or *real* PostScript printer)

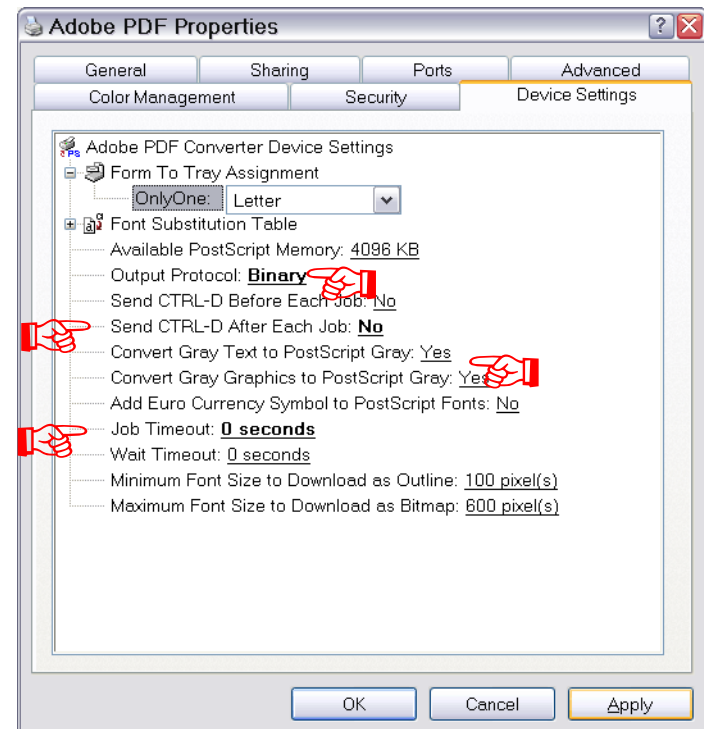
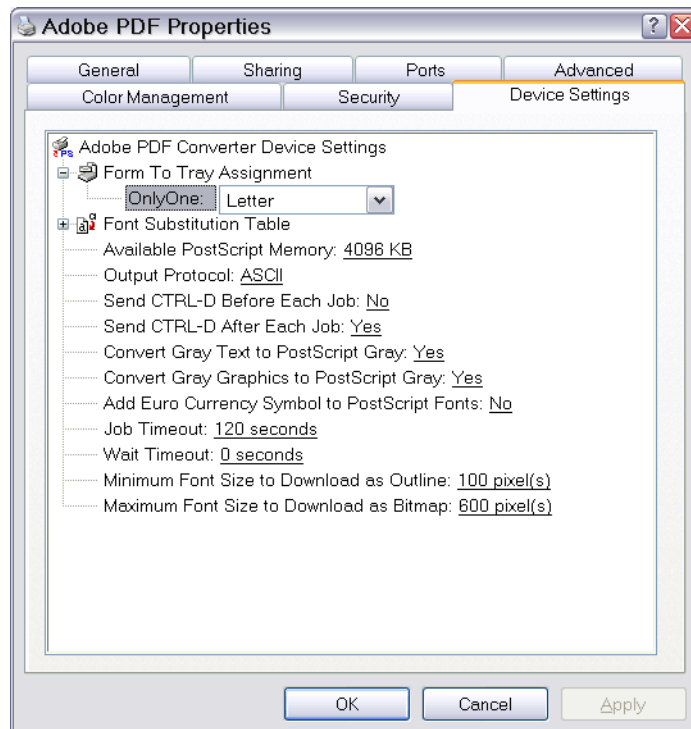


# PostScript Driver Setup

## *PDF Production & Otherwise*

Windows 2000/XP/2003 Server – *Properties* → *Device Settings*

- Controls device-specific parameters





# PostScript Driver Setup

## *PDF Production & Otherwise*

Windows 2000/XP/2003 Server – *Properties* → *Device Settings*

- Output Protocol *Binary* yields a smaller PostScript file size and more efficient PostScript for distillation  
(Note that for actual PostScript printers connected via parallel port, USB, or TCP/IP, *TBCP* protocols may be appropriate. Consult with your system administrator!)
- CTRL-D is technically incorrect for binary channels (although Distiller kludges around it)
- *Wait Timeout* & *Job Timeout = 0* avoids Distiller or PostScript printer job cancellation due to transient system or network slowdown



# PostScript Driver Setup

## *PDF Production & Otherwise*

Windows 2000/XP/2003 Server – *Properties* → *Device Settings*

- **Convert Gray Text/Graphics to PostScript Gray yields more efficient PostScript and PDF**
  - Windows GDI is totally RGB; application black and grayscale expressed as  $R=G=B$
  - Black and grayscale as RGB can lead to “rich black” ( $C=M=Y$  or  $C=M=Y=K$ ) printing or prepress problems
  - Option enabled causes driver to change all GDI text and line art graphics (not images) for which  $R=G=B$  to equivalent  $K$  (grayscale) Postscript
  - Defaulted *yes* for “Adobe PDF” by Acrobat 6 installer; otherwise defaulted *no* by PostScript driver installer

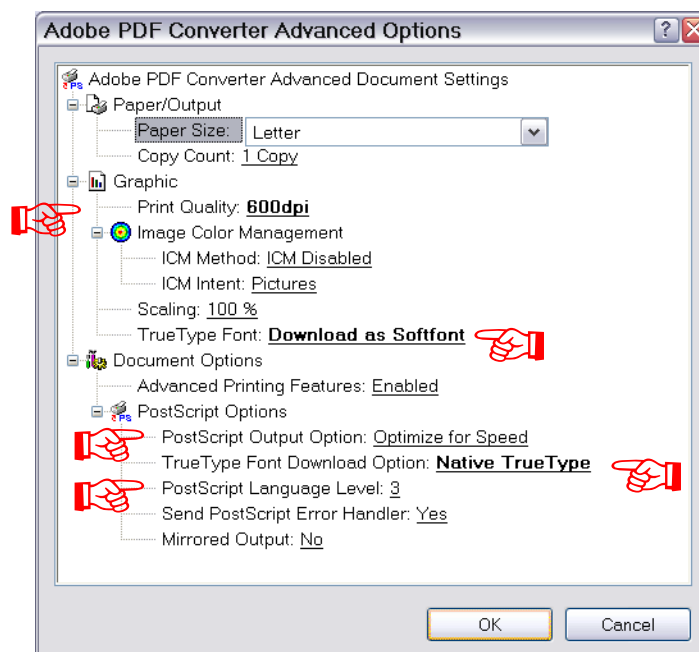
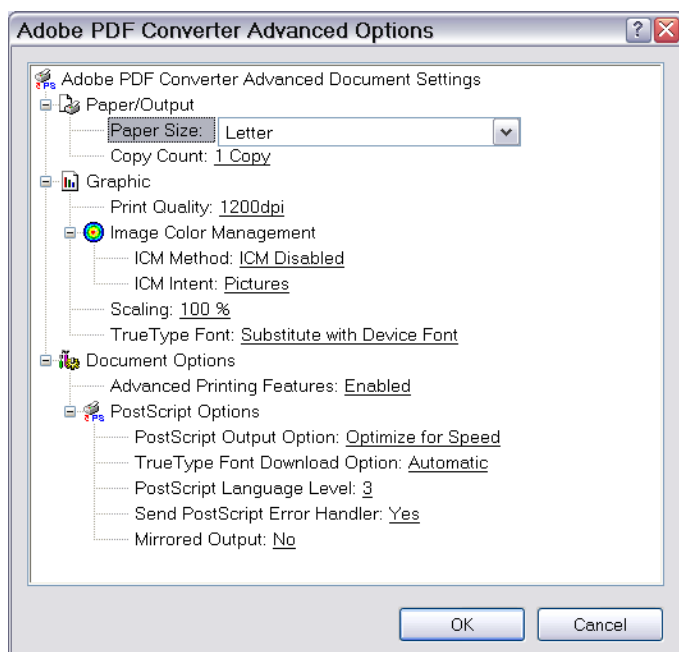


# PostScript Driver Setup

## *PDF Production & Otherwise*

Windows 2000/XP/2003 Server – *Properties → Advanced → Printing Defaults → Layout → Advanced Properties → General → Printing Preferences → Layout → Advanced*

### ■ Additional document-oriented PostScript options







# PostScript Driver Setup

## *PDF Production & Otherwise*

Windows 2000/XP/2003 Server – *Properties* → *Advanced* → *Printing Defaults* → *Layout* → *Advanced Properties* → *General* → *Printing Preferences* → *Layout* → *Advanced*

- **600 DPI? Windows 2000 / XP / Server 2003/ NT 4 Bug**
  - For GDI applications only, “large text” is passed to driver as filled outlines
    - poor rendering / no searchability / no PDF touch-up
  - Crossover point dependent upon point size, specified print device resolution, font, and Windows version
  - 600 DPI setting under Windows 2000 / XP / 2003 Server typically allows for 144 pt text; 1200 DPI setting doesn’t
  - FrameMaker pixel limit bug for large page size and high resolution
  - Very minor but tolerable side effects



# PostScript Driver Setup

## *PDF Production & Otherwise*

Windows 2000/XP/2003 Server – *Properties* → *Advanced* → *Printing Defaults* → *Layout* → *Advanced*  
*Properties* → *General* → *Printing Preferences* → *Layout* → *Advanced*

- **TrueType Font *Download as Softfont***
  - Option avoids any substitution of host-based TrueType fonts with “printer resident” fonts
  - Problems with substitution:
    - Differences in style
    - Differences in character sets supported
    - Less of a problem with Acrobat Distiller printer instance; potentially a massive problem with “real” PostScript printers with documents using international characters
- **Do not modify PostScript Output Option from *Optimize for Speed*; other settings are archaic!**



# PostScript Driver Setup

## *PDF Production & Otherwise*

Windows 2000/XP/2003 Server – *Properties* → *Advanced* → *Printing Defaults* → *Layout* → *Advanced*  
*Properties* → *General* → *Printing Preferences* → *Layout* → *Advanced*

- **TrueType Font Download Option *Native TrueType***
  - Explicit setting of option avoids surprises
  - Conversion of TrueType fonts yields degraded results
    - Bitmaps at device resolution; not scalable or searchable
    - Outlines are “unhinted” Type 1 fonts
    - No PDF touch-up for text in these fonts
- **PostScript Language Level 3 for Distiller**
  - Disregard the language level of the final printing device
  - Acrobat / Acrobat Reader printing capable of printing all constructs to PostScript printers of all language levels

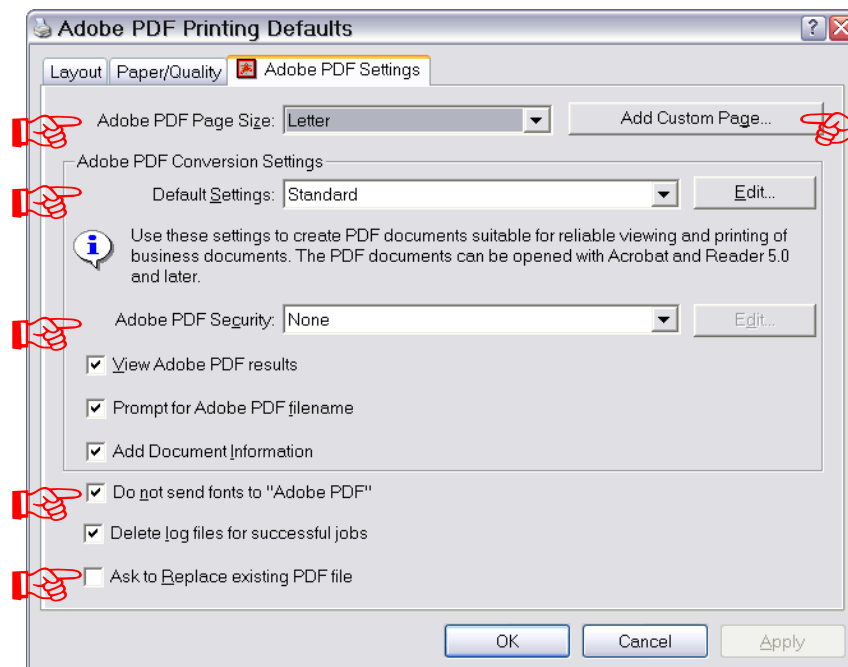


# PostScript Driver Setup

## *PDF Production & Otherwise*

Windows 2000/XP/2003 Server – *Properties* → *Advanced* → *Printing Defaults* → *Adobe PDF Settings*  
*Properties* → *General* → *Printing Preferences* → *Adobe PDF Settings*

- Controls interface between PostScript driver and the “background” Distiller *plus* job options specification





# PostScript Driver Setup

## *PDF Production & Otherwise*



Windows 2000/XP/2003 Server – *Properties* → *Advanced* → *Printing Defaults* → *Adobe PDF Settings*  
*Properties* → *General* → *Printing Preferences* → *Adobe PDF Settings*

- Acrobat 6 now allows selection of page size and/or definition of custom page sizes directly from this dialogue
- Conversion settings
  - Specify the appropriate job options for distillation (the *Standard* settings are most likely inappropriate for you!)
  - Defaults for printer, once set, can be or overridden on a job-by-job basis
  - Live dangerously; create and use your own job options appropriate to your needs!



# PostScript Driver Setup

## *PDF Production & Otherwise*

Windows 2000/XP/2003 Server – *Properties* → *Advanced* → *Printing Defaults* → *Adobe PDF Settings*  
*Properties* → *General* → *Printing Preferences* → *Adobe PDF Settings*

- Acrobat 6 now allows setting of security settings via this dialogue
- *Ask to Replace* existing PDF file option prevents accidental overwrite of an existing PDF file with the same name *if* you don't have the *prompt for Adobe PDF filename* option selected



# PostScript Driver Setup

## *PDF Production & Otherwise*

Windows 2000/XP/2003 Server – *Properties* → *Advanced* → *Printing Defaults* → *Adobe PDF Settings*  
*Properties* → *General* → *Printing Preferences* → *Adobe PDF Settings*

- **Do not send fonts to Distiller – *Huh?***
  - Very counter-intuitive to what we've *been* preaching!
  - Distiller 5 and 6 now find and embeds Type 1, TrueType, and OpenType fonts from system any user-specified locations
  - Why?
    - Efficient and compact intermediate PostScript
    - Faster distillation and less chance of VM problems
    - Better and more consistent embedding of font subsets
  - Exceptions? Private, application-installable fonts



# PostScript Driver Setup

## *PDF Production & Otherwise*

Windows 2000/XP/2003 Server – Fixing “Font Problems” via PPD Hackery

- **PPD enumeration of “printer resident fonts” causes major problems:**
  - *Phantom Fonts* – Fonts listed as “printer resident” in PPD file, but not installed on user’s host computer
  - *ITC Zapf Dingbats Display Bug* – Certain fonts print correctly but always display on-screen as Wingdings from some applications!





# PostScript Driver Setup

## *PDF Production & Otherwise*

Windows 2000/XP/2003 Server – Fixing “Font Problems” via PPD Hackery

- **The “Fix” (done by system “Administrator”):**
  - Edit out all fonts except Courier from all .PPD files in system driver directory:  
`C:\WINNT\system32\spool\drivers\w32x86\3` Windows NT4 / 2000 *or*  
`C:\WINDOWS\system32\spool\drivers\w32x86\3` Windows XP / 2003 Server
  - Delete all .BPD files in the system driver directory



# PostScript Driver Setup

## *PDF Production & Otherwise*

### Windows 2000/XP/2003 Server – Fixing “Font Problems” via PPD Hackery

```
*% Font Information =====
*DefaultFont: Courier
*Font AvantGarde-Book: Standard "(001.002)" Standard ROM
*Font AvantGarde-BookOblique: Standard "(001.000)" Standard ROM
*Font AvantGarde-Demi: Standard "(001.000)" Standard ROM
*Font AvantGarde-DemiOblique: Standard "(001.000)" Standard ROM
*Font Bookman-Demi: Standard "(001.000)" Standard ROM
*Font Bookman-DemiItalic: Standard "(001.000)" Standard ROM
*Font Bookman-Light: Standard "(001.000)" Standard ROM
*Font Bookman-LightItalic: Standard "(001.000)" Standard ROM
*Font Courier: Standard "(001.000)" Standard ROM
*Font Courier-Bold: Standard "(001.000)" Standard ROM
*Font Courier-BoldOblique: Standard "(001.000)" Standard ROM
*Font Courier-Oblique: Standard "(001.000)" Standard ROM
*Font Helvetica: Standard "(001.000)" Standard ROM
*Font Helvetica-Bold: Standard "(001.000)" Standard ROM
*Font Helvetica-BoldOblique: Standard "(001.000)" Standard ROM
*Font Helvetica-Narrow: Standard "(001.000)" Standard ROM
*Font Helvetica-Narrow-Bold: Standard "(001.000)" Standard ROM
*Font Helvetica-Narrow-BoldOblique: Standard "(001.000)" Standard ROM
*Font Helvetica-Narrow-Oblique: Standard "(001.000)" Standard ROM
*Font Helvetica-Oblique: Standard "(001.000)" Standard ROM
*Font NewCenturySchlbk-Bold: Standard "(001.000)" Standard ROM
*Font NewCenturySchlbk-BoldItalic: Standard "(001.000)" Standard ROM
*Font NewCenturySchlbk-Italic: Standard "(001.000)" Standard ROM
*Font NewCenturySchlbk-Roman: Standard "(001.000)" Standard ROM
*Font Palatino-Bold: Standard "(001.000)" Standard ROM
*Font Palatino-BoldItalic: Standard "(001.000)" Standard ROM
*Font Palatino-Italic: Standard "(001.000)" Standard ROM
*Font Palatino-Roman: Standard "(001.000)" Standard ROM
*Font Symbol: Special "(001.001)" Special ROM
*Font Times-Bold: Standard "(001.000)" Standard ROM
*Font Times-BoldItalic: Standard "(001.000)" Standard ROM
*Font Times-Italic: Standard "(001.000)" Standard ROM
*Font Times-Roman: Standard "(001.000)" Standard ROM
*Font ZapfChancery-MediumItalic: Standard "(001.000)" Standard ROM
*Font ZapfDingbats: Special "(001.000)" Special ROM
```

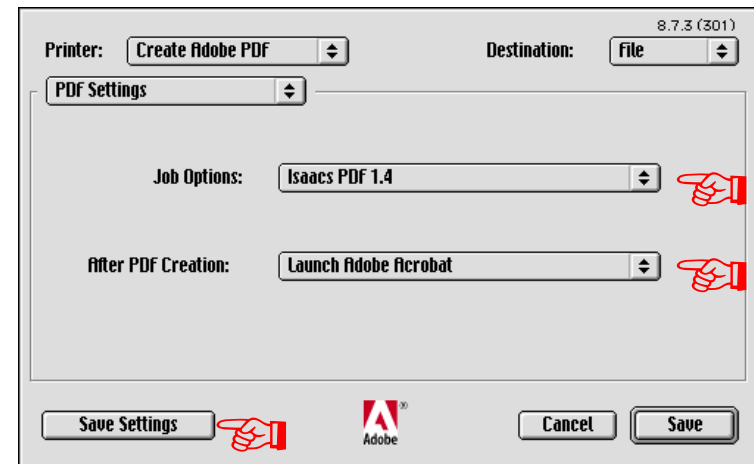
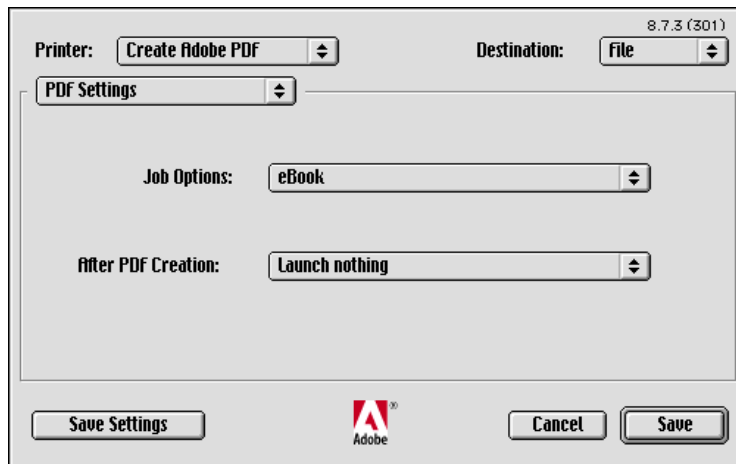


# PostScript Driver Setup

## *PDF Production & Otherwise*

MacOS 9.x (Acrobat 5 *only*) – Print → PDF Settings

- Controls interface between PostScript driver and the “background” Distiller *plus* job options specification





# PostScript Driver Setup

## *PDF Production & Otherwise*

MacOS 9.x (Acrobat 5 *only*) – *Print* → *PDF Settings*

- **Conversion settings**
  - Specify the appropriate job options for distillation (the *eBook* settings are most likely inappropriate for you!)
  - Live dangerously; create and use your own job options appropriate to your needs!
- ***After PDF Creation* option allows for PDF file preview**
  - Unlike Windows, default is *Launch Nothing*
  - Reasonable option is to *Launch Adobe Acrobat*
- ***Save Settings* allows “stickiness” of settings by application program**

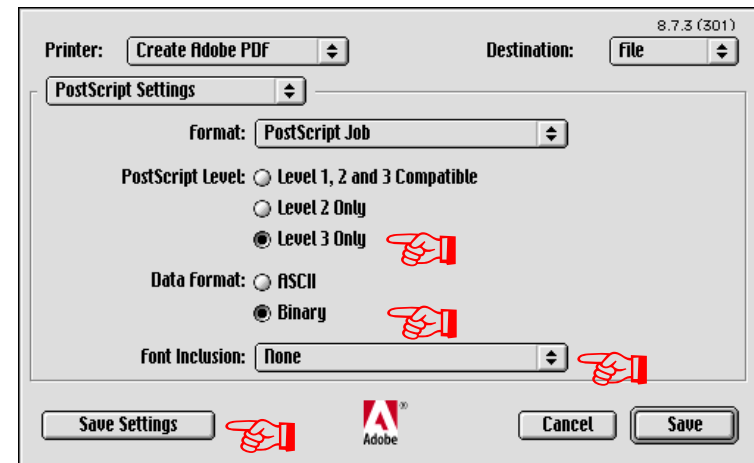
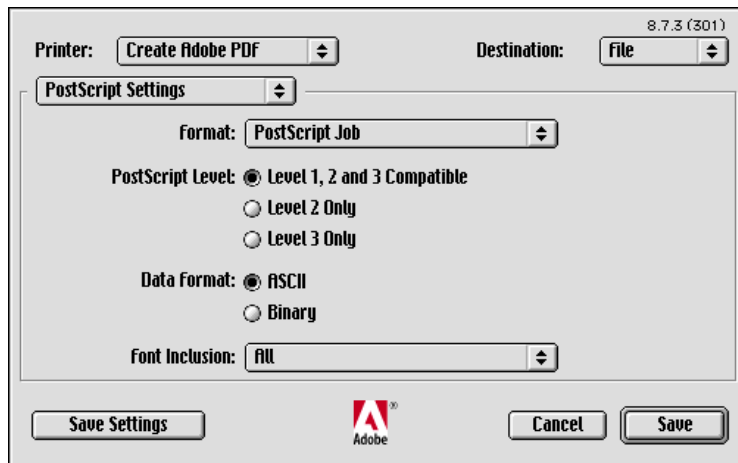


# PostScript Driver Setup

## *PDF Production & Otherwise*

MacOS 9.x (Acrobat 5 *only*) – Print → PostScript Settings

- Determines type and format of PostScript generated plus options for font embedding in the PostScript stream





# PostScript Driver Setup

## *PDF Production & Otherwise*

MacOS 9.x (Acrobat 5 *only*) – *Print* → *PostScript Settings*

- **PostScript Language Level 3 for Distiller**
  - Disregard the language level of the final printing device
  - Acrobat / Acrobat Reader printing capable of printing all constructs to PostScript printers of all language levels
- **Output Protocol *Binary* yields a smaller PostScript file size and more efficient PostScript for distillation**



# PostScript Driver Setup

## *PDF Production & Otherwise*

MacOS 9.x (Acrobat 5 *only*) – Print → *PostScript Settings*

- ***Font Inclusion: None***
  - Same issues and reasoning as under Windows
  - Works around TrueType font embedding bug on Mac:
    - All TrueType fonts embedded in PostScript stream by MacOS end up as “unhinted” Type 1 outlines
      - Quality degradation
      - PDF text touch-up problems
    - MacOS (PrintingLib 8.7.x module) bug!!
- ***Save Settings*** allows “stickiness” of settings by application program

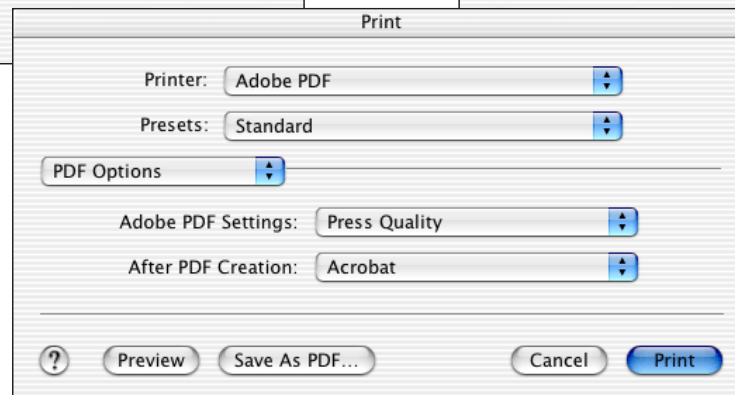
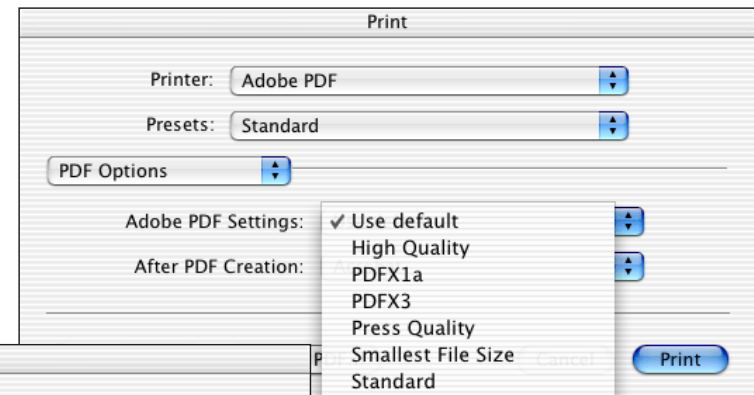
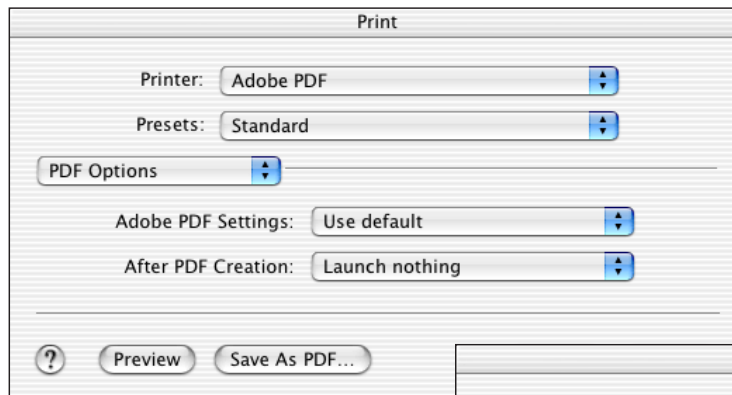


# PostScript Driver Setup

## *PDF Production & Otherwise*

MacOS 10.2.2 (Acrobat 6 *only*) – Print → PDF Options

- Distillation job options and post-PDF file creation options selectable via print dialog PDF Options tab





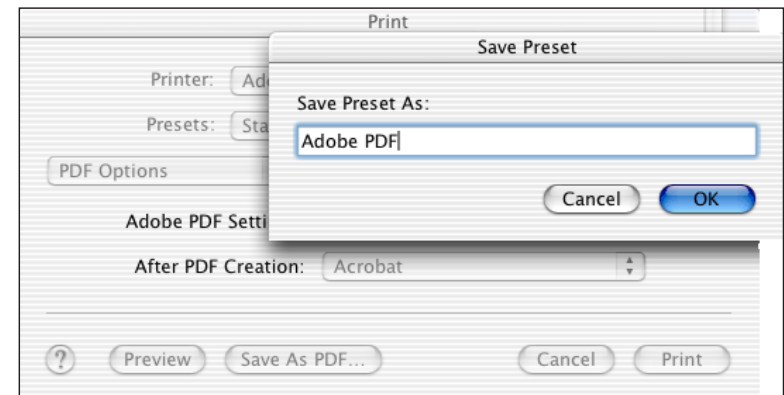
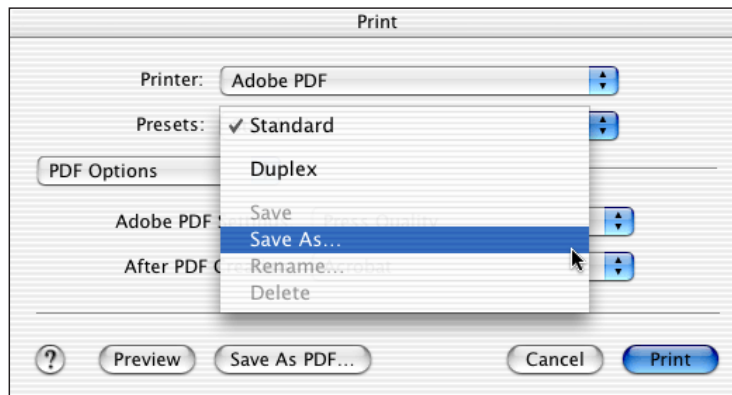


# PostScript Driver Setup

## *PDF Production & Otherwise*

MacOS 10.2.2 (Acrobat 6 *only*) – Print → PDF Options

- Convenient facility for providing named “presets” for printer options





# PostScript Driver Setup

## *PDF Production & Otherwise*

MacOS 10.2.2 (Acrobat 6 *only*)

- No facility is provided for selection of PostScript language level; uses value from PPD (that's OK)!
- No provision is made for *not* placing fonts in the PostScript stream
- No provision is made for binary / ASCII format selection for generated PostScript
- Significant PostScript driver bugs await resolution by Apple in future MacOS X releases

# Distiller Setup

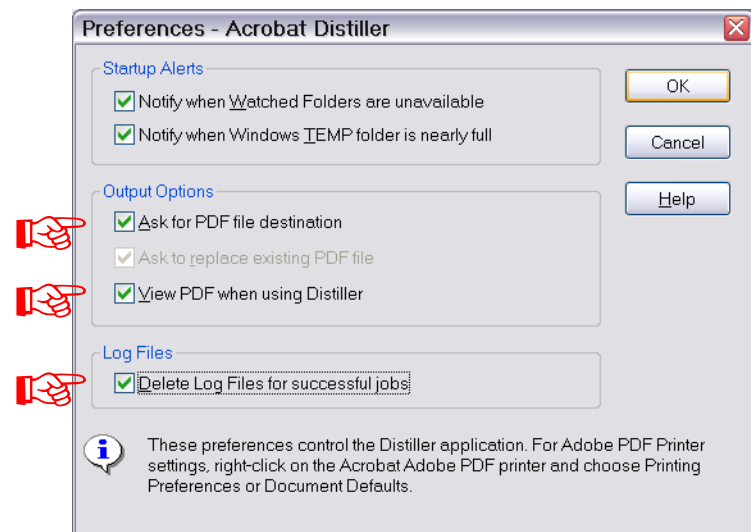
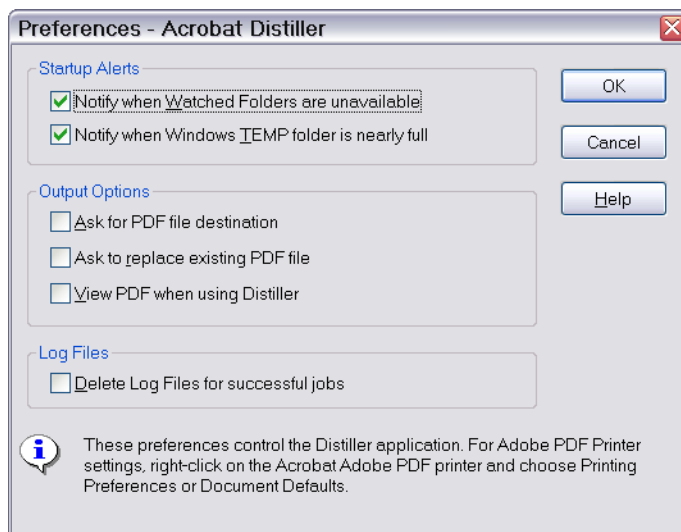




# Distiller Setup

## Preferences

- Provides output options for when the Distiller is invoked “manually”
- *Delete Log Files for successful jobs* option for all invocations of Distiller





# Distiller Setup

## *Preferences*

Preferences

☐ Notify when Watched Folders are unavailable

☐ Delete Log Files for successful jobs

Output Options


☒ Replace existing PDF file if possible


☐ Ask to replace existing PDF file

☐ Ask for PDF file destination

Help Cancel

Preferences


 ☒ Notify when Watched Folders are unavailable

 ☒ Delete Log Files for successful jobs

Output Options

☐ Replace existing PDF file if possible

☐ Ask to replace existing PDF file

 ☒ Ask for PDF file destination

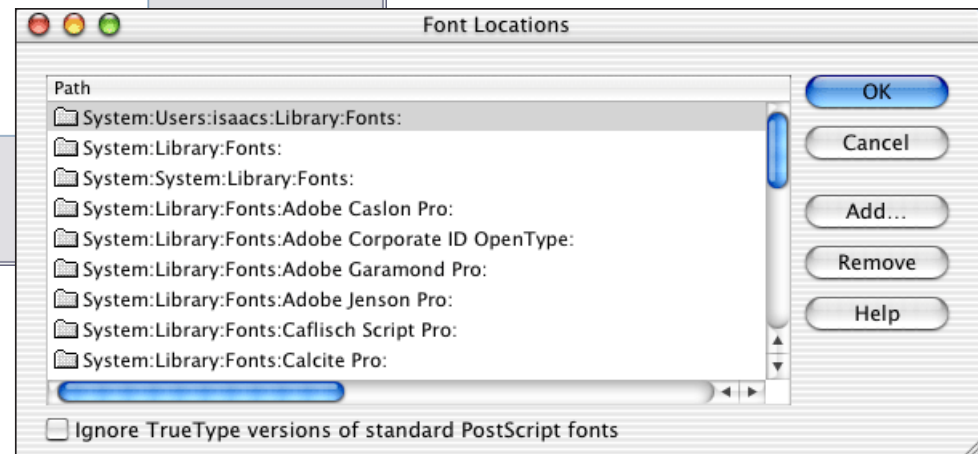
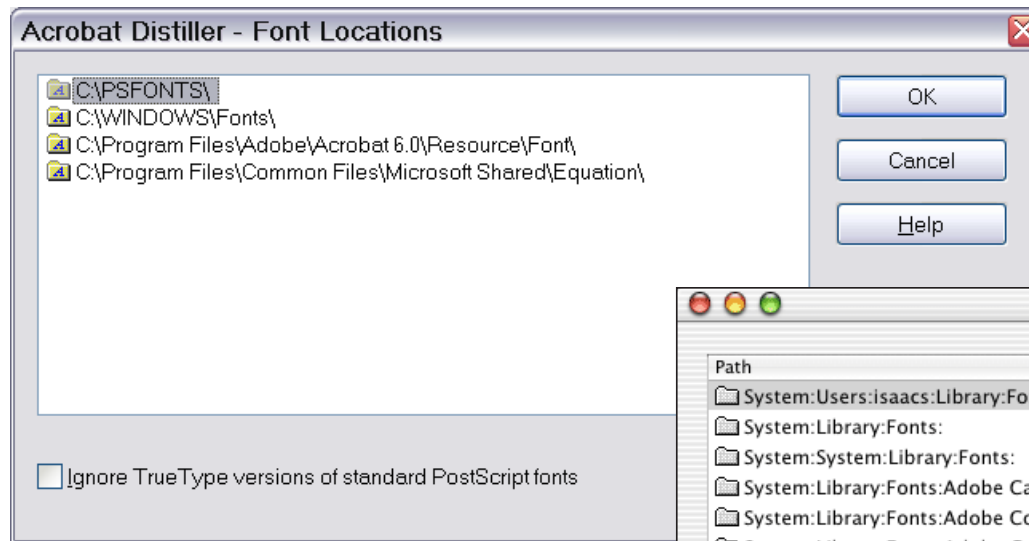
Help Cancel OK



# Distiller Setup

## *Font Locations*

- Initially set to system font directories (including any font directories linked to via Windows font directory)
- Manually add application-specific font directories





# Distiller Setup

## *Job Options – Acrobat Distiller 6*



- **Acrobat Distiller 6 predefined job options:**
  - *Smallest File Size, Standard, High Quality, and Press Quality*
  - Acrobat 6 Professional adds *PDFX1a* and *PDFX3*
  - All predefined job options, except for those for *PDFX1a* and *PDFX3*, produce PDF 1.4 (Acrobat 5-compatible) files



# Distiller Setup

## *Job Options – Acrobat Distiller 6*

- Sample customized job options illustrate improvements on the predefined job options. Differences are in the dpi value for image downsampling and support for PDF version 1.4 or 1.5 (better compression and more features):
  - **Isaacs 1.4 150** – PDF 1.4 compatibility; standard usage
  - **Isaacs 1.4 300** – PDF 1.4 compatibility; PDF file will be printed on a high resolution device
  - **Isaacs 1.5 150** – PDF 1.5 with JPEG 2000 compression; standard usage
  - **Isaacs 1.5 300** – PDF 1.5 with JPEG 2000 compression; PDF file will be printed on a high resolution device





# Distiller Setup

## *Job Options – Acrobat Distiller 6*



### Job Options – General



New or changed *joboptions*  
for Acrobat 6

Isaacs PDF 1.5 - Adobe PDF Settings

General Images Fonts Color Advanced PDF/X

Description  
PDF 1.5 Compatibility - 300/300/1200 dpi Resolution & Max Quality Compressed Images

File Options

Compatibility: Acrobat 6.0 (PDF 1.5)

Object Level Compression: Maximum

Auto-Rotate Pages: Individually

Binding: Left

Resolution: 2400 dots per inch

☒ All Pages  
☐ Pages From: To:  
☐ Embed thumbnails  
☒ Optimize for fast web view

Default Page Size

Width: 612.0 Units: Points  
Height: 792.0

Save As... OK Cancel Help



# Distiller Setup

## *Job Options – Acrobat Distiller 6*

	General Job Options								
	Smallest File Size	Standard	High Quality	Press Quality	PDFX1a & PDFX3	Isaacs 1.4 150	Isaacs 1.4 300	Isaacs 1.5 150	Isaacs 1.5 300
Compatibility	PDF 1.4				PDF 1.3	PDF 1.4		PDF 1.5	
Object Level Compression	Tags Only				✗	✗		Maximum	
"Maximum" yields PDF file compatible only Acrobat 6 / Adobe Reader 6; "Off" required for full compatibility with earlier Acrobat / Acrobat Reader versions									
Auto-Rotate Pages	Collectively			✗	✗	Individually			
Binding	Left				Left	Left			
Resolution	600 dpi		2400 dpi		2400 dpi	2400 dpi			
Does not set document resolution! Returns a value for the few PostScript program that may query for such information.									
Pages	All				All	All			
Embed Thumbnails	✗				✗	✗			
Acrobat 5 / Reader 5 create thumbnails "on the fly" while displaying PDF file; pre-built thumbnails are no longer necessary.									
Optimize for Fast Web View	✓				✗	✓			
Default Page Size	612 × 792 pts				612 × 792 pts	612 × 792 pts			
Relevant only if PostScript has no specified pagesize or EPS has no bounding box information.									



# Distiller Setup

## *Job Options – Acrobat Distiller 6*



### Job Options – Images



New or changed *joboptions*  
for Acrobat 6

Isaacs PDF 1.5 - Adobe PDF Settings

General Images Fonts Color Advanced PDF/X

**Color Images**

Downsample: Bicubic Downsampling to 300 pixels per inch  
for images above: 450 pixels per inch

Compression: Automatic (JPEG2000) ★

Image Quality: Maximum Tile Size: 256 pixels

**Grayscale Images**

Downsample: Bicubic Downsampling to 300 pixels per inch  
for images above: 450 pixels per inch

Compression: Automatic (JPEG2000)

Image Quality: Maximum Tile Size: 256 pixels

**Monochrome Images**

Downsample: Bicubic Downsampling to 1200 pixels per inch  
for images above: 1800 pixels per inch

Compression: CCITT Group 4

Anti-alias to gray: Off

Save As... OK Cancel Help



# Distiller Setup

## Job Options – Acrobat Distiller 6

		Image Job Options								
		Smallest File Size	Standard	High Quality	Press Quality	PDFX1a & PDFX3	Isaacs 1.4 150	Isaacs 1.4 300	Isaacs 1.5 150	Isaacs 1.5 300
Color Images Downsampling		Bicubic 100 dpi, for over 150 dpi	Bicubic 150 dpi, for over 225 dpi	Bicubic 300 dpi, for over 450 dpi		Bicubic 300 dpi, for over 450 dpi	Bicubic 150 dpi, for over 225 dpi	Bicubic 300 dpi, for over 450 dpi	Bicubic 150 dpi, for over 225 dpi	Bicubic 300 dpi, for over 450 dpi
Color Images Compression		Automatic (JPEG), Low Quality	Automatic (JPEG), Medium Quality	Automatic (JPEG), Maximum Quality		Automatic (JPEG), Maximum Quality	Automatic (JPEG), Maximum Quality		Automatic (JPEG 2000), Maximum Quality	
For all image compressions, any value less than “maximum” may yield results that are unacceptable for any printing! JPEG 2000 compression is compatible only with Acrobat 6 / Reader 6.										
Grayscale Images Downsampling		Bicubic 150 dpi, for over 225 dpi		Bicubic 300 dpi, for over 450 dpi		Bicubic 300 dpi, for over 450 dpi	Bicubic 150 dpi, for over 225 dpi	Bicubic 300 dpi, for over 450 dpi	Bicubic 150 dpi, for over 225 dpi	Bicubic 300 dpi, for over 450 dpi
Grayscale Images Compression		Automatic (JPEG), Low Quality	Automatic (JPEG), Medium Quality	Automatic (JPEG), Maximum Quality		Automatic (JPEG), Maximum Quality	Automatic (JPEG), Maximum Quality		Automatic (JPEG 2000), Maximum Quality	
Monochrome Images Downsampling		Bicubic 300 dpi, for over 450 dpi		Bicubic 1200 dpi, for over 1800 dpi		Bicubic 1200 dpi, for over 1800 dpi	Bicubic 600 dpi, for over 900 dpi	Bicubic 1200 dpi, for over 1800 dpi	Bicubic 600 dpi, for over 900 dpi	Bicubic 1200 dpi, for over 1800 dpi
Monochrome Images Compression		CITT Group 4				CITT Group 4	CITT Group 4			
Monochrome Images Anti-alias to Gray		✗				✗	✗			
Any value other than “Off” results in image conversion to grayscale!										

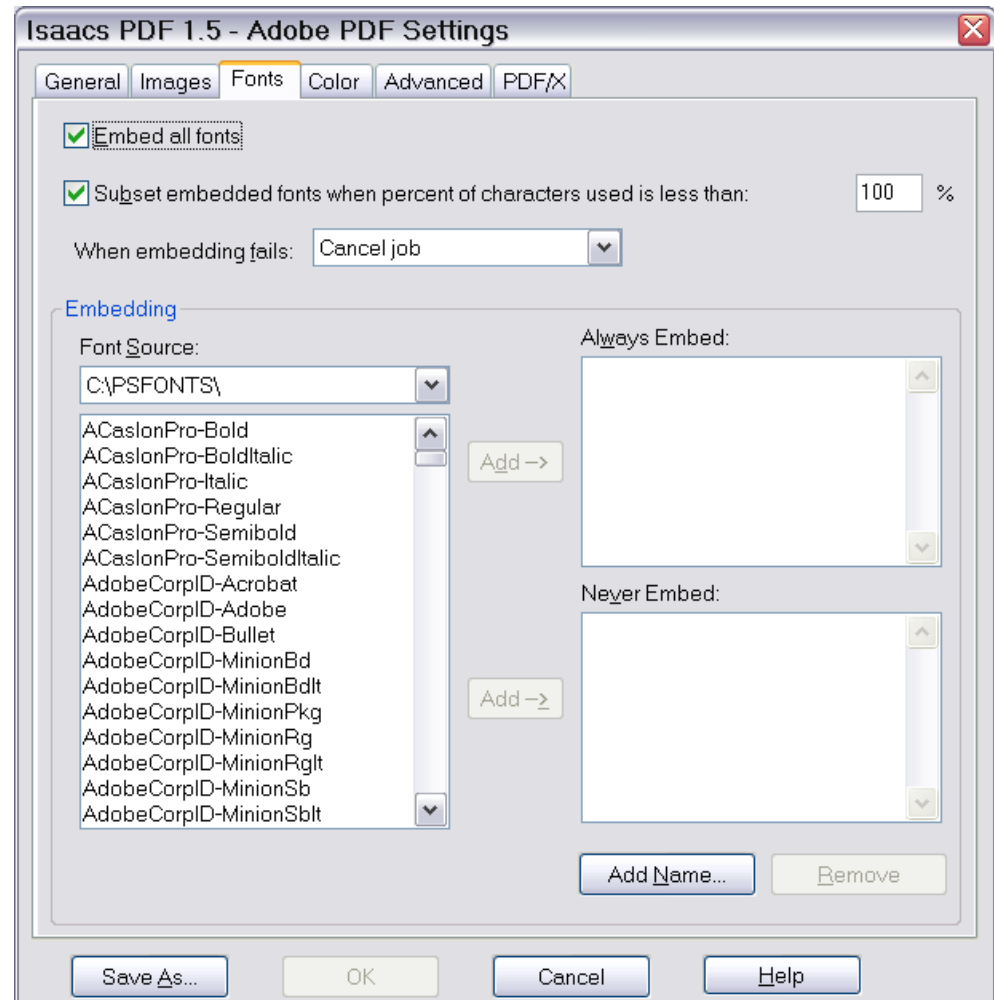


# Distiller Setup

## *Job Options – Acrobat Distiller 6*



### Job Options – Fonts





# Distiller Setup

## Job Options – Acrobat Distiller 6

Fonts Job Options								
Smallest File Size	Standard	High Quality	Press Quality	PDFX1a & PDFX3	Isaacs 1.4 150	Isaacs 1.4 300	Isaacs 1.5 150	Isaacs 1.5 300
✗	✓			✓	✓			
The ability to reliably and consistently view, print, and/or render a PDF file is seriously compromised if any referenced fonts are not embedded in that PDF file!								
✓				✓	✓			
100%				100%	100%			
100% yields unconditional font subset embedding; 0% yields full font embedding. Full font embedding yields no tangible benefits over font subset embedding!								
Warn and continue			Cancel job	Cancel job	Cancel job			
Values of “ignore” or “warn and continue” result in an inherently unreliable PDF workflow!								
(none)				(none)	(none)			
(none)	List of forty system TrueType fonts	(none)		(none)	(none)			
The ability to reliably and consistently view, print, and/or render a PDF file is seriously compromised if any referenced fonts are not embedded in that PDF file!								



# Distiller Setup

## *Job Options – Acrobat Distiller 6*



### Job Options – Color

Isaacs PDF 1.5 - Adobe PDF Settings

General Images Fonts **Color** Advanced PDF/X

Adobe Color Settings

Settings File: None

Color Management Policies

Leave Color Unchanged

Intent: Default

Working Spaces

Gray: Dot Gain 20%

RGB: sRGB IEC61966-2.1

CMYK: U.S. Web Coated (SWOP) v2

Device-Dependent Data

☒ Preserve under color removal and black generation

When transfer functions are found: Preserve

☐ Preserve halftone information

Save As... OK Cancel Help



# Distiller Setup

## *Job Options – Acrobat Distiller 6*

	Color Job Options								
	Smallest File Size	Standard	High Quality	Press Quality	PDFX1a & PDFX3	Isaacs 1.4 150	Isaacs 1.4 300	Isaacs 1.5 150	Isaacs 1.5 300
Color Settings File	None				None	None			
Color Management Policies	Convert All Colors to sRGB		Leave Color Unchanged		Leave Color Unchanged	Leave Color Unchanged			
Intent	Default				Default	Default			
Working Space – Gray	n/a				n/a	n/a			
Working Space – RGB	sRGB IEC61966-2.1		n/a		n/a	n/a			
Working Space – CMYK	U.S. Web Coated (SWOP) v2		n/a		n/a	n/a			
Preserve under color removal and black generation	✗			✓	✗	✓			
When transfer functions are found ...	Apply				Apply	Preserve			
Preserve halftone information	✗				✗	✗			



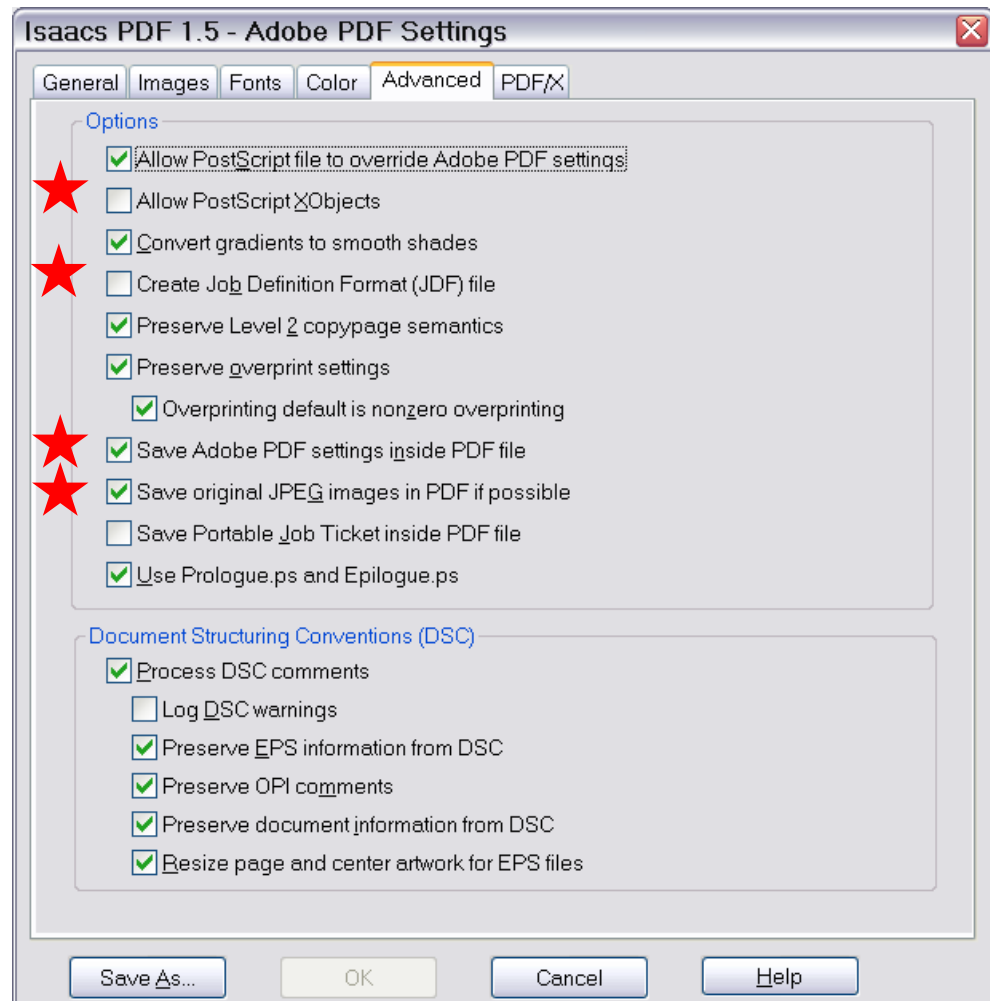


# Distiller Setup

## *Job Options – Acrobat Distiller 6*



### Job Options – Advanced



New or changed joboptions  
for Acrobat 6



# Distiller Setup

## *Job Options – Acrobat Distiller 6*

	Advanced Job Options								
	Smallest File Size	Standard	High Quality	Press Quality	PDFX1a & PDFX3	Isaacs 1.4 150	Isaacs 1.4 300	Isaacs 1.5 150	Isaacs 1.5 300
Allow PostScript to override Adobe PDF settings			✓		✓			✓	
Allow PostScript xObjects			✗		✗			✗	
"Deprecated feature" – feature should never be used!									
Convert gradients to smooth shades			✓		✓			✓	
Create Job Definition File (JDF) file			✗		✗			✗	
Properly created PostScript for distillation should not have any setpagedevice commands that would yield JDF.									
Preserve Level 2 copypage semantics			✓		✓			✓	
Preserve overprint settings			✓		✓			✓	
Overprint default is nonzero overprint			✓		✓			✓	
Save Adobe PDF settings inside PDF file		✗		✓	✗			✓	
Joboptions used for distillation stored as metadata within generated PDF file for audit trail purposes only.									
Save original JPEG images in PDF if possible	✗		✓		✓			✓	
Distillation optimization – avoids cascading JPEG image compression if neither downsampling nor higher compression is required!									



# Distiller Setup

## Job Options – Acrobat Distiller 6

Advanced Job Options								
Smallest File Size	Standard	High Quality	Press Quality	PDFX1a & PDFX3	Isaacs 1.4 150	Isaacs 1.4 300	Isaacs 1.5 150	Isaacs 1.5 300
✗				✗	✗			
Obsolete – PJT replaced by JDF.								
✗				✗	✓			
✓				✓	✓			
✗				✗	✗			
✗	✓		✓	✓	✓			
✗				✗	✗			
✗	✓			✓	✓			
✓				✓	✓			



# Distiller Setup

## *Job Options – Acrobat Distiller 6*



### Job Options – PDF/X



New or changed *joboptions*  
for Acrobat 6

Isaacs PDF 1.5 - Adobe PDF Settings

General Images Fonts Color Advanced **PDF/X**

PDF/X Reporting and Compliance

☐ PDF/X-1a ☐ PDF/X-3

When not compliant: Continue

If Neither TrimBox nor ArtBox are Specified

☒ Report as error

☐ Set TrimBox to MediaBox with offsets (Points):

Left: 0.0 Right: 0.0 Top: 0.0 Bottom: 0.0

If BleedBox is Not Specified

☒ Set BleedBox to MediaBox

☐ Set BleedBox to TrimBox with offsets (Points):

Left: 0.0 Right: 0.0 Top: 0.0 Bottom: 0.0

Default Values if Not Specified in the Document

OutputIntent Profile Name: None

OutputCondition:

RegistryName (URL): http://www.color.org

Trapped: Insert False

Save As... OK Cancel Help



# Distiller Setup

## Job Options – Acrobat Distiller 6

	PDF/X Job Options									
	Smallest File Size	Standard	High Quality	Press Quality	PDFX1a & PDFX3		Isaacs 1.4 150	Isaacs 1.4 300	Isaacs 1.5 150	Isaacs 1.5 300
PDF/X-1a compliance	✗				✓	✗	✗			
PDF/X3 compliance	✗				✗	✓	✗			
When not compliant	n/a				Cancel job		n/a			
If Neither Trimbox nor Artbox are Specified	n/a				Set Trimbox to Mediabox with offsets (0, 0, 0, 0 pts)		n/a			
If Bleedbox is Not Specified	n/a				Set Bleedbox to MediaBox		n/a			
Default values if not specified:	n/a				U.S. Web Coated (SWOP) v2		n/a			
Outputintent Profile Name					Euroscale Coated v2					
OutputCondition	n/a				(none)		n/a			
RegistryName (URL)	n/a				http://www.color.org		n/a			
Trapped	n/a				Insert false		n/a			



# Distiller Setup

## *The Prologue.ps and Epilogue.ps facility*

- Designed for special effects via custom PostScript run by Distiller at the start and end of each PostScript job
- Requires detailed knowledge of PostScript to write Prologue.ps and Epilogue.ps code.
- Examples:
  - Cover page generation
  - Logging of Distiller parameters
  - Global fixup of bum PostScript

# Acrobat 6 Print Configuration Issues



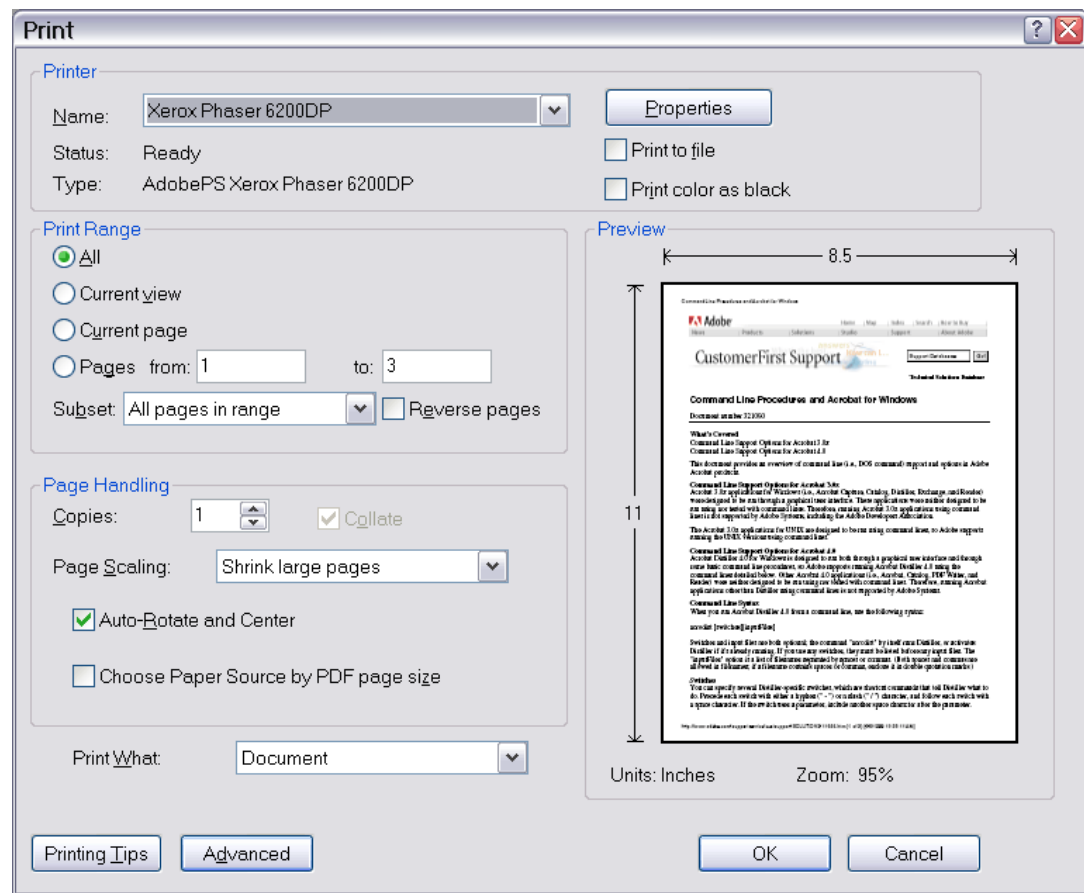


# Acrobat 6 Print Configuration Issues

## *Main Print Dialogue*

- Reorganized main print dialogue

- Improved user interface
- More realistic “preview” of rendered page
- Most of the *Advanced* options are particular to Acrobat 6 Professional







# Acrobat 6 Print Configuration Issues

## *Print Dialogue – Advanced Functions*

**Advanced Print Setup**

Settings: **Custom** Delete Save As

Printer: **Xerox Phaser 6200DP** ☐ Print As Image

**Output**

Marks and Bleeds  
Transparency Flattening  
PostScript Options

**Color:** Composite

**Screening:** 60lpi 600dpi

**Elip:** None ☐ Negative

**Printer Profile:** U.S. Web Coated (SWOP) v2

☒ Apply Working Color Spaces  
☐ Apply Proof Settings  
☐ Simulate Overprinting  
☒ Use Maximum Available JPEG2000 Image Resolution  
☐ Emit Trap Annotations

**Ink Manager**

**Plate Control:** Emit All Plates

<input checked="" type="checkbox"/>	Process Cyan	60.00	45.00
<input checked="" type="checkbox"/>	Process Magenta	60.00	45.00
<input checked="" type="checkbox"/>	Process Yellow	60.00	45.00
<input checked="" type="checkbox"/>	Process Black	60.00	45.00

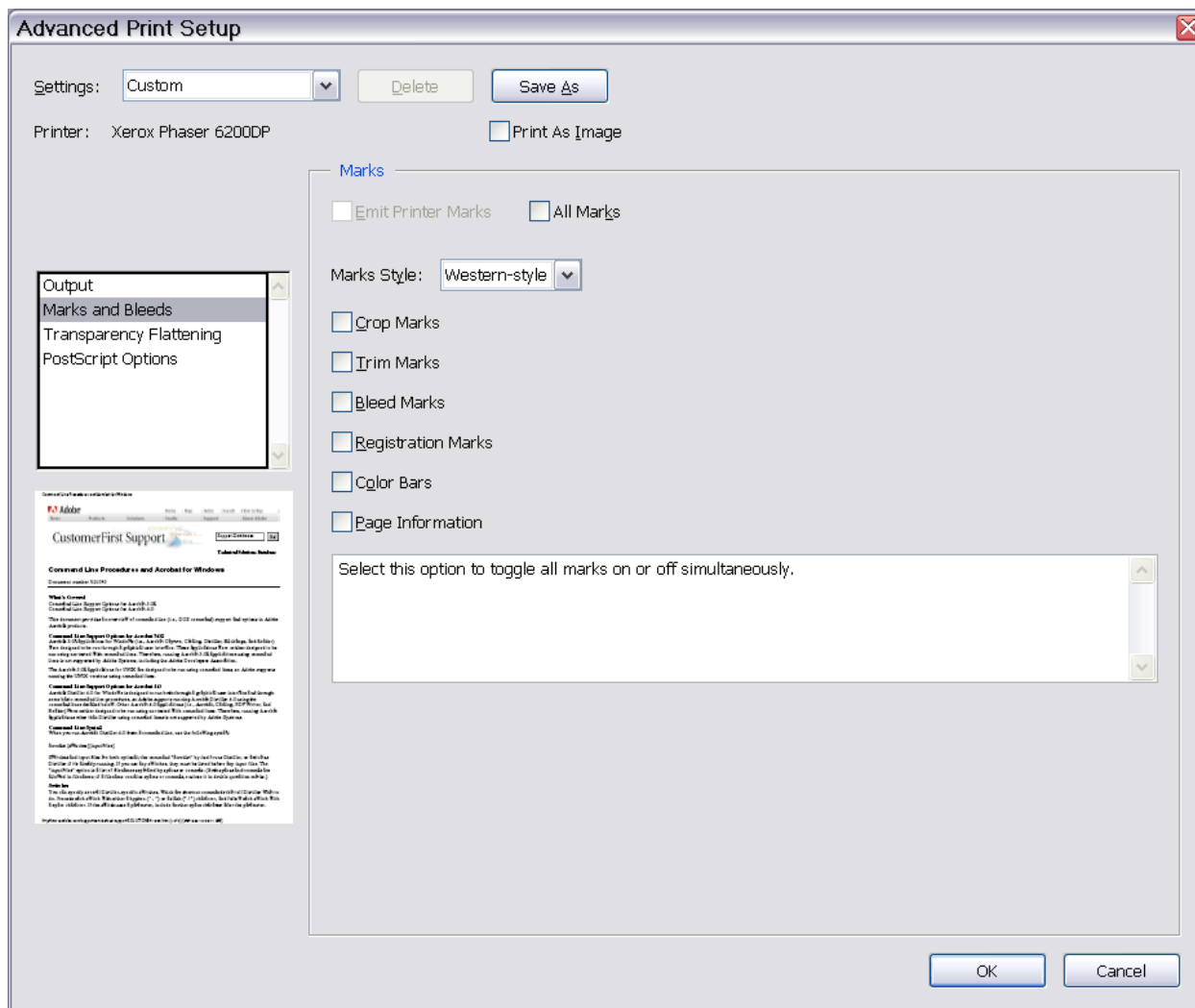
Select an ICC Profile that describes the target output device. If 'Printer/PostScript Color Management' is selected, convert any ICC profiles to PostScript CSAs, and color will be managed in the printer RIP. If 'Same as Source (No Color Management)' is selected, embedded profiles are ignored, and only device values are sent.

OK Cancel



# Acrobat 6 Print Configuration Issues

## *Print Dialogue – Advanced Functions*





# Acrobat 6 Print Configuration Issues

## *Print Dialogue – Advanced Functions*

**Advanced Print Setup**

Settings: Custom [v] [Delete] [Save As]

Printer: Xerox Phaser 6200DP ☐ Print As Image

**Output**  
Marks and Bleeds  
Transparency Flattening  
PostScript Options

**Transparency Quality/Speed:** [Slider] 75

**Raster/Vector Balance:**  
Rasters Vectors

**Rasterization Resolution:**  
Line Art and Text: 300 pixels per inch  
Gradient and Meshes: 150 pixels per inch

**Options**  
☐ Convert All Text to Outlines  
☒ Convert All Strokes to Outlines  
☒ Clip Complex Regions

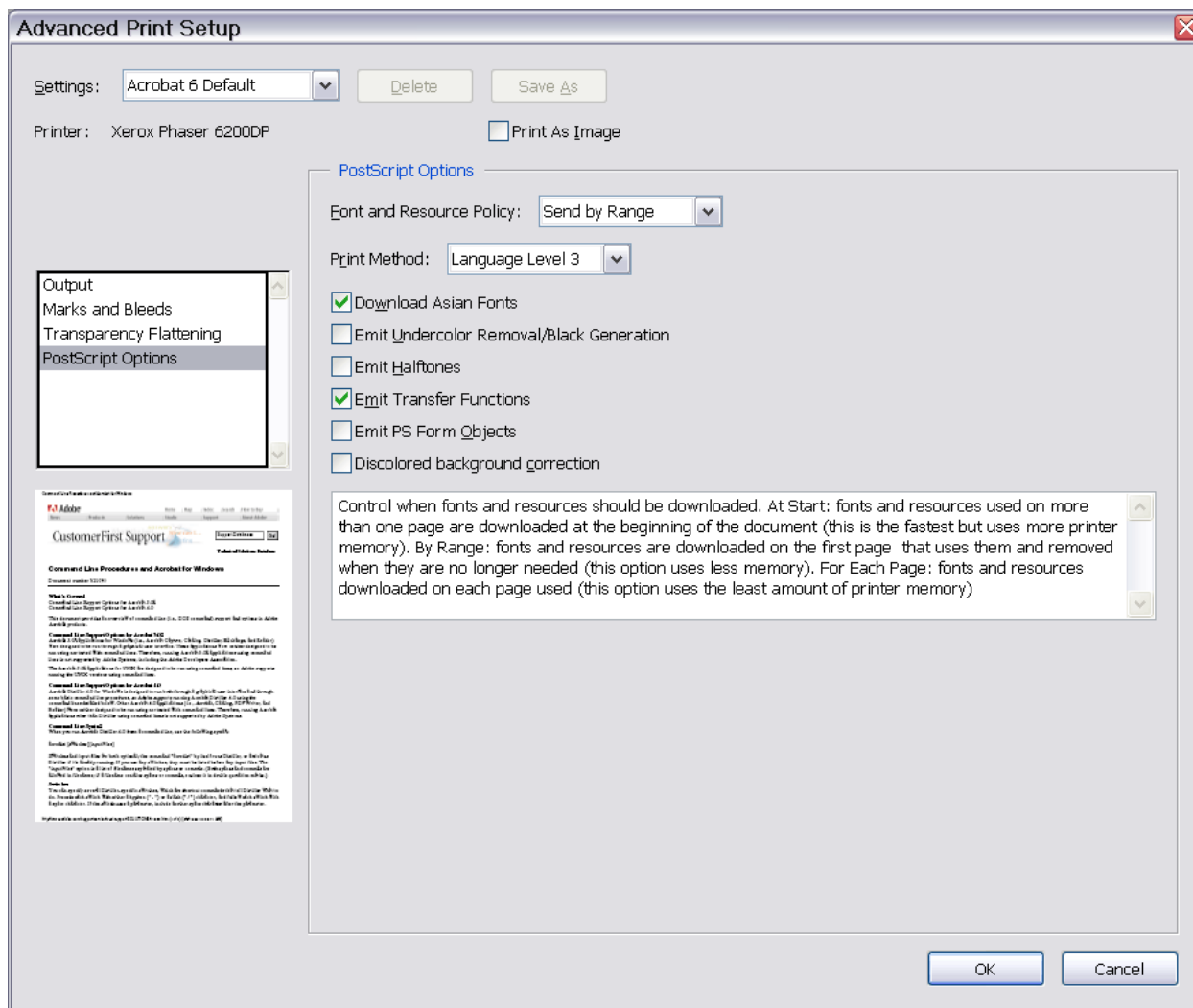
Select a threshold for the transparency flattener rasterization. Selecting a higher value causes less of the document to be rasterized, but increases printing time. The amount of rasterization that occurs depends on the amount of RAM available to the program, the complexity of the page, and the types of overlapping objects.

[OK] [Cancel]



# Acrobat 6 Print Configuration Issues

## *Print Dialogue – Advanced Functions*





# Acrobat 6 Print Configuration Issues

## *Print Dialogue – Advanced Functions*

- Output options control output color management and well as separations options
- Marks and bleeds options controls optional output of printers' marks
- Transparency flattening options are necessary for proper PostScript printing of PDF 1.4 and 1.5 documents with “live” transparency
- PostScript options control generated PostScript
- Color management & transparency flattening to be discussed in presentation

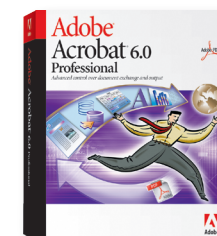
*Reliable PDF Creation & Publishing Workflows*

# Colophon

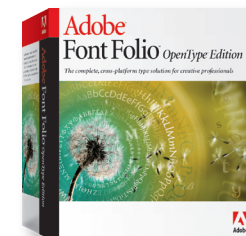
PDF 1.5 (*live transparency, managed color, JPEG 2000 image compression*) exported directly from Adobe InDesign CS



Adobe Acrobat 6 Professional



Adobe OpenType Fonts





Q&A





**Adobe**

Tools for the New Work™