

# The Perfect PDF

## Best Practices for Preparing Adobe PDF Files

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# The Perfect PDF

Adobe® Acrobat®



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How do you define the Perfect PDF File? It's a bit like defining "the perfect vehicle" – it depends on how you plan to use it. Let's assume you are preparing a PDF file for high-end printing. Now our definition takes shape: The Perfect PDF File is:

**Complete:** it contains all fonts, graphics and assets embedded in the file,

**Compact:** it is smaller than the original files with all of their linked components, and

**Correct:** it is created in accordance with a set of guidelines that are agreed upon by design and print production professionals, resulting in a truly press-ready file.

With these three principals guiding the creation of your Perfect PDF, you will process PDF files more efficiently – and more profitably – avoiding the time, expense and frustration of fixing PDF files after they are received from creative clients or delivered to the production team.

To help you achieve this goal, Adobe has developed a set of Best Practices for Preparing PDF files for

## Best Practices for Preparing PDF Files

high-end printing. We're pleased to share these with you, and hope that the guidelines will become a valuable tool that you, your design teams, and your creative clients will follow for optimum results.

### Communicate

It's a vast understatement to say that printers are busy professionals. Nonetheless, the time and effort that printers invest in communicating their PDF file preparation guidelines to their design partners will pay off handsomely in terms of quality, productivity and profitability. Develop your file preparation parameters as a team, and set up a framework for using them consistently. Offer educational tools or seminars to train your partners in their implementation. And finally, review the guidelines regularly to check your progress against your benchmarks for efficiency, and to modify them when appropriate to take advantage of new technologies and trends.

### Adhere to Principals of a Reliable PDF Workflow

**The quality of the final PDF file will only be as good as the quality of its source components.**

Ensure that the original source file contains the correct content and form, including proper image resolution, and linked fonts and images. Good vector-based clip art, high-quality stock images, and fonts from reliable, reputable foundries will yield higher quality output.

### Maintain content at the highest level of abstraction

To retain flexibility and achieve the best-printed results, convert files only when absolutely necessary. This principal applies to the timing of when to 1) flatten/convert transparency 2) convert files from PostScript to PDF or 3) perform any conversion that would make the PDF file device-dependent. Maintain text, fonts, images, colors, gradients and transparency in their original form as long as possible, converting only when the workflow requires it.

## **Lose no data before its time; and add no unnecessary data**

Downsample or interpolate only when it is time to render the final image. This will give you added flexibility and help preserve the integrity of the design job.

## **Avoid unnecessary and cascading data and attribute transformation**

To avoid degrading image quality, decode and re-code JPEG-compressed images, convert fonts and rotate images only once, just before final screen or print rendering. This rule also applies to color conversions, as discussed in the second principal above.

## **Problems detected earlier are generally easier and less expensive to correct**

Proof carefully for content and formatting before creating the PDF. If available, use preflighting features to identify missing fonts, and unlinked or low resolution images.

## **Disciplined use of standard procedures will result in consistent and reliable production**

Developing and sticking to procedures will help you maintain a consistent, repeatable workflow. Each job will receive the care and attention it deserves, and repeat print runs will match their originals.

## **Proactively Identify and Avoid Problems**

**If problems are predictable, then they're also avoidable. Here are two known "speed bumps" in PDF generation that you can now steer around.**

### **1. Fonts**

Adobe PDF fully supports TrueType, OpenType Multiple Master, Type 1 fonts, and most CID-encoded (double Byte) fonts. If you and your customers use high quality fonts, there should be no reason to restrict these fonts. To minimize the chance

of errors when editing or printing PDF files, embed the fonts in the file. Check with the end user license agreement to avoid using fonts that are unreasonably restrictive about embedding them into the PDF.

### **2. Transparency**

As a general rule, we recommend that designers place objects that are totally opaque (text and line work) on separate a layer "above" objects with transparency. However, in the case of some special affects – such as feathering or drop shadows to opaque objects – a design may require that objects with transparency remain on the same layer. In this case, it's important that the designer and print provider work together to understand and discuss how to best build the file for predictable print output.

Next, keep the transparency "live" as long as possible, as flattening renders the artwork un-editable. When you do flatten a transparent object, select the highest quality settings, using the color configuration settings and pay special attention to spot colors. If you are working in an OPI workflow, "fatten" the document with high-resolution images before you flatten the file. In most cases, we find that the printer or prepress professional is best positioned to flatten transparency. Because the process is resolution-based, the printer can more easily control how and where the flattening should take place, and select the settings for optimum results. Downloading and using the latest software updates to Adobe software, RIPs and PPD settings will ensure best results. These are readily available through Adobe OEM Workflow and RIP partners as listed here:

*<http://www.adobe.com/products/postscript/partners>*



## **Using JDF and Acrobat Professional to Create Press-Ready PDF Files**

**By using the JDF capabilities in Adobe InDesign and Acrobat Professional, PDF creation is more automated and controlled.**

The ability to embed PDF conversion and preflight settings in a JDF ensures the integrity of the files before the job enters print production. The designer and print professional should work together to define a JDF "template," which contains production-specific settings that are appropriate and adequately describe the job. These templates typically include PDF conversion settings, preflight profiles, and may also include other commonly used job specifications.

Acrobat 8 Professional, with built-in support for industry standards such as PDF/X and JDF, is an essential tool in design and print workflows today. New preflight and file correction features help fix problems before they get to press, including automatic correction of hairlines, downsampling image resolution, transparency flattening, color conversion, and more.

An Acrobat 8 Professional preflight report performs a comparison between the job definition in the job ticket and the properties of the assigned files. Any inconsistencies or discrepancies in page sizes, inks, and/or the number of pages available in the associated documents will result in an error. Corrections can be made without creating a new PDF document, which not only saves time, but also preserves the correct print production settings. In other words, using InDesign, JDF and Acrobat Professional ensure that files are not only preflighted, they are also verified as "press ready."

For more JDF and Acrobat 8 Professional workflows information, please visit:

<http://www.adobe.com/products/jdf/index.html>

<http://www.adobe.com/products/jdf/overview.html>

<http://www.adobe.com/products/acrobat/solutions/creative>



## Use Proper PDF Settings for PDF Creation

There are many ways to create PDF files, but the best method is one that can be directed to build a PDF properly for professional print output. For this reason, you will achieve superior results when you use Adobe PDF creation.

### Creating a PDF file from an Adobe Application

If you are working in an Adobe Creative Suite application (Photoshop, Illustrator, InDesign, or GoLive) you can access all of the PDF settings within the application's interface. This is the fastest and most efficient way to create a PDF file.

### Creating a PDF File from Microsoft Office for Windows Applications

When you install Adobe Acrobat in Windows, the installer automatically adds a PDF Maker for any Microsoft Office application. Be sure to use the setting appropriate for high-quality printing. To change the settings, choose *Adobe PDF > Change Conversion Settings*.

### Creating a PDF File from a Microsoft Office for Mac OS X Application

If the document contains transparency, use the Save As PDF option, available in the Print dialog box.

### Creating a PDF File Using the Adobe PDF Printer

The Adobe PDF printer uses the settings file that was last used in Distiller. You can select a different settings file in the Properties section of the Print dialog box.

Authoring Tool	PDF Settings File
Adobe Creative Suite	Export PDF or Save As PDF
Microsoft Office for Windows	Use PDF Maker (installed with Adobe Acrobat), or Print to Adobe PDF
Microsoft Office for Mac OS (and if the document contains transparency)	Save As PDF
Any Other Application	Use the Print command to the Adobe PDF Printer, (installed with Adobe Acrobat)



### Creating a PDF File Using Adobe Acrobat Distiller

Use Acrobat Distiller to convert PostScript files to PDF, creating consistent, reliable and compact PDF files. Because the PDF model supports a broader range of features than PostScript3 (and therefore Distiller), features like live transparency and color management will require special attention.

## PDF Best Practices – In Practice

It's not just theory. The proof is in the PDF. Here are a few examples where implementing best practices has yielded best business results.

The Publisher Services Group at Cadmus Communications invested time and effort into training its customers in the preparation of the perfect PDF file for their workflow. Their investment returned remarkable time-savings and positioned the company to be more responsive and take on more business. Cadmus prints more than 600 different client periodicals and magazines. To make their PDF workflow run most efficiently, the company's expert staff regularly offers classes to clients on how to properly convert files from Adobe InDesign CS2 or QuarkXPress™ to Adobe PDF. Recently, the company began promoting the use of PDF/X-1a, a simplified PDF standard that helps eliminate problems with color profiles, fonts, and having artwork linked to native page layout files. James McQueen, vice president of technology and development, deemed the results of this training phenomenal. Jobs that previously took 48 hours to print were handled in 4 or 5 hours – a time savings of 90 percent. This impressive acceleration of preflight and printing processes allows Cadmus to give its clients substantially more time to write stories, rework layouts, and sell advertising space. The bottom line is a more efficient workflow, a satisfied customer, and more business for Cadmus.

Modern Postcard, an innovator in direct mail services, uses PDF best practices to address a challenge: how to ensure consistent, high quality color – a factor of key importance to meeting client expectations – while maintaining high volume output and rapid job turnaround. When Modern Postcard receives fully laid out pieces, the files typically arrive



in a wide variety of formats, from Adobe InDesign and Illustrator to Adobe PageMaker and Macromedia FreeHand. To increase efficiency, Modern Postcard standardized on an Adobe PDF workflow in which operators export native application files directly to Adobe PDF, and then preflight them using Adobe Acrobat Professional software. Maintaining optimum color consistency is ensured by using the built-in color profiles across Adobe Creative Suite 2. "Before InDesign became widely adopted in the industry, our customers often submitted Adobe PDF files that did not meet our requirements," says Demetra Brodsky, graphic artist manager. "Now our customers simply enter the settings posted on our Web site into InDesign CS2, click Export to PDF, and they have an Adobe PDF file that exactly meets our specifications for fast reliable output."

Consolidated Graphics Group (CGG) is a midsize sheet-fed commercial printer that has consistently leveraged new technologies to enhance productivity and customer satisfaction. As an industry pioneer in establishing best practices in a PDF

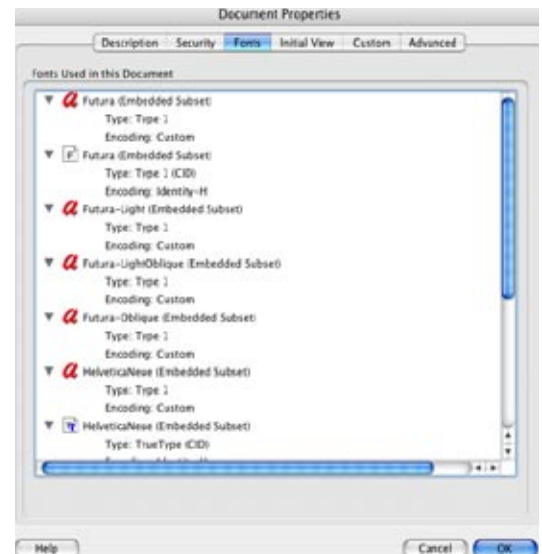
workflow, CGG has used that solid foundation to introduce on-line job submission services and a JDF-enabled workflow. Customers who utilize CGG's on-line job submission tools view an Adobe PDF proof before finalizing their order, sparing CGG the need to preflight these jobs and enabling them to go straight to production. "Saving 15 minutes per job by eliminating preflighting frees up hours each day, enabling us to accept more jobs," says David Minnick, chief technology officer. Customer job information that is captured during the online submission process is used to generate a JDF job ticket that accompanies the PDF file through every stage of the workflow, and further streamlines the print process. CGG finds that this process saves time and prevents errors inherent in re-keying the project information, and helps eliminate misunderstandings as a job progresses to the next stage. Having a strong foothold in a PDF workflow, CGG is now able to reap the productivity benefits of JDF.

For each of these companies, a PDF workflow not only enables them to streamline and control their design and prepress processes, it also ensures easier and more secure communication and collaboration within teams. If members of a review team do not own the Professional version of Adobe Acrobat, using the free Acrobat Reader enables them to view and print files, including the option to view with overprint pre-view turned on in the preferences. Acrobat Reader also allows them to participate in commenting reviews of a PDF file that was enabled by a colleague with Acrobat Professional, accelerating feedback and approvals. For rapid turnaround jobs, time saved in this stage is crucial, as well.



The print industry is filled with entrepreneurs who are continually finding new ways to meet rising customer expectations, offer faster turnaround, expand their services and attain greater production efficiencies. While innovation – in the form of new ideas, products or technologies – can help printers achieve their goals, new processes must be rooted in a set of best practices that will produce predictable, high quality results.

Adobe PDF files have become ubiquitous in our industry, currently 89 percent of the world's PC's have PDF technology and the top 10 PC manufacturers ship the Adobe Reader. As you receive more PDF files from clients, establishing a set of Best Practices for PDF file creation will be essential for smooth, productive partner and client relationships, and to attain the workflow efficiencies that enable you to compete – and succeed – well into the future. We hope this document will help you expedite the process of creating your perfect PDF.



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# Adobe

## The Adobe Solutions Network

Information like the guidelines contained in this article are regularly made available to members of the Adobe Solutions Network (ASN), which offers programs specifically for Print Service Providers, Trainers, Developers, Systems Integrators and Value Added Resellers. As a member of the ASN Print Service Provider Program, you could receive unlimited toll-free technical support, two free copies of Adobe Creative Suite 2.3, access to mailing lists and marketing tools, and training for your employees and creative clients to help you grow your business, learn more about Adobe products, solutions, and technologies, and run your operations more smoothly. Learn more about ASN program benefits and membership levels at

<http://partners.adobe.com/public/asn/psp/detail.html>

## Resources for Creating Reliable PDF Files

For more information about working with PDF files in a print production workflow, please refer to the following:

Adobe PDF in a Print Production Workflow

[http://media.studio.adobe.com/linked\\_content/en/acr7ip\\_prntwrkflw/acr7ip\\_prntwrkflw.pdf](http://media.studio.adobe.com/linked_content/en/acr7ip_prntwrkflw/acr7ip_prntwrkflw.pdf)

Adobe Acrobat 7.0 Printing Guide

[http://media.studio.adobe.com/linked\\_content/en/acr7bgprintguide/acr7bgprintguide.pdf](http://media.studio.adobe.com/linked_content/en/acr7bgprintguide/acr7bgprintguide.pdf)

PDF Integration Guide for Adobe Creative Suite 2

[http://media.studio.adobe.com/linked\\_content/en/acs2pdfintguide/acs2pdfintguide.pdf](http://media.studio.adobe.com/linked_content/en/acs2pdfintguide/acs2pdfintguide.pdf)

PDF/X Files and Adobe Creative Suite 2

[http://www.adobe.com/products/creativesuite/pdfs/pdfx\\_white\\_paper.pdf](http://www.adobe.com/products/creativesuite/pdfs/pdfx_white_paper.pdf)

Transparency in Adobe Applications: A Print Production Guide

[http://media.studio.adobe.com/linked\\_content/en/acs2bgtransparency/acs2bgtransparency.pdf](http://media.studio.adobe.com/linked_content/en/acs2bgtransparency/acs2bgtransparency.pdf)

Designer's Guide to Transparency for Print Output

<http://www.adobe.com/products/creativesuite/pdfs/dgt.pdf>

Adobe Print Resource Center

[www.adobe.com/asnprint](http://www.adobe.com/asnprint)

Acrobat 8 Professional for Creative and Print Professionals

<http://www.adobe.com/products/acrobat/solutions/creative/>

Adobe eSeminars

[http://www.adobe.com/cfusion/event/index.cfm?event=detail&id=505116&loc=en\\_us](http://www.adobe.com/cfusion/event/index.cfm?event=detail&id=505116&loc=en_us)

Adobe On Demand Training Sessions

[http://www.adobe.com/cfusion/event/index.cfm?event=list&type=ondemand\\_seminar&loc=en\\_us](http://www.adobe.com/cfusion/event/index.cfm?event=list&type=ondemand_seminar&loc=en_us)