

How to **Create Adobe®**

PDF Files **for eBooks**



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Discover the Value of Adobe PDF

Today's savvy authors and publishers know that electronic books (eBooks) offer a terrific market opportunity. Online publishing means significantly lower costs, which in turn mean higher profit margins. But before expanding into the eBook market, content owners need the reassurance of a universally viewable file format. They need a means of protecting copyright ownership. And they need a reliable distribution method. Adobe has a solution to meet those needs: Adobe Portable Document Format (PDF).

An open standard, Adobe PDF is a cross-platform file format that can be viewed by anyone on the planet with the free Acrobat Reader software. With one million copies downloaded each week—165 million to date—Acrobat Reader ensures that consumers can easily access your eBook content. And since eBook pages created in Adobe PDF maintain the essential attributes of the printed page, consumers are ensured a familiar, enjoyable reading experience. In addition, Adobe PDF offers a variety of key benefits for eBook publishers:

- *Cross-platform viewing.* Because Adobe PDF files can be viewed on all major computing platforms, consumers can read eBooks on desktop computers and other devices, and they can transfer eBooks between different devices. Plus the open specification of Adobe PDF provides an accessible point of integration for manufacturers of today's dedicated eBook readers as well as tomorrow's eBook devices and technologies, such as Palm, Windows CE, PocketPC, and others.
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- *Compact file size.* Adobe PDF produces compact files that can be downloaded quickly from commercial Web sites and transferred between reading devices with no loss of quality. The small file size also means that consumers can download more eBooks into a single viewing device to create extensive personal libraries.

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- *Multimedia integration.* eBooks created in Adobe PDF can take special advantage of the digital medium. In addition to text and graphics, Adobe PDF can include video and audio files, enhancing the traditional reading experience and giving consumers the benefit of greater dimension in everything from cooking demonstrations to language-learning tutorials.
- *Navigation features.* In electronic publications, it's important to provide the reader with ways to move efficiently through a document, as well as across documents. Acrobat provides navigation methods such as thumbnails, bookmarks, articles, and links. Each navigation method has its own special features. You can choose when and where to apply each one to create the best document structure and flow for your audience.

With this booklet as your guide, you can quickly and easily convert documents created in your favorite page layout or office applications to Adobe PDF. Discover the advantages of distributing all your information—from reference works and technical manuals to novels and periodicals—in eBookOptimized Adobe PDF.

Creating an eBook from the Ground Up

Although many publishers have print production workflows in place and archived content from which to produce eBooks, you don't have to start with an existing document to create an eBook. Just as you can design layouts, flow text, and produce publications exclusively for print, you can also create eBooks from the ground up. The key is building a good template. The booklet you're reading now is a good example of a document that was designed specifically to be viewed online. The following pages offer some tips for designing your own templates for electronic publications.

DETERMINE THE PROPER PAGE SIZE

Pages displayed on computer screens and handheld devices are not trimmed like paper pages, so it's important that you consider how your eBook will be accessed and what size page is appropriate. Most often, readers will access your electronic documents from their computers. While some monitors are larger than a standard 8.5-inch by 11-inch page, many are smaller. Unless you are certain that all viewers of your eBook will share a particular display device, it's a good idea to design your eBook for the lowest common denominator. For most eBooks, specifying a page size of 6 inches by 9 inches is a good compromise. It can be comfortably displayed on a variety of screens and printed to an 8.5-inch by 11-inch page easily. And with the zoom capabilities in Acrobat, readers can customize their viewing experience. A page size of 4 inches by 3 inches is a good choice for screen-focused documents that will never be printed. If you know that all readers will be using a particular display device, you can specify a page size that's appropriate for that device.

SET UP MARGINS

As with printed pieces, margins help readers follow the text and give their eyes places to rest from time to time. For many printed documents, the binding and trim size can dictate margins. But when you design a template for an eBook, you have more freedom. Even though margins are not determined for you in eBook templates, you should still use them to lead your readers through the content and to provide ample white space on each page. Make dense pages more inviting by reducing the amount of text and graphics crammed onto a single page. And be consistent. Once you find a nice balance between information and white space, use the same margins throughout your publication.

DEFINE TYPOGRAPHIC STYLES

When you set up type styles for electronically displayed pages, choose fonts that look good on-screen and are especially easy to read. Fonts with delicate serifs or thin strokes that look good on the printed page can lose their definition on-screen and appear fuzzy or difficult to read. The best way to make decisions about type is to test a variety of fonts. That way, you can determine which typefaces work best for on-screen reading while still enhancing your overall design.

When formatting type, make sure you use stylistic variations, font sizes, and leading and tracking values that produce easily readable text. For printed publications, a font size of 9–10 points for body text is usually appropriate, but slightly larger font sizes—11 to 13 points—are better for on-screen viewing. You should also allow room for higher leading and tracking values. Even though readers can zoom in on electronic documents to ease readability, it is still a good idea to design pages that are legible at 100 percent page view. However, you should try to address letter-spacing issues with tracking values, not by kerning multiple pairs of individual characters. Occasional kerning is fine, but kerning many letter combinations to perfection often adds little value, and the extra information it introduces to the file increases the file size. Try to keep your typographic styles simple. The easier your document is to read, the more likely people will be to read it.

If you're looking for on-screen typeface ideas, check out the Adobe WebType™ Collection. It contains 12 award-winning Adobe Originals typefaces optimized for on-screen viewing. The typefaces have been fine-tuned to provide maximum readability. The collection includes a versatile selection of display, text, script, and decorative TrueType fonts. (For information about the Adobe WebType Collection, visit the Adobe WebType Web page at www.adobe.com/type/browser/P/P_911.html.)

DON'T BE AFRAID TO EXPERIMENT

Whatever your electronic document needs, find a format that works for your publication. If you're not sure how big to set the type or how wide to make the margins, experiment with these elements. Set up a sample template, and view it on a standard monitor for ease of readability. Often when you see your choices as readers will view them, your decisions become easier to make.

For more detailed information about creating documents for electronic distribution, refer to *The Official Adobe Electronic Publishing Guide*. Published by Adobe Press and available online at www.amazon.com and www.barnesandnoble.com, this book is a comprehensive guide to electronic publishing on the World Wide Web or CD-ROM and includes information about transporting, manipulating, and distributing images and documents electronically as well as transforming publications into more compact and searchable forms.

Setting Up Acrobat Distiller

Once you have created your master eBook file or when you have identified existing content you would like to distribute electronically, you must turn your native files into Adobe PDF files. With the Distiller in Adobe Acrobat 4.0 software, you can not only customize your Adobe PDF files for your specific distribution needs but you can also optimize those files for electronic publishing. When assessing your content for electronic distribution, you must decide how you want to optimize the text and image data contained in your documents.

ACROBAT JOB OPTIONS

Acrobat 4.0 has three predefined job options:

- *ScreenOptimized.* This option is recommended for content that will be displayed primarily on-screen, whether on a desktop monitor or an LCD screen. This option produces an extremely small file size, making it ideal for quick downloading from a Web site or intranet.
- *PrintOptimized.* This option is recommended for content that might be printed or for documents for which file size doesn't matter—such as eBooks distributed on removable media or CD. If your content will likely be printed, you should consider this option.
- *PressOptimized.* This option is recommended for content that will eventually be printed on a high-resolution device. Most text-intensive content prepared for electronic distribution will not require this level of optimization, but you might consider it if your content contains very rich graphics (such as fine illustrations) or if extreme visual fidelity is of paramount importance. PressOptimized Adobe PDF files can be quite large, so be sure to weigh the benefits against the drawbacks of using this setting.

For simple electronic distribution, the ScreenOptimized setting will suffice; it is intended for general documents. Through Acrobat Distiller, you can set up an eBookOptimized job option that optimizes your Adobe PDF files for eBook distribution. There are several differences between the ScreenOptimized and eBookOptimized job options. The eBookOptimized setting specifies PDF 1.3 compatibility while the ScreenOptimized setting supports only PDF 1.2. For documents containing smooth shaded graphics, PDF 1.3 represents graphics in a more efficient manner. In addition, the eBookOptimized setting

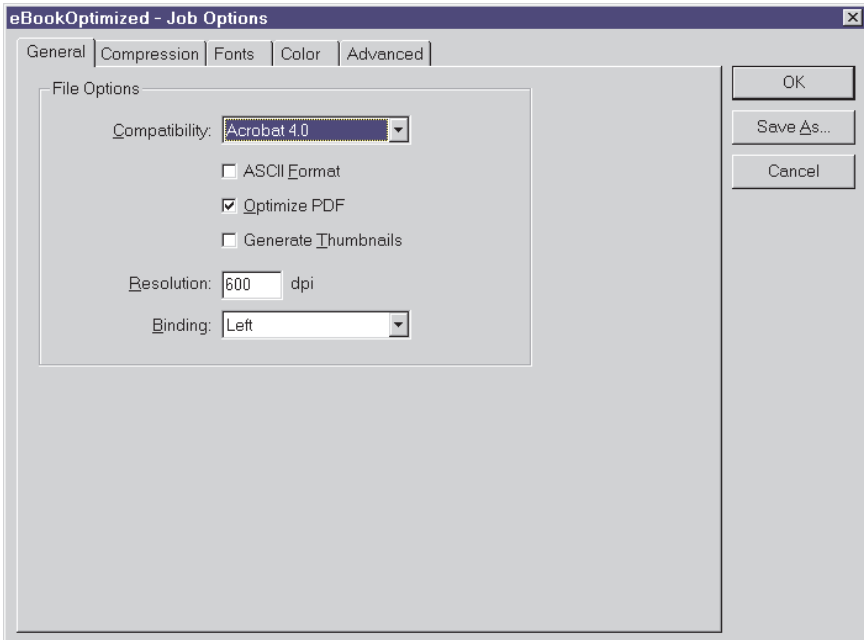
downsamples images at 150 dots per inch (dpi), instead of 72 dpi, which increases image readability and enables better printing without significantly increasing the file size. And with the eBookOptimized job option, the fonts of your electronic document are embedded as subsets, which means your readers can view your document with the same fonts you used to create it. The ScreenOptimized job option doesn't embed fonts, so if readers don't have the fonts you used to create the document, Acrobat may replace those fonts with the closest matches it can find on the reader's system. Replacement fonts may not work as well for your document as the fonts you chose, and they could compromise readability.

You can set up an eBookOptimized job option in Acrobat Distiller by following the instructions in this booklet, or you can simply download it from Adobe's Web site at www.adobe.com/products/acrdis/createbooks.html. The Macintosh file is called *eBookOptimized_jobopt.hqx*. The Windows file is called *eBookOptimized_jobopt.zip*. If you download this job option, place it in the Adobe/Acrobat4.0/Distiller/Settings folder. (The Settings folder already contains the three predefined job option files.) To use the eBookOptimized job option, launch Acrobat Distiller and then choose eBookOptimized from the job options pull-down menu.

CREATING AN eBookOPTIMIZED JOB OPTION

When you deliver documents online, you want to make sure you provide an excellent on-screen viewing experience for your readers. While the predefined Distiller job options contain many settings that will enhance the online viewing experience, none of these options addresses all the special needs of an eBook. Following are step-by-step instructions you can use to customize an eBookOptimized setting that will produce Adobe PDF files with cleaner text and graphics and small file sizes. The accompanying screen shots illustrate the settings you should choose, and even though every setting is not described in detail in the steps, for best results you should set up each job option panel as shown. (See Appendix B for more information on customizing settings and creating high-quality Adobe PDF documents.)

- 1 Launch Acrobat Distiller.
- 2 Choose Settings > Job Options to display the Job Options dialog box. (If you have already saved a job options file for eBooks, select it from the Job Options pull-down menu.)
- 3 Select the General panel. The dialog box below shows recommended settings for eBooks.



- 4 In the Compatibility pull-down menu, select Acrobat 4.0.

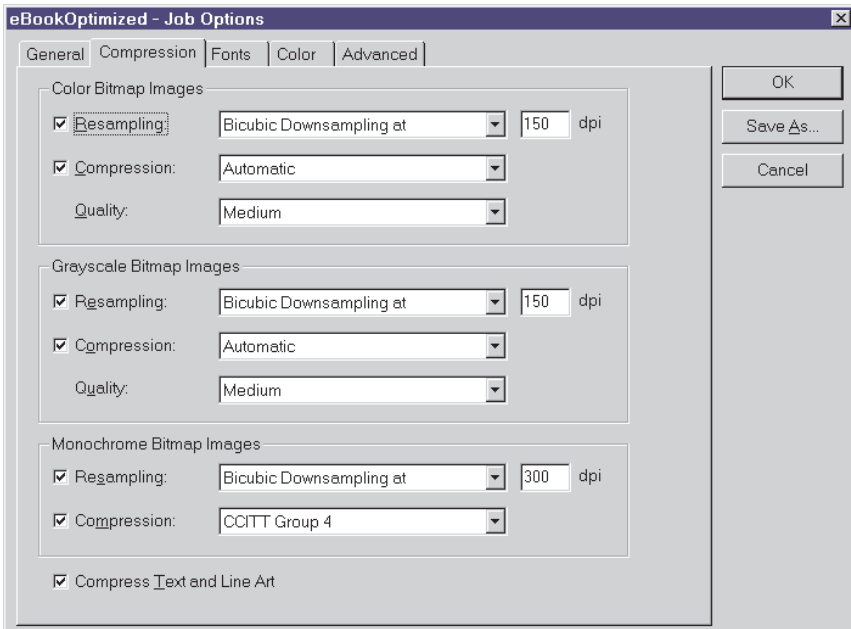
Several page layout attributes require Acrobat 4.0 compatibility, including sRGB and page sizes up to 200 inches by 200 inches.

- 5 Select the Optimize PDF option.

This reduces the size of an Adobe PDF document by removing repeated background text, line art, and images and replacing them with pointers to the first occurrence of each object. The Optimize PDF feature also restructures the file to facilitate one-page-at-a-time downloading from Web servers.

- 6 Select the Compression panel.

- 7 Choose the Resampling option in the Color Bitmap Images, Grayscale Bitmap Images, and Monochrome Bitmap Images sections. Then select Bicubic Downsampling from the Resampling pull-down menu in all three sections.



To make bitmapped pad images small enough for online distribution, you need to compress the images to ensure a small file size. Distiller can downsample a bitmapped image to reduce the amount of data in the image and therefore reduce the file size while maintaining quality ideal for printing. To resample an image, Distiller combines pixels in a sample area to make one larger pixel. You specify the resolution in dpi, and Distiller combines pixels as needed to reduce the image's resolution to the specified dpi setting.

For documents that will be distributed electronically, bicubic downsampling at 150 dpi produces high-quality images that will look great on-screen and print well too.

- 8** Select the Compression option in the Color Bitmap Images and Grayscale Bitmap Images sections. Then choose Automatic from the pull-down menu in both those sections. Choosing Automatic tells Acrobat Distiller to automatically apply either Zip/LZW or JPEG compression on an image-by-image basis, depending on the type of image.
- 9** Select the Compression option in the Monochrome Bitmap Images section, and choose CCITT Group 4 from the pull-down menu.

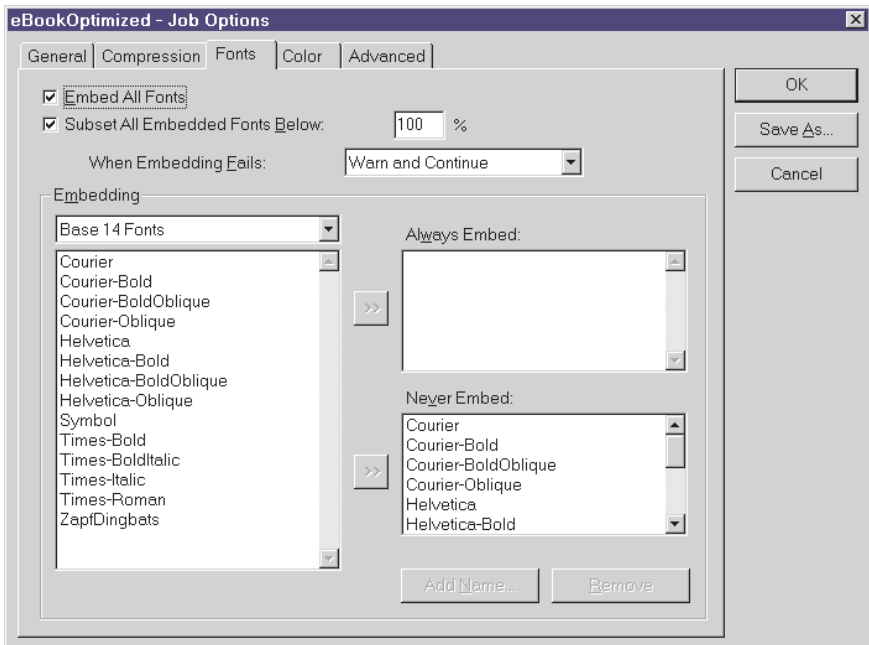
The CCITT Group 4 setting for Monochrome Bitmap Images is a general-purpose method that produces good compression for most types of monochrome images.

- 10 Select the Fonts panel.
- 11 Select the Embed All Fonts option.

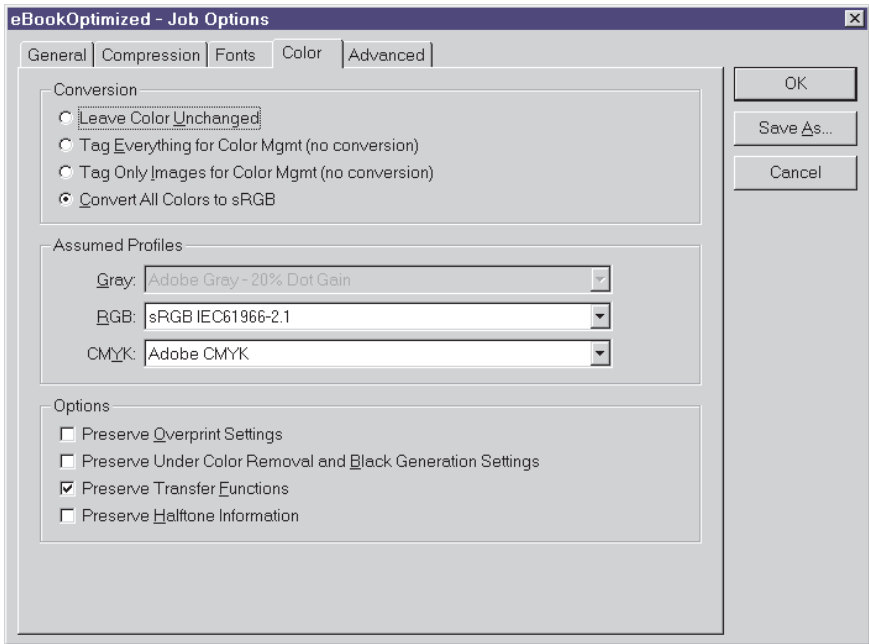
If you are converting an existing document to an eBook, you will likely want to maintain the integrity of the original file and therefore use the same fonts that were used for the original publication. For this reason, Adobe recommends that you select the Embed All Fonts option.

- 12 Select the Subset All Embedded Fonts Below option and enter 100% as the value.

This means Distiller will embed only the characters that are used in the document, and the file size of your document will be as small as possible.



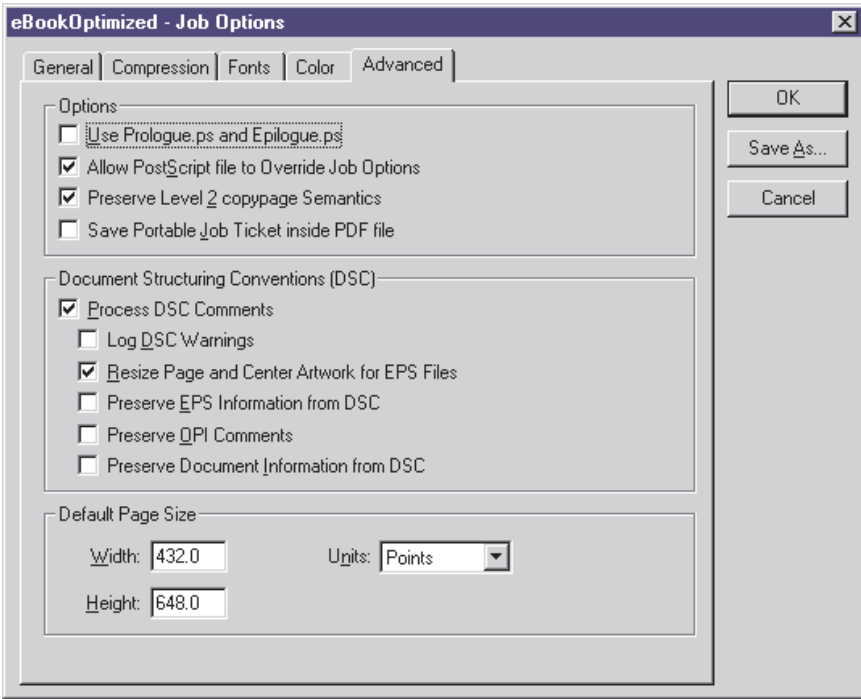
13 Select the Color panel.



14 Select the Convert All Colors to sRGB option.

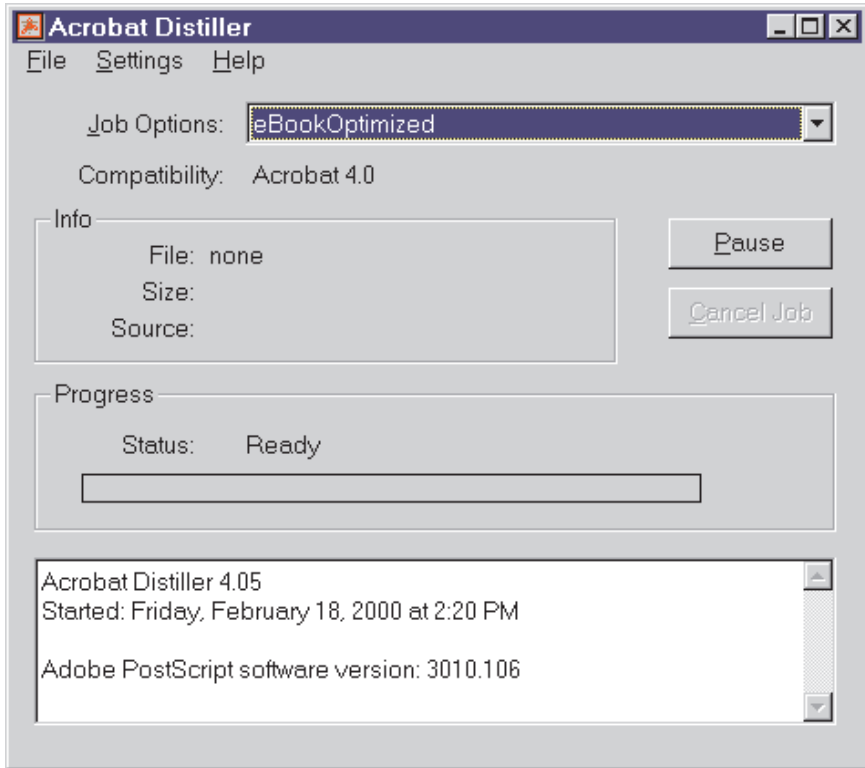
Because RGB is the native color space used on monitors, choosing Convert All Colors to sRGB eliminates the need for color conversion during display, which results in fast online viewing.

- 15** Select the Advanced panel. The dialog box below shows the recommended Advanced settings for eBooks.



- 16** Click the Save As button to save the settings in your job options file. Specify a filename for your new settings file and choose a storage folder. (By default, settings files are stored in the Settings folder within the Acrobat Distiller folder.)

Saving an eBook-specific job option spares you the work of specifying job options manually each time you create an eBook. We have named our job option eBookOptimized. Next time we launch Distiller, the eBookOptimized job option will automatically be selected in our Job Options pull-down menu.



Creating Adobe PDF Files

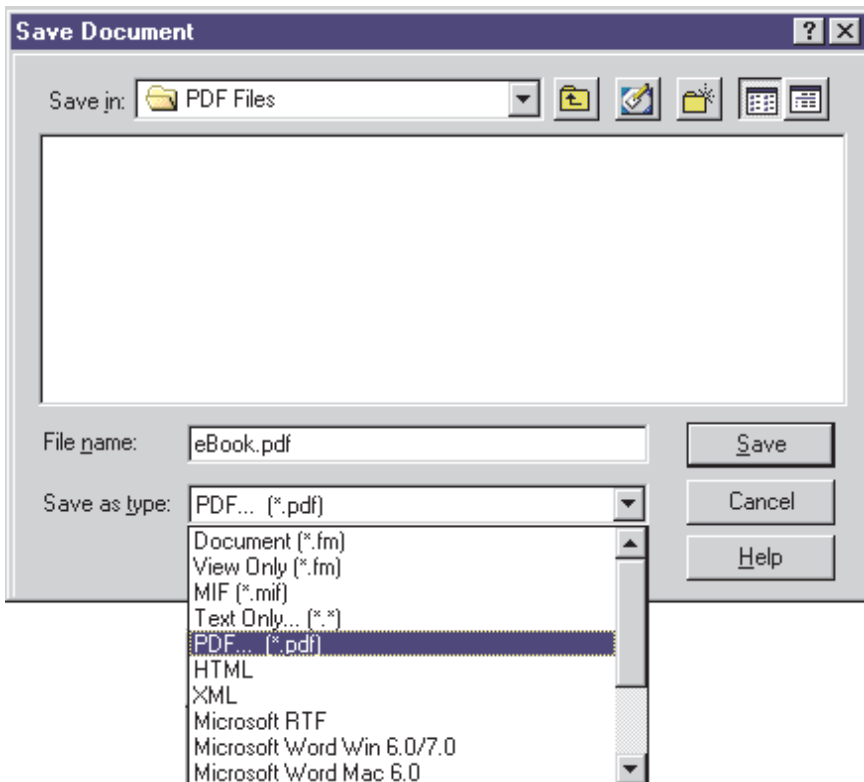
If you have Acrobat 4.0 software installed on your computer, you can create Adobe PDF files from many popular authoring applications in no time. And with the eBookOptimized job option, you can rest assured the Adobe PDF files you create will be easy to distribute and view online. This section gives you step-by-step instructions for creating Adobe PDF files from:

- Adobe FrameMaker
- Adobe InDesign
- Adobe PageMaker Plus
- Microsoft Word
- QuarkXPress
- Existing PostScript and PDF Files
- Create Adobe PDF Online Service



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Converting FrameMaker files to Adobe PDF

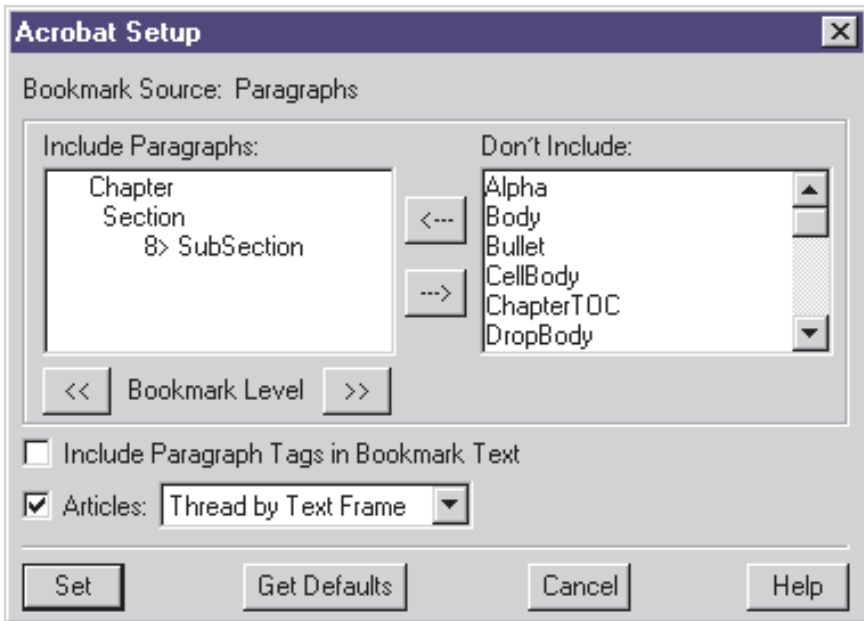
- 1 Open the document or book in FrameMaker.
- 2 If there are references to other FrameMaker documents, also open the referenced files. This ensures that links will work properly when all books are converted to Adobe PDF.
- 3 Choose File > Save As, and then select PDF from the Save as Type pull-down menu. Choose a storage folder and specify a filename for the Adobe PDF document you're about to create.
- 4 Click Save.



Creating Adobe PDF bookmarks

- 1** To determine which paragraph tags will be converted to bookmarks, use the  and  arrows to move selected paragraph tags to the Include Paragraphs list or the Don't Include list. The paragraphs in the Include Paragraphs list will be bookmarked in the resulting Adobe PDF document.
- 2** To change bookmark levels for included paragraph tags, select a paragraph tag in the Include Paragraphs list and then click one of the Bookmark Level arrows. To change the level of all tags, select a Bookmark Level arrow while holding down the Shift key.

- 3 To include paragraph tags along with the paragraph text in the bookmarks, select the Include Paragraph Tags in Bookmark Text option. Use this option to check the assigned levels of bookmarks in a draft of the Adobe PDF document. (Don't forget to turn this option off when you create the final version of the document.)
- 4 After you finish making bookmark settings, click Set.



Maintaining FrameMaker links in Adobe PDF files

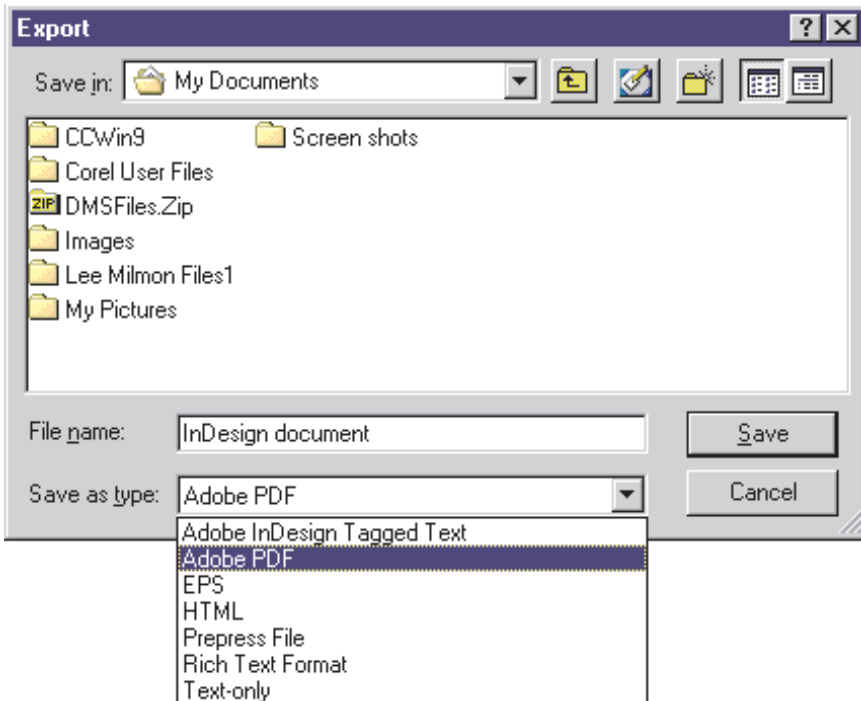
If your FrameMaker files contain links to other FrameMaker documents, you must convert those linked files to Adobe PDF as well. Repeat above steps for any linked books to ensure your Adobe PDF file maintains the links of the original file.

ADOBE INDESIGN FOR WINDOWS

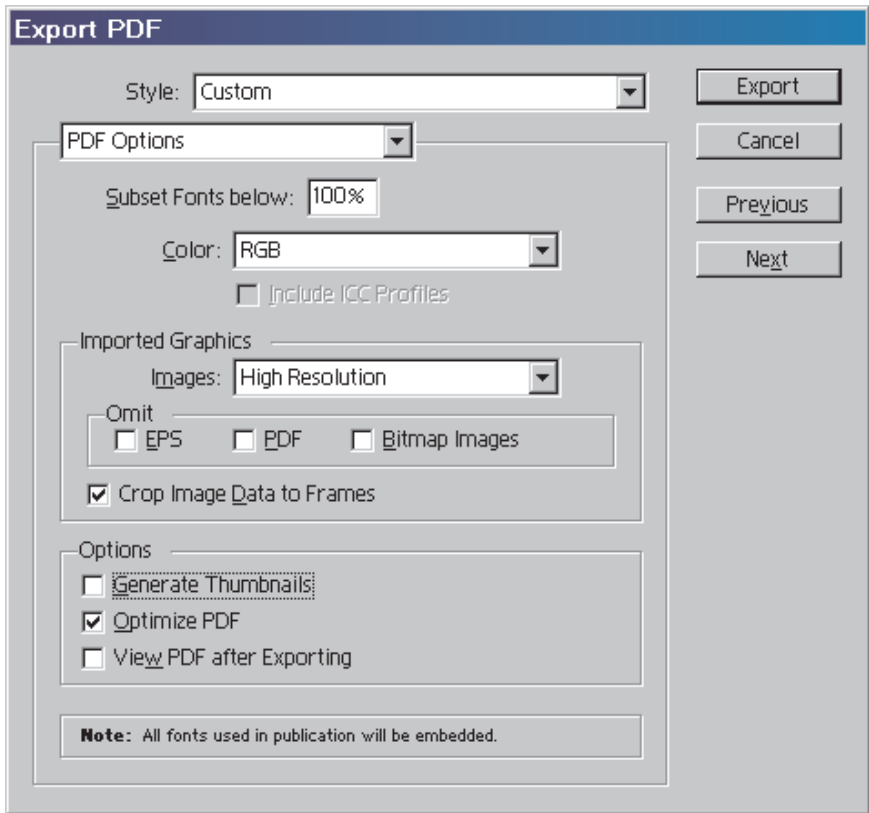
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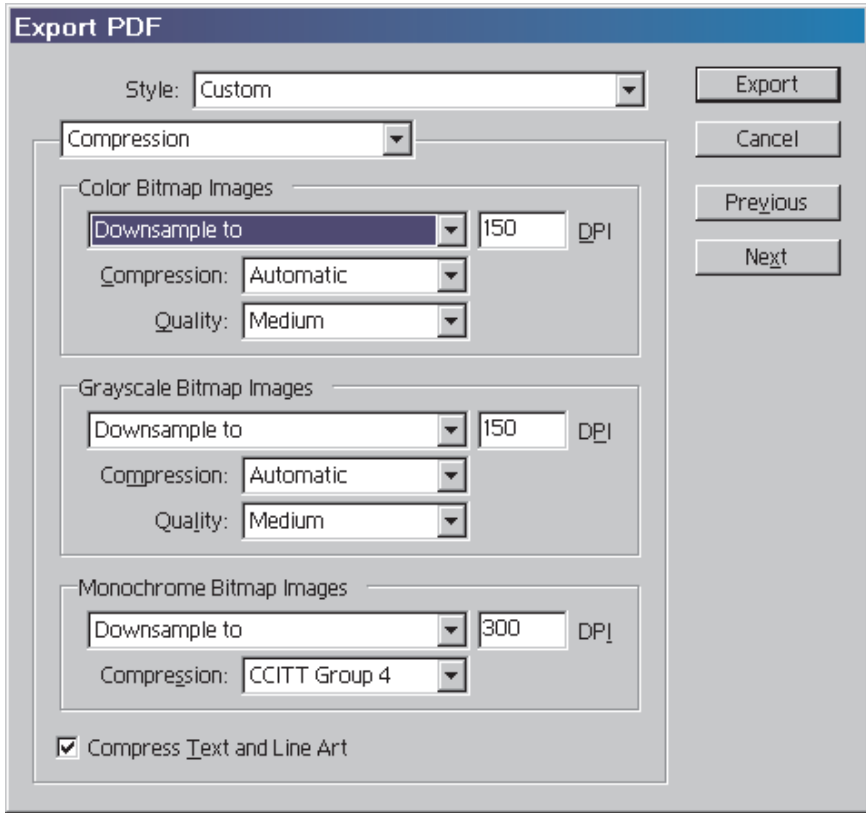
Adobe InDesign does not use Acrobat Distiller job options when it creates Adobe PDF files. The following steps show you how to create Adobe PDF files optimized for eBooks within InDesign:

- 1 Open the document in InDesign for Windows.
- 2 Choose File > Export.
- 3 Select Adobe PDF from the Save as Type pull-down menu. Then select a storage folder for your Adobe PDF document, and name the Adobe PDF file you're about to create.
- 4 Click Save.



- 5 Select PDF Options from the Export PDF pull-down menu, and then choose the settings shown in the screen shot below. Color should be set to RGB and the Generate Thumbnails option should not be selected.



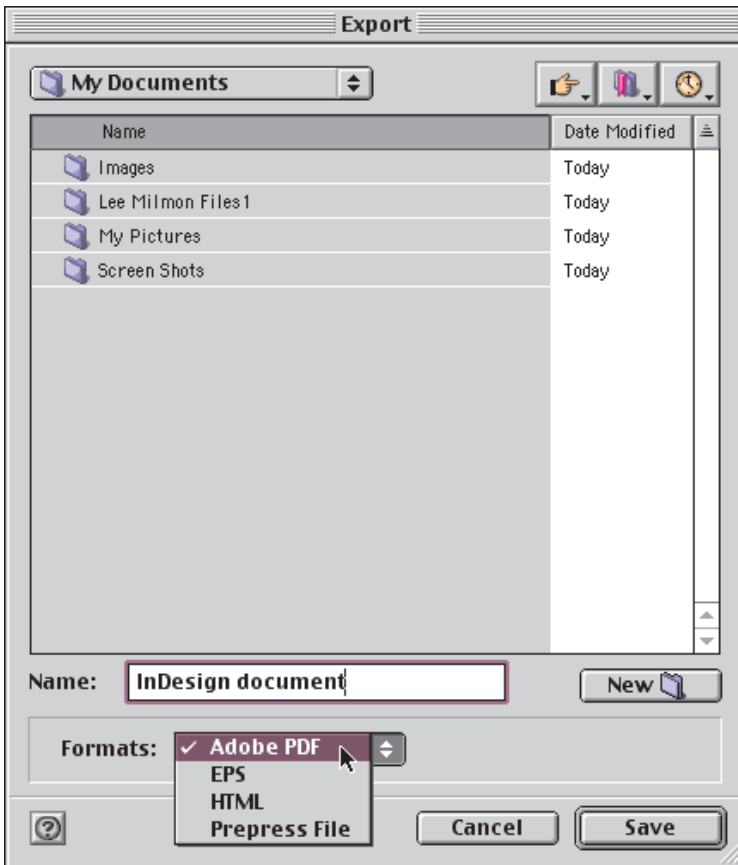


- 6 Select Compression, instead of PDF Options, from the Export PDF pull-down menu.
- 7 Select Downsample To from both the Color Bitmap Images and the Grayscale Bitmap Images sections, and set the DPI value to 150.
- 8 Select Downsample To from the Monochrome Bitmap Images section, and set the DPI value to 300. Then select CCITT Group 4 from the Compression pull-down menu.
- 9 Click Export.

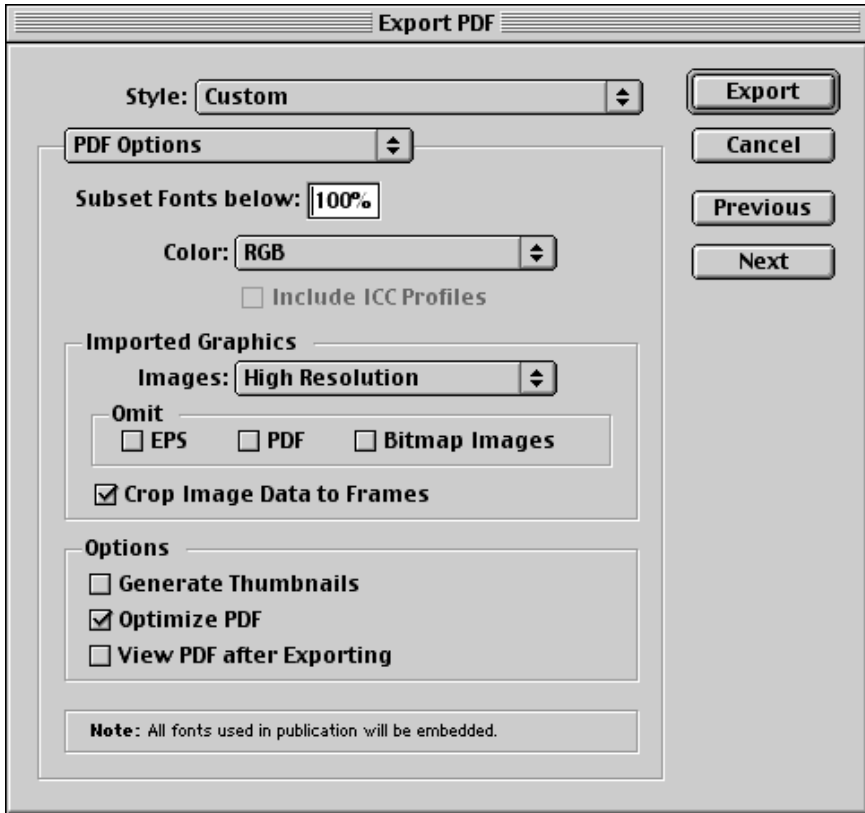
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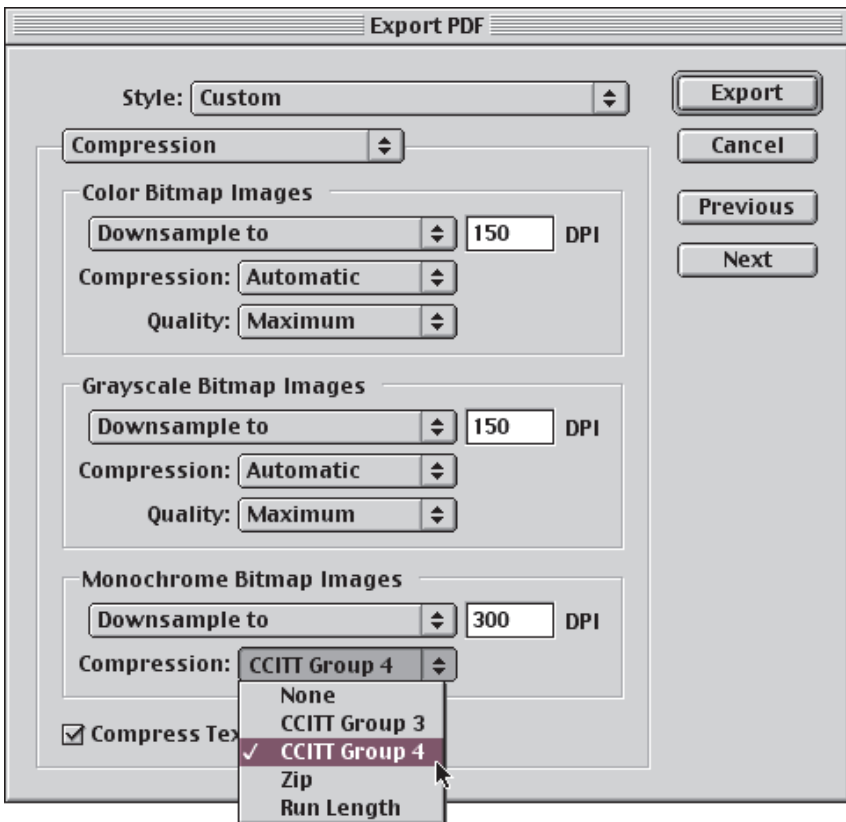
- 1 Open the document in InDesign for Macintosh.
- 2 Choose File > Export.
- 3 Select Adobe PDF from the Formats pull-down menu. Then select a storage folder for your Adobe PDF document, and name the file you're about to create.
- 4 Click Save.



- 5 Select PDF Options from the Export PDF pull-down menu, and then choose the settings shown in the screen shot below. Color should be set to RGB and the Generate Thumbnails option should not be selected.



- 6 Select Compression, instead of PDF Options, from the Export PDF pull-down menu.
- 7 Select Downsample To from both the Color Bitmap Images and the Grayscale Bitmap Images sections, and set the DPI value to 150.
- 8 Select Downsample To from the Monochrome Bitmap Images section, and set the DPI value to 300. Then select CCITT Group 4 from the Compression pull-down menu.

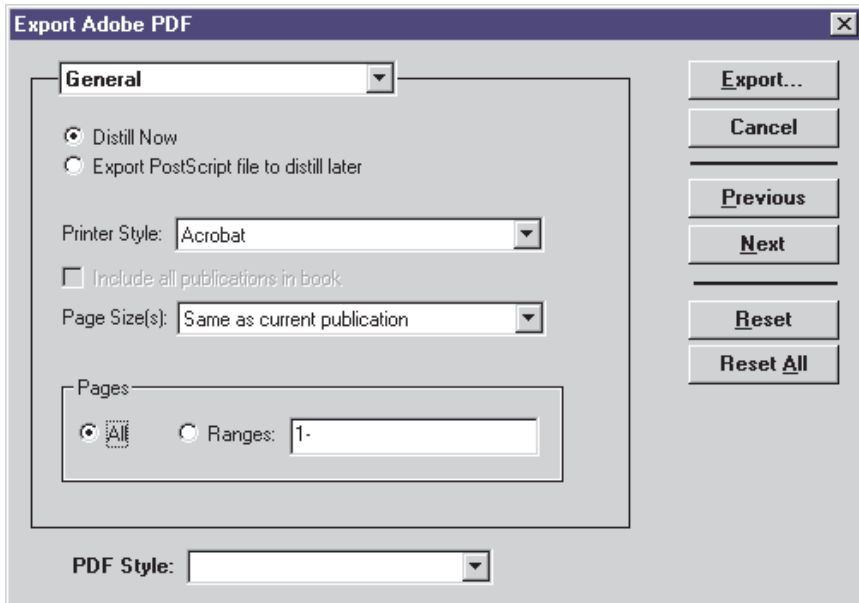


- 9 Click Export.

ADOBE PAGEMAKER PLUS FOR WINDOWS

Converting PageMaker Plus for Windows files to Adobe PDF

- 1 Launch Acrobat Distiller and select eBookOptimized from the Job Option pull-down menu. (PageMaker relies on the Acrobat Distiller settings to create Adobe PDF files, so you must select the eBookOptimized job option in Distiller to create an Adobe PDF file optimized for eBooks.)
- 2 Open the document in Adobe PageMaker Plus for Windows.
- 3 Choose File > Export > Adobe PDF.
- 4 In the General panel of the Export Adobe PDF dialog box, select the Distill Now option and choose Acrobat from the Printer Style pull-down menu.

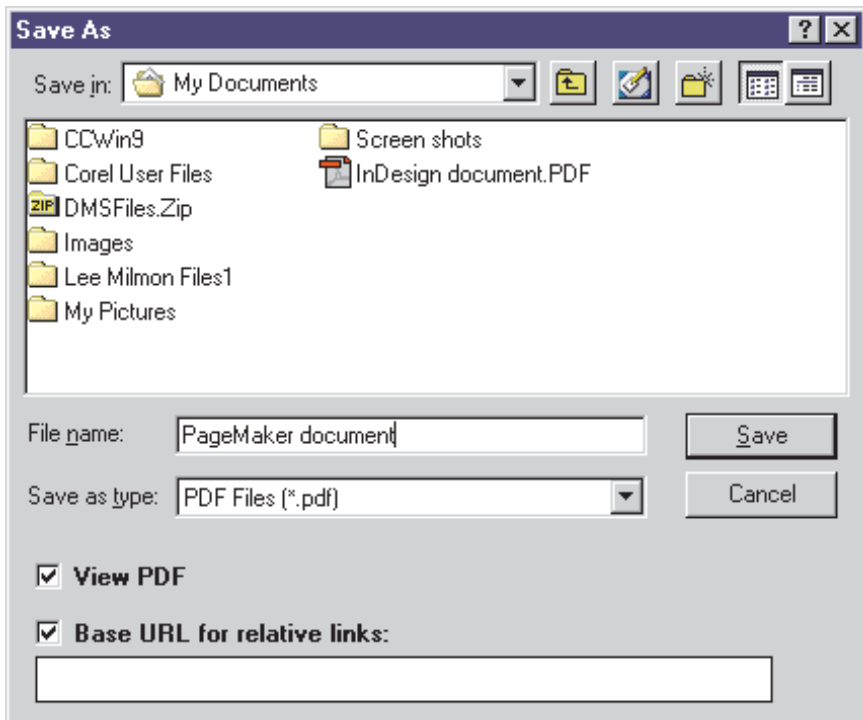


- 5 Select Miscellaneous, instead of General, from the Export Adobe PDF pull-down menu. Then make sure that Override Distiller Options is not selected. If it is, click the checkbox to deselect this option. (This instructs PageMaker not to override the Distiller job option setting you selected in step 1.)



- 6 Click Export.
- 7 Specify a filename for your Adobe PDF document and choose a storage folder. If you want to view your Adobe PDF document after it's created, select the View PDF option. If you want to specify a base URL for the links in your Adobe PDF document, select the Base URL for Relative Links option and type the URL in the accompanying field.
- 8 Click Save.

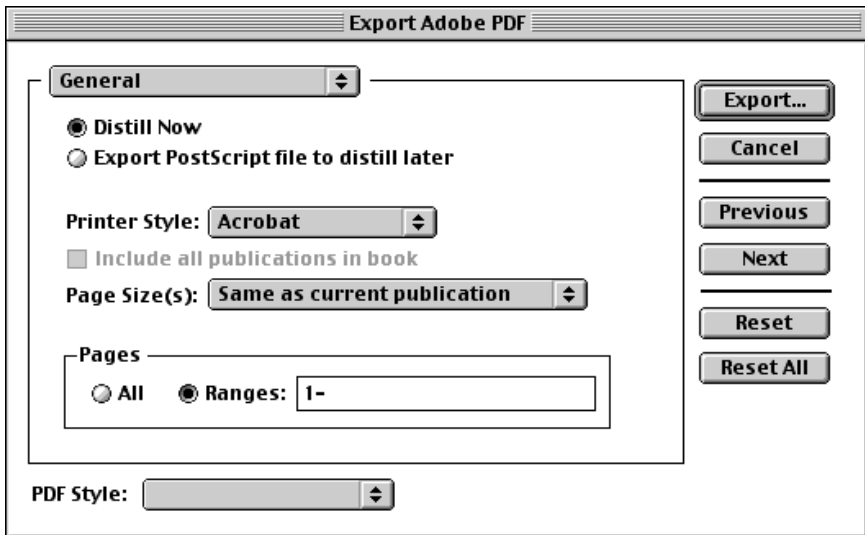
When you click Save, a temporary PostScript file is created. Acrobat Distiller then converts the PostScript file to an Adobe PDF file, and the Adobe PDF file then opens automatically in Acrobat.



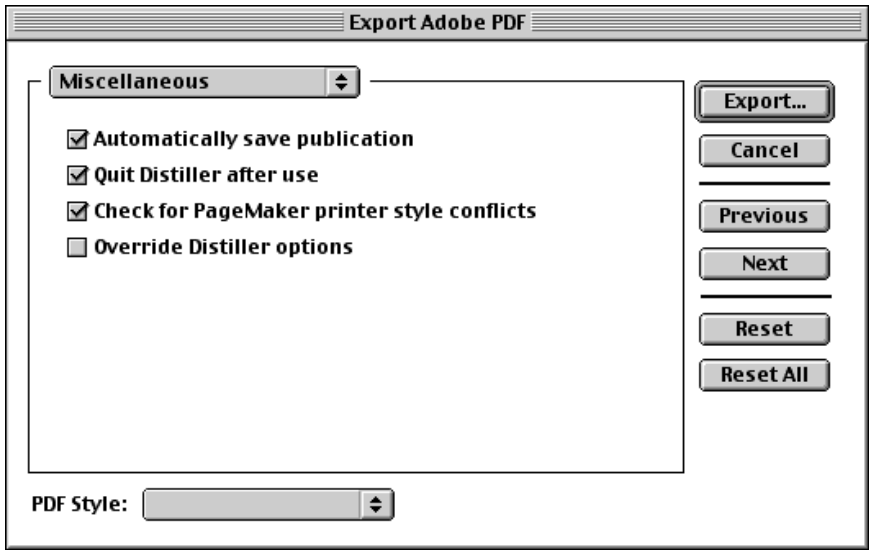
ADOBE PAGEMAKER PLUS FOR MACINTOSH

Converting PageMaker Plus for Macintosh files to Adobe PDF

- 1 Launch Acrobat Distiller and select eBookOptimized from the Job Option pull-down menu. (PageMaker relies on the Acrobat Distiller settings to create Adobe PDF files, so you must select the eBookOptimized job option in Distiller to create an Adobe PDF file optimized for eBooks.)
- 2 Open your document in Adobe PageMaker Plus for Macintosh.
- 3 Choose File > Export > Adobe PDF.
- 4 In the General panel of the Export Adobe PDF dialog box, select the Distill Now option and choose Acrobat from the Printer Style pull-down menu.



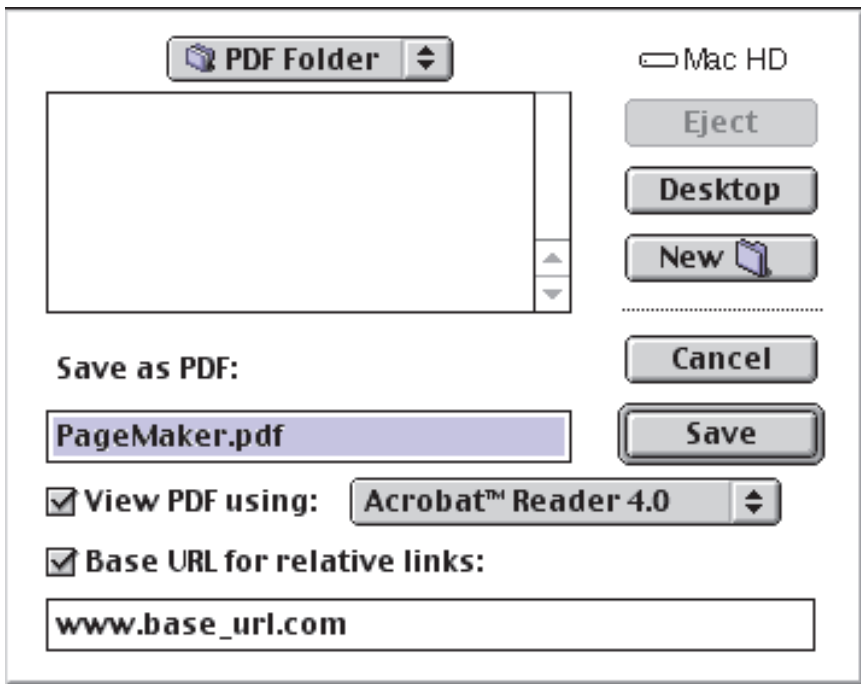
- 5 Select Miscellaneous, instead of General, from the Export Adobe PDF pull-down menu. Then make sure that Override Distiller Options is not selected. If it is, click the checkbox to deselect this option. (This instructs PageMaker not to override the Distiller job option setting you selected in step 1.)



- 6 Click Export.

- 7 Specify a filename for your Adobe PDF file, and choose a storage folder. If you want to view your Adobe PDF document after it's created, select the View PDF option and choose the desired viewer from the pull-down menu. If you want to specify a base URL for the links in your Adobe PDF document, select the Base URL for Relative Links option and type the URL in the accompanying field.
- 8 Click Save.

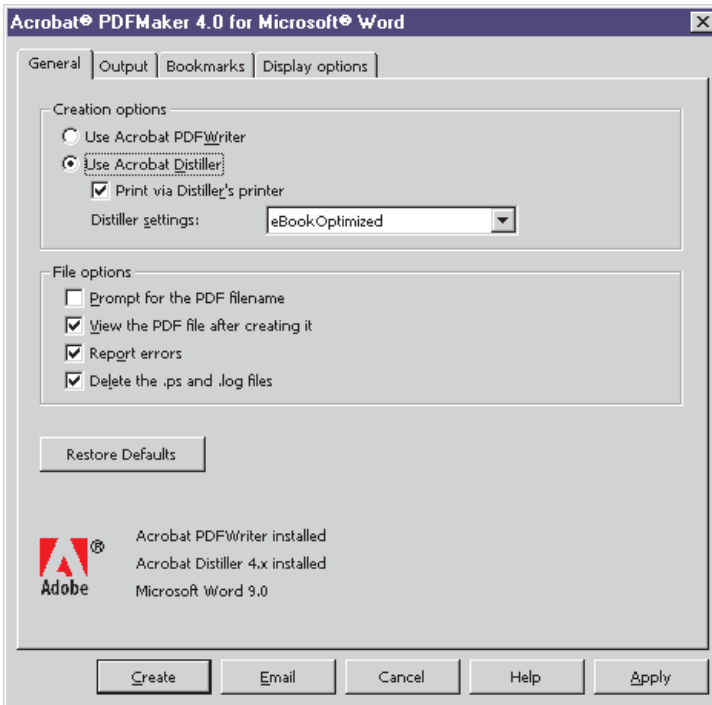
When you click Save, a temporary PostScript file is created. Acrobat Distiller then converts the PostScript file to an Adobe PDF file, and the Adobe PDF file then opens automatically in Acrobat.



MICROSOFT WORD FOR WINDOWS

Converting Microsoft Word for Windows files to Adobe PDF

- 1 Open the document in Microsoft Word.
- 2 Click the Create Adobe PDF button in the task bar or choose File > Create Adobe PDF.
- 3 In the General panel, select Use Acrobat Distiller, and then select Print Via Distiller's Printer. Then choose eBookOptimized from the Distiller Settings pull-down menu.
- 4 Click Create.

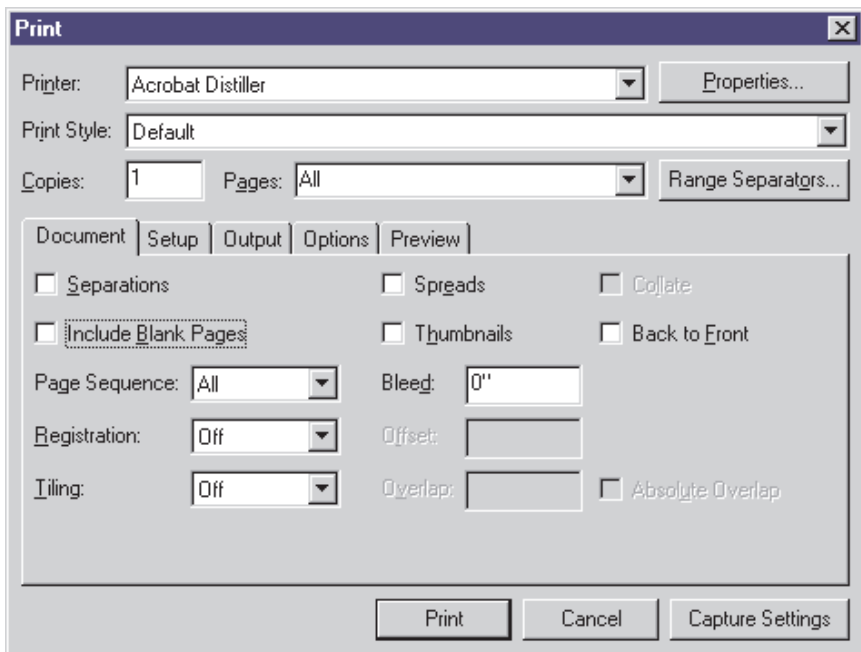


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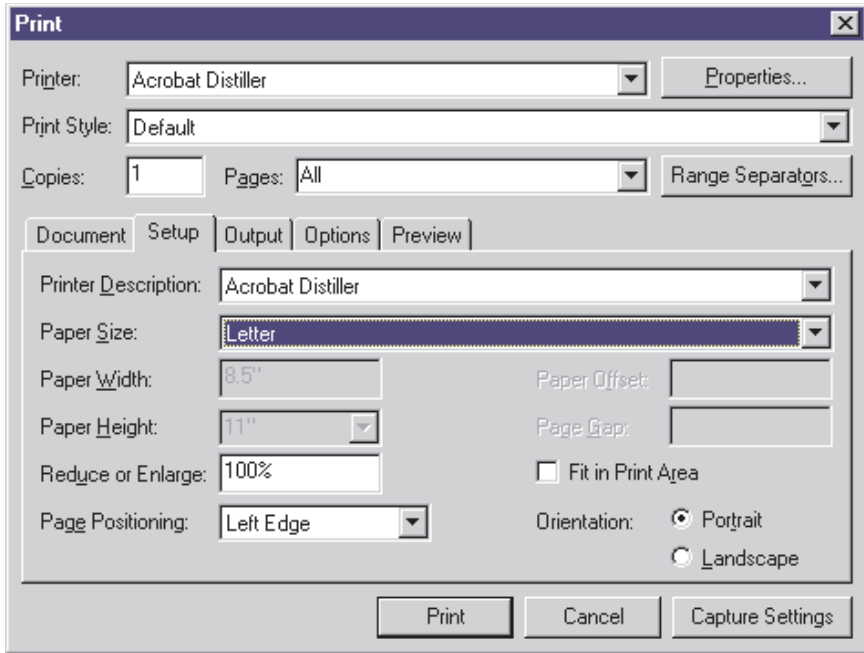
QUARKXPRESS FOR WINDOWS

Converting QuarkXPress for Windows files to Adobe PDF

- 1 Open your document in QuarkXPress 4.04 or later.
- 2 Choose File > Page Setup or File > Print to open the Print dialog box.
- 3 Select Acrobat Distiller from the Printer pull-down menu if it is not already selected.
- 4 In the Document panel, make sure none of the following options is selected: Separations, Include Blank Pages, and Thumbnails. Then select Off from the Tiling pull-down menu and set Bleed to 0"



- 5 Click the Setup panel, and then select Acrobat Distiller from the Printer Description pull-down menu.
- 6 Make sure you select Portrait Orientation, regardless of the dimensions of your document.



- 7 Select the Output panel, and then specify a Resolution of 600 dpi to optimize your output for electronic distribution. The dpi setting is used in the conversion of blends and gradients.
- 8 Choose the appropriate settings for your file in the Options panel.
- 9 Click Print.

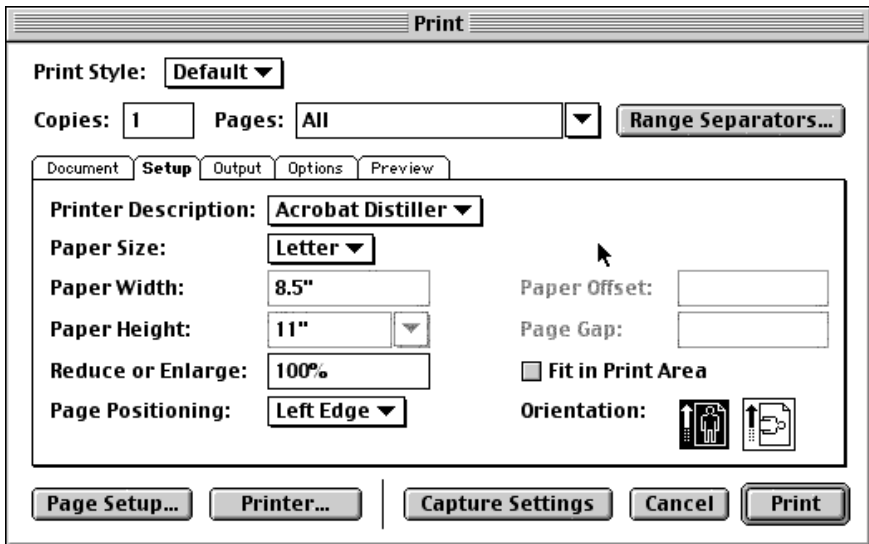
A PostScript file is generated. Acrobat Distiller then automatically launches, converts the PostScript file into an Adobe PDF document, and quits.

To simplify the PDF conversion process, Quark has developed a PDF export XTension (available for QuarkXPress 4.01 and later). The PDF Filter XTension can be selected in the Utilities menu and integrates the Acrobat Distiller job option settings to export files in Adobe PDF. It is available for both Windows and Macintosh platforms and can be downloaded at www.quark.com.

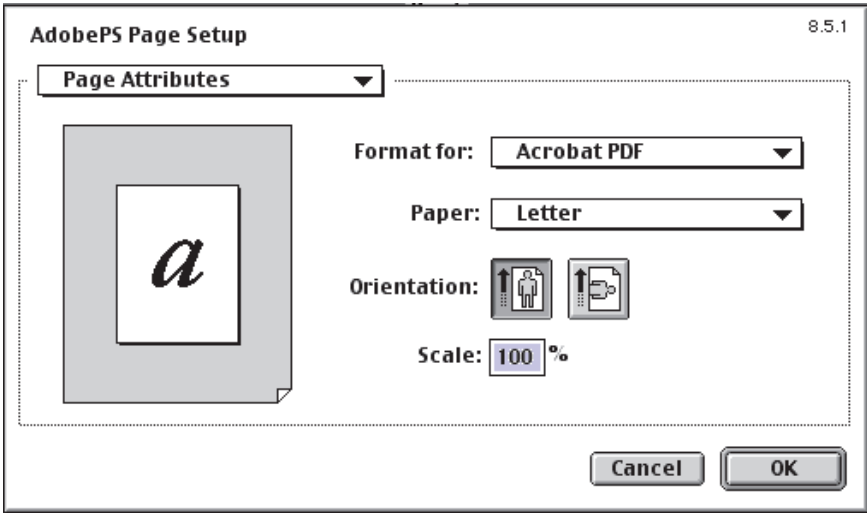
QUARKXPRESS FOR MACINTOSH

Converting QuarkXPress for Macintosh files to Adobe PDF

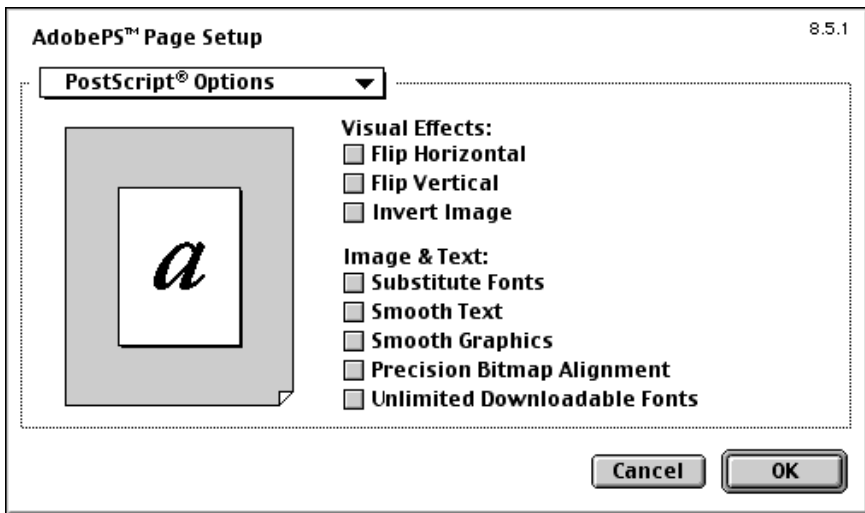
- 1 Open your document in QuarkXPress 4.0 or later.
- 2 Choose File > Page Setup or File > Print to open the Print dialog box.
- 3 Click the Setup panel in the Print dialog box, and then select Acrobat Distiller from the Printer Description pull-down menu.
- 4 Make sure you select Portrait Orientation, regardless of the dimensions of your document.



- 5 Click Page Setup at the bottom of the dialog box.
- 6 Select Acrobat PDF from the Format For pull-down menu.

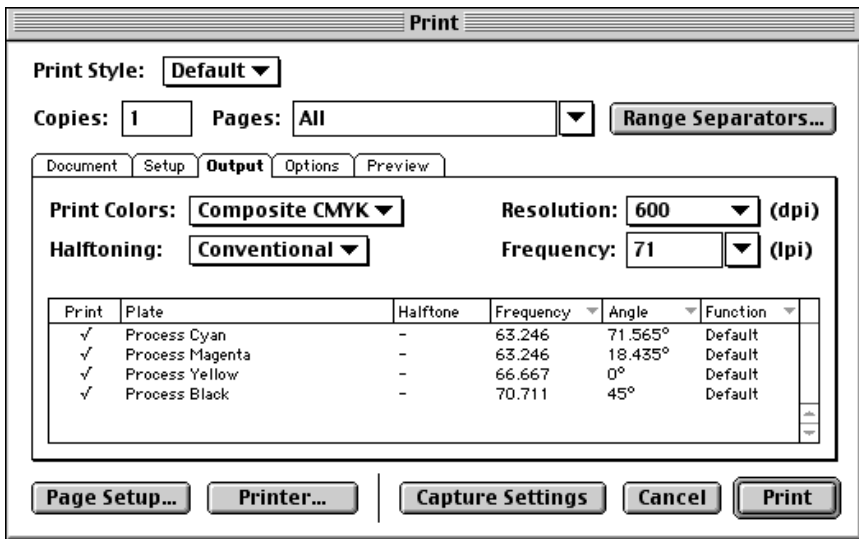


- 7 Select PostScript Options, instead of Page Attributes, from the AdobePS Page Setup pull-down menu. Ensure none of the Visual Effects or Image & Text options is selected. Then click OK to return to the Print dialog box. It is extremely important to make the right choices in this dialog box. Smoothing text or substituting fonts can make your Adobe PDF files large and unwieldy.



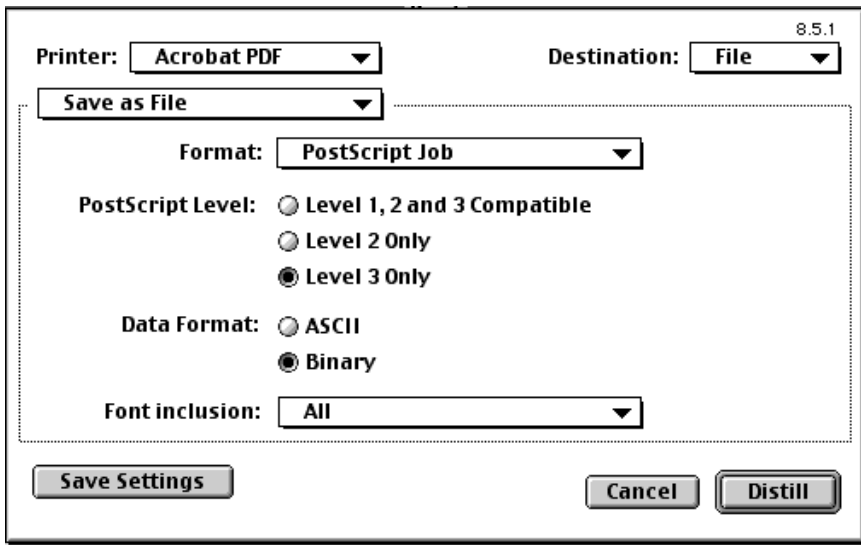
- 8 Click the Document panel in the Print dialog box. Ensure the Separations and Include Blank Pages options are not selected.

- 9 Click the Output panel in the Print dialog box to select the appropriate color and resolution settings for your document. To optimize your document for electronic distribution, set the Resolution to 600 dpi. The dpi setting is used in the conversion of blends and gradients.
- 10 Choose Composite CMYK from the Print Colors pull-down menu.



- 11 When you have specified all your settings, click Printer.

- 12 At the top left, you should see Acrobat PDF in the Printer pull-down menu and File in the Destination pull-down menu.
- 13 Select Save as File from the pull-down menu under the Printer menu, and then select PostScript Job from the Format pull-down menu. Select Level 3 Only from the PostScript Level options list. Then select Binary as the Data Format option, and choose All from the Font Inclusion pull-down menu.
- 14 Click Save Settings, and then click Distill. QuarkXPress will retain these settings until the next time you change and save them.



- 15 Choose a filename for the PostScript file, choose a storage folder for the file, and then click Save.
- 16 Click Print.

QuarkXPress generates a PostScript file, automatically launches Acrobat Distiller, converts the PostScript file into an Adobe PDF document, and quits.

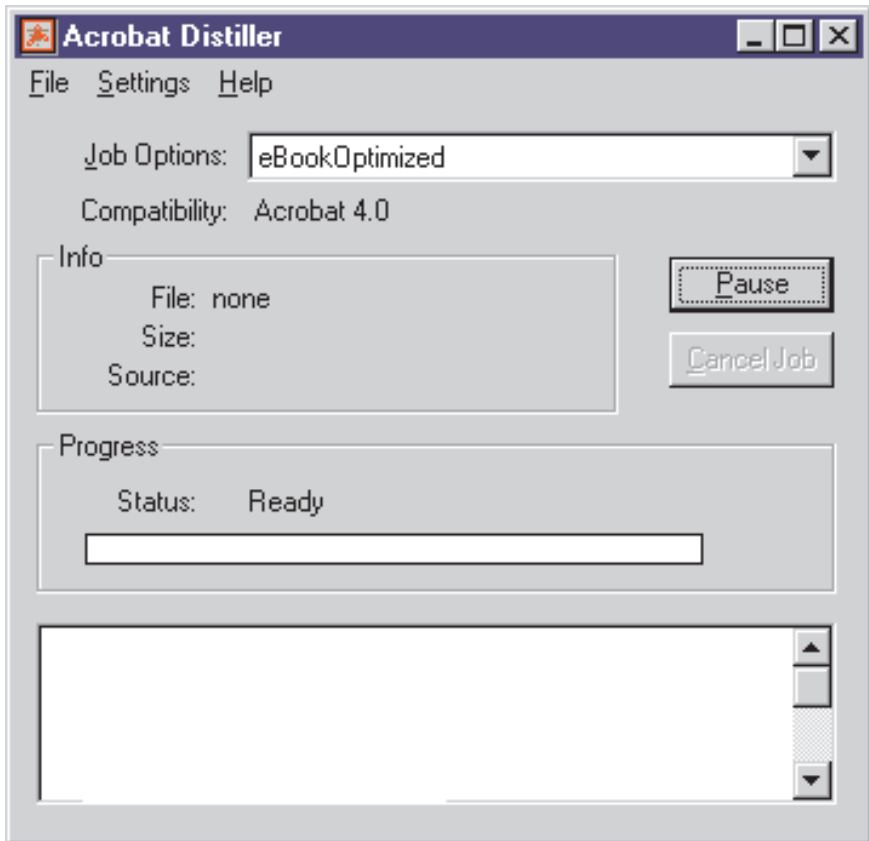
To simplify the PDF conversion process, Quark has developed a PDF export XTension (available for QuarkXPress 4.01 or later). The PDF Filter XTension can be selected in the Utilities menu and integrates the Acrobat Distiller job option settings to export files in Adobe PDF. It is available for both Windows and Macintosh platforms and can be downloaded at www.quark.com.

USING ADOBE ACROBAT 4.0 WITH EXISTING POSTSCRIPT AND PDF DOCUMENTS

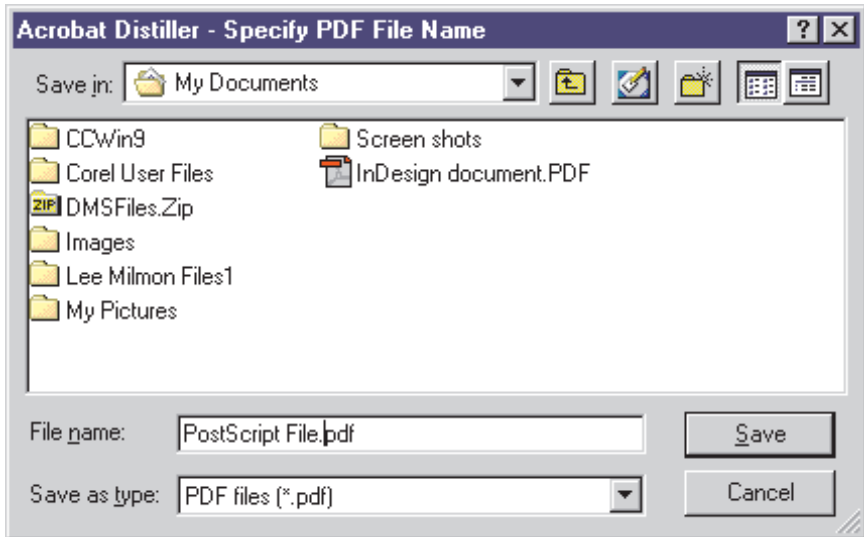
Many publishers archive the content from their printed publications as Adobe PostScript or PDF documents. Often these files contain the high-resolution data required for printing, which makes the files very large. If you want to create eBook versions of these files, you should distill them to ensure they're efficiently compressed. Make sure you are using PostScript files that were created with the Acrobat Distiller printer instance. (The full version of Acrobat uses the Acrobat Distiller printer instance to generate PostScript files.) And if possible, you should distill the files on the same computer used to create them.

Creating a compressed Adobe PDF document from an existing PostScript file

- 1 Launch Acrobat Distiller.
- 2 From the Job Options pull-down menu, select the appropriate settings for your file. If you've created an eBookOptimized job option, select that setting. (To create an eBookOptimized job option, see "Setting Up Acrobat Distiller" on page 12.)

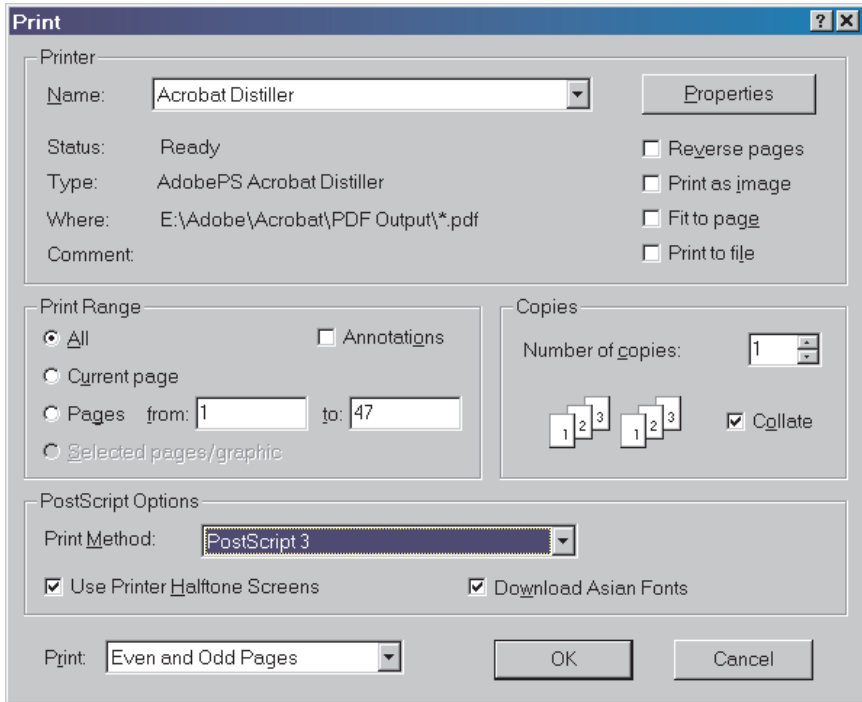


- 3 Choose File > Open and select your PostScript file.
- 4 In the Specify PDF File Name dialog box, choose a storage folder and assign a filename to the PDF document. Then click Save.



Creating a compressed Adobe PDF document from an existing, noncompressed Adobe PDF document

- 1 Open your document in Acrobat Reader.
- 2 Choose File > Print.
- 3 Select Acrobat Distiller from the Name pull-down menu.



- 4 Click OK.

When you click OK, a PostScript file is generated. Acrobat Distiller then automatically launches, converts the PostScript file into an Adobe PDF document, deletes the PostScript file, and then quits. (Distiller automatically names the PDF document by adding a “.pdf” extension to the PostScript filename and places the PDF document in the same folder as the original PDF file.) Then the PDF document automatically opens in Acrobat.

Combining multiple PostScript files into one PDF document

Just because a publication is printed as a single document doesn't mean it originated as a single file. Often, a book cover is created with different software than the content, resulting in two files. And even content can be saved as separate files, divided by sections or even by chapters. But no matter how many files make up your eBook, Acrobat Distiller can convert multiple PostScript files into a single Adobe PDF file. That way, you can consolidate your files from the beginning, so you don't have to go back into Acrobat to cut and paste pages from multiple Adobe PDF files to create one file. And when you use Acrobat Distiller to turn several PostScript files into one PDF file, the resulting PDF file size will be much smaller than if you distilled the files separately and combined the pages in Acrobat. Merging multiple PDF files into a single Adobe PDF document can lead to large file sizes because each PDF file has embedded font subsets, so the resulting master file will have multiple embedded versions of the same font subsets. Each subset of embedded fonts can add substantially to the file size of the document. By combining multiple PostScript files into a single Adobe PDF file eliminates redundant subsetted fonts and ensures your file only contains the data it needs. And that keeps your file size small.

To combine PostScript files into one PDF document, make sure you are using PostScript files that were created with the Acrobat Distiller printer instance. The full version of Acrobat uses the Acrobat Distiller printer instance to generate PostScript files. Then follow these steps:

- 1** Launch your text editor or word processor.
- 2** Choose File > Open. Then use the browser to locate Runfilex.ps (Windows) or RunFileEx.ps (Macintosh) in the Acrobat Distiller/Xtras folder, and open the file as a text file with carriage returns.
- 3** Follow the instructions in the Runfilex.ps or RunFileEx.ps file. Note that this utility combines PostScript files in the order in which they are listed.
- 4** Choose File > Save As, and save the modified Runfilex.ps or RunFileEx.ps as a new filename. Use the name you want Distiller to give the Adobe PDF document. For example, if you name the file Handbook.ps, Distiller creates a PDF document called Handbook.pdf.
- 5** Quit the text editor or word processor.
- 6** Open the file in Acrobat Distiller.
- 7** When the Adobe PDF document is ready, open the file in Acrobat and make sure all the document parts are present and in the correct order.

To combine PostScript files that are in the same folder, follow the instructions in the Rundirex.txt (Windows) or RunDirEx.txt (Macintosh) file in the Acrobat Distiller Xtras folder.

CREATE ADOBE PDF ONLINE SERVICE

Creating Adobe PDF files on the Web

If you want to create an Adobe PDF eBook but you don't own Adobe Acrobat, you can practice by using Create Adobe PDF Online (<http://createpdf.adobe.com>). Create Adobe PDF Online is a Web-hosted service that lets you convert a variety of native files to Adobe PDF documents that anyone on any platform can view or print using the free, widely distributed Acrobat Reader software. Adobe PDF documents produced with Create Adobe PDF Online can be viewed and printed across a range of platforms and printing systems, regardless of operating system or application version.

The screenshot shows the Netscape browser window displaying the 'Create Adobe PDF Online' website. The browser's address bar shows the URL <http://cpdf1.adobe.com/index.pl?BP#NS>. The website header includes the Adobe logo and navigation tabs for 'ADOBE STORE', 'SHOPPING CART', 'WEB', 'PRINT', 'MOTION', and 'ePAPER'. The main content area features a 'Free trial' banner with the text 'Now anyone, anywhere can read your files' and 'Make 3 PDF files!'. Below this is a 'Welcome' section explaining the service, followed by a 'File types' section listing supported formats like Word, PowerPoint, HTML, PostScript, Excel, WordPerfect, JPEG, and more. A 'How it works' section provides a three-step process: 1. Register for a free trial, 2. Upload your file or provide the URL, and 3. Download or receive the file as an e-mail attachment. On the right side, there is a 'Subscriber login' form with fields for 'Adobe ID' and 'Password', a 'LOGIN' button, and a link for 'Have you forgotten your password?'. Below the login form are links for 'Free trial login', 'Subscribe now', 'Product info', and 'Related products'. At the bottom right, there is a 'Get Acrobat Reader' button. The footer contains copyright information for 2000 Adobe Systems Incorporated and links to 'Terms of Use' and 'Online Privacy Policy'.

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How it works

- 1** Register for a free trial. (You can convert your first three files for free.)
- 2** If you are converting an existing document, click Browse to select a document for upload, and select the optimization you prefer. If you are converting a Web page or Web site, type in the URL you want to convert to Adobe PDF, and select the Convert URL and All Pages Linked from this URL option, if desired.
- 3** Choose your delivery method. You can wait for the conversion in your Web browser, have your Adobe PDF file e-mailed to you, or have a URL e-mailed to you so you can download the PDF file from a Web repository.

If you want to continue using Create Adobe PDF Online after your free trial, you can purchase a monthly subscription for US\$9.99 or a one-year subscription for US\$99.99. (The subscription service is currently available for U.S. residents only.) When you subscribe to Create Adobe PDF Online, you receive a password that lets you access the service.

Navigation Features for eBooks

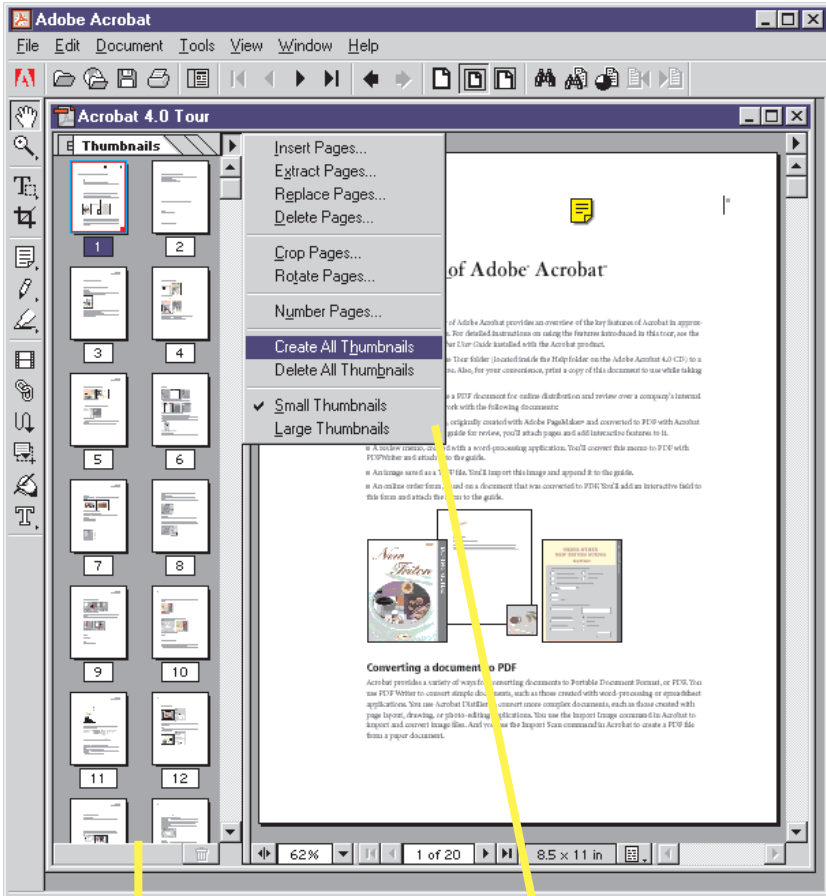
Once you have created your Adobe PDF eBook, you can use Adobe Acrobat to add helpful navigation features to your document. Create mini preview pages of your document with the Thumbnails tool. Produce quick-reference links to the important chapters and sections in your eBook with the Bookmark tool. Add hyperlinks to your eBook to connect concepts within your document or to point readers to valuable supplemental information not contained in your eBook. And ensure the page numbers on your PDF file match the page numbers on your original document with handy page and section start tools. When you make the information in your eBooks easy to access, you'll encourage readers to use your document over and over again.

THUMBNAILS

Thumbnails display miniature previews of the pages in an Adobe PDF document. When thumbnails are displayed, you can double-click a page preview to display a particular page. While thumbnails are useful tools, they are not necessary for every document. When you're creating documents for electronic distribution, consider your reader and the information you are conveying. The eBookOptimized job option does not include thumbnail creation in the Distiller settings because thumbnails can considerably increase the file size of your documents. So you must decide whether the functionality they add is worth the file size they entail. (The document you're reading does not use thumbnails because the value of the thumbnails was not worth the increase in file size.) If you do want to add thumbnails to your Adobe PDF files, you can create them in Acrobat.

To create thumbnails:

- 1 Choose Window > Show Thumbnails.
- 2 Choose Create All Thumbnails from the Thumbnails palette's pop-up menu (the right arrow in the palette). To remove thumbnails, choose Delete All Thumbnails from the pop-up menu.



The Acrobat Navigation panel displays separate palettes for bookmarks, thumbnails, annotations, and digital signatures. In this example, small thumbnails are displayed.

The Thumbnails palette's pop-up menu lets you create and delete icons for thumbnails and perform other page-related tasks.

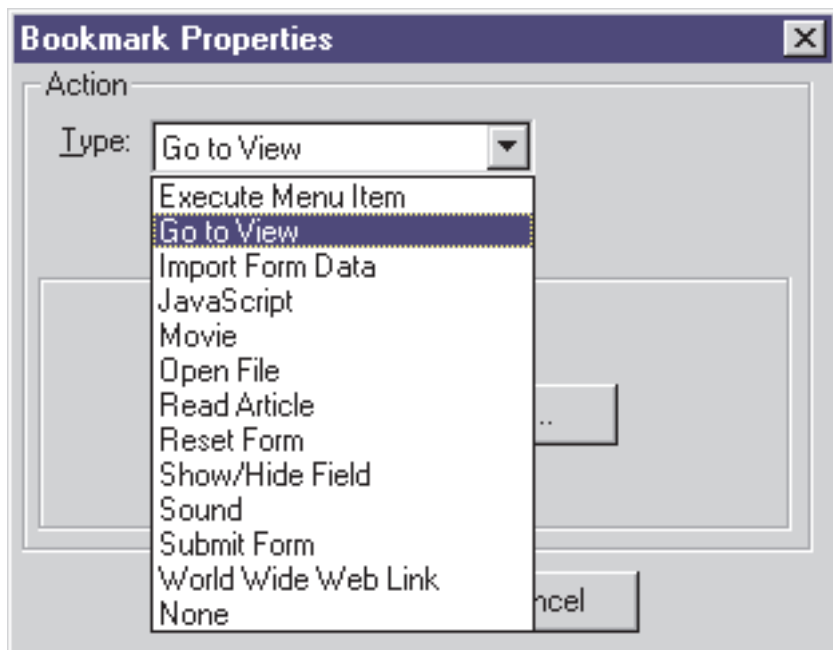
BOOKMARKS

A bookmark in an Adobe PDF document behaves like a table of contents by listing each section and subsection of the document and letting you navigate quickly to a particular page or section. Not only can you use bookmarks to jump from page to page within a document, but you can also jump to linked documents (PDF or non-PDF) or to Web pages.

To create a bookmark:

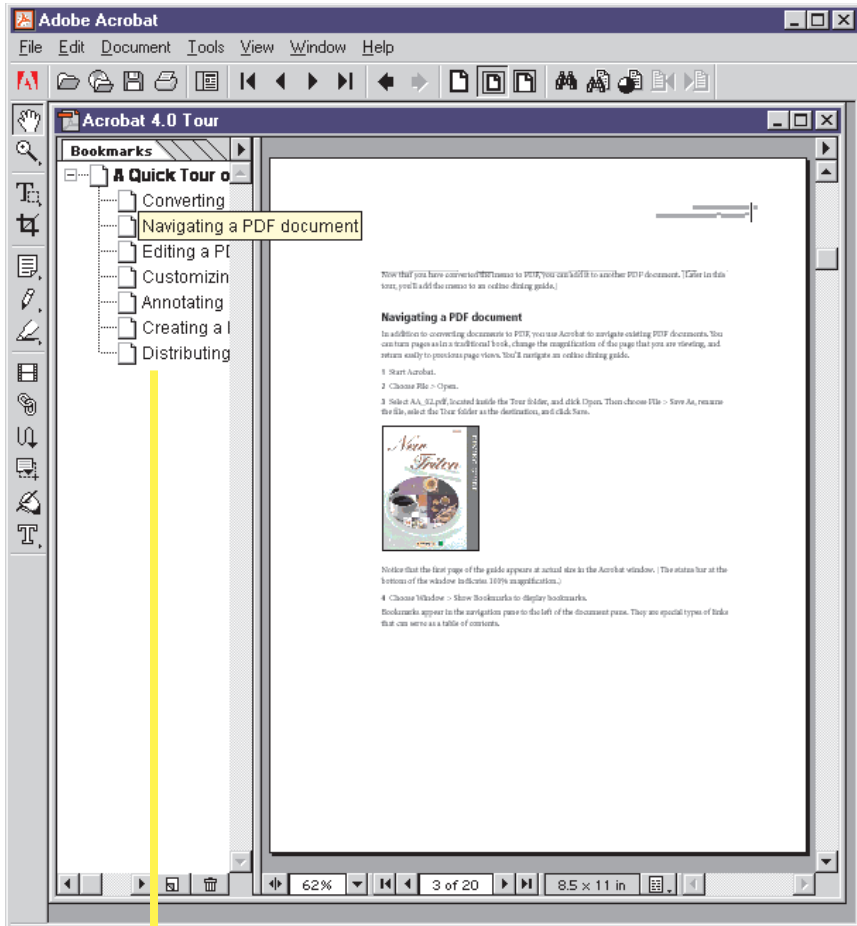
- 1** Choose Window > Show Bookmarks.
- 2** Use the Next Page and Previous Page arrows in the command bar to navigate to the page you want the bookmark to link to.
- 3** Choose New Bookmark from the Bookmarks palette's pop-up menu (the right arrow in the palette). The new bookmark is displayed in the palette.
- 4** Type in the text for the bookmark label and then press Enter.

When you're finished, you should test the bookmark by navigating to another place in the document and then clicking the bookmark. Follow the same steps to create additional bookmarks. You can click and drag bookmark icons in any order.



The Bookmark Properties dialog box lets you apply an action to a bookmark. When readers click on the bookmark, the action is performed.

You can also link an action to a bookmark. For example, you can click a bookmark to execute a menu command, play a movie or sound, or change the magnification. To link an action to a bookmark, select the bookmark, and choose Edit Properties. Then use the controls in the Bookmark Properties dialog box to specify an action. To delete a bookmark, select it and choose Delete Bookmark from the Bookmarks palette's pop-up menu.



Here you see bookmarks displayed in the Navigation panel. Clicking a bookmark displays the associated page or section.

HYPertext LINKS

When including hypertext links in a document, you must choose how the links are formatted. It is common for an authoring application to make text links colored, underlined, highlighted with a rectangle, or called out with any combination thereof.

When creating documents for electronic distribution, you will likely want to preserve the text in its original format so that it looks like the printed version.

PAGE NUMBERS

After you create an Adobe PDF document, you may notice that the page numbers on the document pages do not match the page numbers displayed on the thumbnails in the Navigation palette. Acrobat always numbers pages with integers, starting with page 1 for the first page of the document. Because some Adobe PDF documents may have originally been hard-copy documents with front matter, such as a copyright page and table of contents, the body pages may not follow the numbering shown in the Navigation palette.

Acrobat allows you to number or renumber the pages in your documents in a variety of ways. You can specify a different numbering style for page ranges, for instance 1, 2, 3; i, ii, iii; or a, b, c. You can also customize the numbering system by adding a prefix. For example, the page numbers for chapter 1 of a book could be 1-1, 1-2, 1-3, and so on.

To renumber one or more pages:

- 1** Click the Show/Hide Navigation Pane button and then select the Thumbnails tab to display thumbnails.
- 2** Choose Number Pages from the Thumbnails palette's pop-up menu.
- 3** Specify the pages you want to renumber. You can either select the All option to change the page numbers of your entire document, or you can select the From option and specify a range of pages to renumber.
- 4** Choose a page numbering sequence. You can either select the Begin New Section option and then choose a sequence from the pull-down menu or start page numbering with a prefix or a number. Or you can select the Merge Previous Section option to have the current pages you selected automatically renumbered to fall in sequence with the section that precedes it. For example, if the section that precedes the pages you selected ends on page 15, Acrobat would automatically number the first page of your selected section as page 16.
- 5** Click OK.

Note: To view customized page numbers, your readers must have the Use Logical Page Numbers option selected in their General Preferences panel. If this option is not selected, Acrobat will number the pages with Arabic numbers starting at page 1.

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ADOBE ePAPER SOLUTIONS

Leading enterprises around the world are leveraging the Web to realize efficiencies and drive new e-business models. Many of these new models revolve around electronic documents, which enable collaborative work processes, streamline distribution, and provide unprecedented interactivity. Still, paper has not gone away. To succeed in today's Web-driven environment, businesses must learn how to integrate paper-based information with the speed, flexibility, and accessibility of electronic document workflows.

Adobe ePaper Solutions comprise technologies and services—including Adobe Acrobat and Adobe PDF—that form a bridge between paper and digital information. By helping companies create, capture, transmit, archive, access, and reproduce information electronically, these Adobe technologies and services ensure that information can benefit every corporate intranet, extranet, and Internet business process. Used in a variety of ways across the enterprise, Adobe ePaper Solutions provide a natural complement to paper and an excellent foundation for e-business practices.

For more information about Adobe ePaper Solutions, please visit www.adobe.com/epaper.

THIRD-PARTY TOOLS

Hundreds of third-party solutions built for Adobe Acrobat are available to help you get the most out of Adobe Acrobat software. With third-party plug-ins, you can take advantage of the powerful extensibility of Adobe PDF.

Compose 4.0

Compose, from Ambia Corporation, is a comprehensive set of 22 publishing tools for Adobe Acrobat software that streamlines your document production tasks. Batch process multiple PDF files from one central dialog box. Automatically create hypertext links in your existing table of contents and index pages. Build tables of contents or indexes for individual documents, or create a master table of contents for your multidocument publishing applications. Even add custom headers and footers to your Adobe PDF documents. Compose is available for Microsoft Windows. For more information, visit www.ambia.com.

Compose Document Conversion Server

Ambia Corporation's Compose Document Conversion Server (DCS) converts and stores up to 500,000 pages in PDF that can be searched quickly and easily. For more information, visit www.ambia.com.

Enfocus PitStop 4.0

Enfocus PitStop 4.0 adds powerful, seamlessly integrated, and easy-to-use preflight, editing, and correction capabilities to Adobe Acrobat. Preflight your PDF document within PitStop, and this tool will guide you through automatic correction and interactive editing. Visit www.enfocus.com for more information.

ISI ToolBox

ISI ToolBox is a suite of plug-ins that allows you to create hypertext links and bookmarks and copy text, tables, and graphics from PDF files. For more information, visit www.imagesolutions.com.

Quite a Box of Tricks

This easy-to-use toolkit helps you solve your PDF formatting problems. Convert CMYK or grayscale, thicken hairlines, shrink files for proofing by subsampling or performing extra compression, change all text to black, and do much more. The software is fully compatible with Acrobat 4.0 for Macintosh or Windows. For more information, visit www.quite.com.

Sonar Bookends Activate

Sonar Bookends Activate, from Virginia Systems, is a plug-in for Adobe Acrobat that can dynamically create hypertext links for page numbers in an index, page numbers in a table of contents, URLs and e-mail addresses, and figure and table references. Using Sonar Bookends Activate, the time-consuming work of creating hyperlinks for a book takes less than one minute. For information and a free demo, visit www.virginiasonsystems.com.

These are only some of the third-party tools you can use to customize and enhance your Adobe PDF documents. To find out what other people are doing with Acrobat and Adobe PDE, visit www.PDFzone.com.

Appendix A:

Advanced Tips



WORKING WITH ROTATED PAGES

Acrobat Distiller automatically recognizes the rotation of pages in a file based on the predominant text orientation, and rotates them appropriately in the resulting Adobe PDF file. Sometimes this rotation is done incorrectly depending on the information in the PostScript file. If you run into this problem, you have two options: You can manually rotate pages using Acrobat, or you can turn off the automatic rotation of pages in Distiller as follows:

- 1** In a text editor (such as Wordpad in Windows), open your .joboptions file (found at C:\Program Files\Adobe\Acrobat 4.0\Distillr\Settings*.joboptions or similar).
- 2** Change the /AutoRotatePages parameter to /None.
- 3** Save the file and then close it.

The next time Distiller is launched, the new setting will be used.

Note that the eBookOptimized job option file available at www.adobe.com already has the /AutoRotatePages parameter set to /None. If you downloaded the eBookOptimized job option from the Adobe Web site, you don't need to edit the .joboptions file. If you created your own eBookOptimized job option, you will need to edit the .joboptions file manually if you are having trouble with page rotations in Acrobat.

WORKING WITH VECTOR GRAPHICS

Vector graphics are made up of a series of lines and mathematical instructions (“draw a line from here to there” or “draw a circle with this center and radius”). This means that their resolution when viewed or printed will match the output device instead of being a fixed resolution like raster images. This is one of the strengths of Adobe PDF—it can store and use vector graphics for printing and viewing, thus maintaining the highest quality for illustrations.

In most cases, these drawing commands will consume less space in the Adobe PDF file and will appear more quickly on-screen than their raster counterparts. In some rare instances, complex illustrations may actually be larger than a raster image and appear slowly. Sometimes this can happen when complex graphics are described in PostScript using programmatic loops (such as, for $i=1$ to 5, draw line). In the equivalent PDF file, this statement gets flattened into five separate commands. For large loops, this can mean a very large description in Adobe PDF.

In these rare cases, it may make sense to rasterize the vector graphics. Fortunately, you can convert vector files to bitmap format using graphics programs such as Adobe Illustrator® and Adobe Photoshop® (using their Save As or Export feature) or by using any of several graphics transformation utilities, such as Image Solutions’ ISICopy (see www.imagesolutions.com).

To convert vector graphics in Adobe PDF files to bitmaps using Adobe Illustrator:

- 1** In Illustrator 8.0, choose File > Open.
- 2** Locate and select the Adobe PDF file you want to open.
- 3** Select the page that contains the vector graphics and click OK.
- 4** With the Selection Tool, select the vector graphic you want to convert.
- 5** Select the following options:
 - Color Model: RGB
 - Resolution: Medium/150 dpi
- 6** Click OK.
- 7** Choose File > Save.
- 8** Select the appropriate Adobe PDF file options and click OK.

The PDF file is then updated with the bitmapped graphics.

WORKING WITH BLENDS AND GRADIENTS

If you're working with an application that doesn't support PostScript Level 3, you may find idiom recognition, a feature supported by Acrobat 4.0, useful. Idiom recognition enables the conversion of blends and gradients from authoring applications that support only PostScript Level 2—such as older versions of Adobe Illustrator, Macromedia FreeHand, QuarkXPress, and CorelDRAW—into PostScript 3™ smooth shades. Acrobat Distiller 4.0 turns off this option by default, but you can re-enable it if you select Acrobat 4.0 compatibility in the General panel and if you change the idiom recognition parameter from false to true as follows:

- 1 In a text editor (such as Wordpad in Windows), open Example.ps (found at C:\Program Files\Adobe\Acrobat 4.0\Distillr\Startup\Example.ps or similar).
- 2 Find the IdiomRecognition definition and change it to read:
`<</IdiomRecognition true>> setuserparams`
- 3 Save the file and close it.

The next time Distiller is launched, the new setting will automatically be used.

Note: Once smooth shades have been defined in the Adobe PDF file, they may not print with the highest quality to PostScript Level 2 or earlier devices. If you need high-quality printing to non-PostScript 3 devices, you should not enable idiom recognition. If your files are targeted for online use or will be printed to PostScript 3 devices, then it is beneficial to enable idiom recognition.

WORKING WITH EPS FILES

Encapsulated PostScript (EPS) is a graphic file format. An EPS file is not designed for printing; it is usually incorporated in a page design and then printed. Acrobat Distiller can convert EPS files to Adobe PDF files, but unlike PostScript files, EPS files do not have a defined page size and may not include required fonts. The default page size and resolution in the Distiller job options compensate for the lack of a defined page size and missing fonts in EPS files.

Distiller gains access to font information in two ways:

- The font is included in the PostScript file that Distiller is converting.
- The font is available in a monitored font location.

If you get font errors when trying to convert an EPS file created in any application other than QuarkXPress (version 4.0 or later) to a PDF file, you probably did not embed the fonts in the EPS file when it was saved or you distilled the file on a different machine than the one used to create the original EPS. To eliminate font errors in Adobe PDF files, either distill the files on the same computer as the one used to create the EPS files (with all the fonts available) or embed fonts in EPS files when saving the EPS files from the original application. In Adobe Illustrator, check Include Document Fonts when creating an EPS file. If a particular font is unavailable, Distiller will substitute it with Courier.

Depending on the operating system, Distiller will monitor font folders and use the fonts in those folders to convert PostScript files with unembedded fonts. If you need Distiller to monitor font folders other than the default folders, you can add those font locations in Distiller.

A large, thin orange outline of the number '10' is positioned in the background, spanning most of the page. The '1' is on the left and the '0' is on the right, both rendered in a clean, sans-serif style.

Appendix B: Customizing Distiller Settings

GENERAL SETTINGS

Compatibility

The General job options allow you to specify the version of Acrobat for file compatibility and other file and device settings, including resolution and optimization.

You can create Adobe PDF documents that are compatible with Acrobat 3.0 or Acrobat 4.0. However, if your files contain any of the following elements, you should make your files Acrobat 4.0 compatible, or these elements will be lost:

- Smooth shading (converted to images in Acrobat 3.0)
- Use of sRGB and DeviceN color (CalRGB supported in Acrobat 3.0)
- Masked images
- Page sizes larger than 45 inches (Acrobat 4.0 supports pages up to 200 inches)
- Documents larger than 32,768 pages
- Embedded double-byte fonts
- Searchable TrueType fonts

Ensure the ASCII Format option is not selected. This option is useful if you want to open the file in a text editor to view its contents, but it produces larger files and should be avoided for PDF documents being distributed electronically.

Be sure to select the Optimize PDF option. This option reduces the Adobe PDF document size. To optimize a file, Acrobat removes repeated background text, line art, and images, replacing them with pointers to the first occurrences of those objects, and then restructures the file to prepare for page-at-a-time downloading from Web servers.

Generate Thumbnails creates a thumbnail preview for each page in the Adobe PDF document. You should consider whether you want to include thumbnails in your PDF document because they will increase the file size. You should also consider the environment in which the document will be viewed. For example, some dedicated eBook reading devices do not give users the option of viewing thumbnails.

Resolution

The resolution setting is sometimes used by PostScript Level 2 programs when generating blends and gradients. (Distiller does not directly use the resolution setting to make decisions about how to create an Adobe PDF file.) You can enter a value from 72 to 4,000. However, note that a low-resolution setting can cause banding in gradients and can slightly change the positioning of objects. Generally, you should set resolution to 600 dpi and experiment if you do not get desirable results.

Binding

Binding specifies whether to display a PDF document with left-side or right-side binding. This affects the display of pages in the Facing Page—Continuous layout and the display of thumbnails side by side. Some Asian languages use right-side binding. In all other cases, the default value Left should be selected.

COMPRESSION SETTINGS

To make bitmapped images small enough for online distribution, you must compress Adobe PDF documents to consume the least amount of disk space. For continuous-tone images such as photographs, JPEG Medium compression saves a lot of space without compromising quality.

You may want to apply different compression settings to your Adobe PDF documents and then compare the resulting image quality and file size. Use Distiller to convert two or three versions of a document to Adobe PDF, each with a different compression setting, and save each version as a separate file. Then open the files in Acrobat and compare them, zooming in at 400 percent for a close view of the images. Compare their file sizes as well. If it is difficult to detect any degradation in images in a document with default compression, higher compression settings may not be worth the increase in file size.

Color and grayscale images

The JPEG compression method is suitable for grayscale or color images such as continuous-tone photographs that contain more detail than can be reproduced on-screen or in print. JPEG is lossy, which means that it removes image data and may reduce image quality, but it attempts to reduce file size with the minimum loss of information. Because JPEG eliminates data, it can achieve much smaller file sizes than Zip compression.

Acrobat provides five JPEG options, ranging from Maximum quality (the least compression and the smallest loss of data) to Minimum quality (the most compression and the greatest loss of data). The loss of detail that results from the Maximum and High quality settings are so slight that most people cannot tell an image has been compressed; at Minimum and Low, however, the image may become blocky and acquire a mosaic look. The Medium quality setting usually strikes the best balance in creating a compact file while still maintaining enough information to produce high-quality images. You may want to experiment with different settings as described above to obtain optimal results.

The Zip/LZW 8-bit and 4-bit options in Distiller are actually combinations of two techniques. They perform a potentially lossy reduction of the color depth of an image to 8 or 4 bits respectively per component (for example, 4 bit means 4-bit gray, 12-bit RGB, and 16-bit CMYK), and then perform a lossless Zip or LZW compression. The 8-bit color depth reduction is lossy only if you have a PostScript Level 2 file with 12-bit color components. The 4-bit color depth reduction is lossy only if you have 12- or 8-bit components.

In Distiller, downsampling an image or converting color space from RGB to CMYK or vice versa can trigger an increase in color depth. (For example, downsampling a black-and-white image can produce an anti-aliased gray image). This happens before any color depth reduction.

The choice between Zip/LZW and JPEG for the Automatic compression option is complex. The goal is to select an appropriate compression technique for each image. JPEG should be used if the image is downsampled by more than 2:1 or if the average and standard deviation of the differences between adjacent pixels are less than some empirical threshold (indicating smooth color transitions). If you don't like the Automatic choice, use Manual.

Distiller will not compress an indexed-color image or one with fewer than 256 distinct color values as a JPEG; it will use Zip/LZW instead. For files being distributed electronically, you should choose the Automatic setting with Medium quality.

Monochrome images

The International Coordinating Committee for Telephony and Telegraphy (CCITT) compression method is appropriate for black-and-white images made by paint programs and any images scanned with an image depth of 1 bit. CCITT is a lossless method. Acrobat provides the CCITT Group 3 and Group 4 compression options. CCITT Group 4 is a general-purpose method that produces good compression for most types of monochrome images. CCITT Group 3, used by most fax machines, compresses monochrome bitmaps one row at a time.

Run Length is a lossless compression option that produces the best results for images that contain large areas of solid white or black.

Adobe recommends using a default compression setting of CCITT Group 4. This setting produces the smallest file sizes for most monochrome images.

All text and line art is compressed using the ZIP compression method, which is lossless. You should always compress text and line art.

Resampling

Resampling refers to changing the pixel dimensions (and therefore, file size) of an image. When you downsample (or decrease the number of pixels), information is deleted from the image. When you resample, new pixel information can be added based on color values of existing pixels. There are several types of sampling:

- Average downsampling averages the pixels in a sample area and replaces the entire area with the average pixel color at the specified resolution.
- Bicubic downsampling uses a weighted average to determine pixel color and usually yields better results than the simple averaging method of downsampling. Bicubic is the slowest but most precise method, resulting in the smoothest tonal gradations.
- Subsampling chooses a pixel in the center of the sample area and replaces the entire area with that pixel at the specified resolution. Subsampling significantly reduces the conversion time compared with downsampling but results in images that are not as smooth or continuous. Acrobat Distiller 3.0 supports subsampling only.

For documents you intend to distribute electronically, bicubic downsampling at 150 dpi is recommended to produce the highest quality files for viewing on-screen. You may want to consider increasing this resolution to 200 dpi for viewing on 96-dpi monitors if the additional file size is acceptable. If these settings do not produce desirable results, you may want to test other settings.

FONT SETTINGS

It is important to the integrity of your documents to maintain the fonts you chose during authoring. Acrobat Distiller can embed Roman Type 1 and TrueType fonts in an Adobe PDF document to prevent font substitution when readers don't have the right fonts installed on their system. For each font embedded, Distiller can embed the subset of characters used in the file. Type 1 and TrueType fonts can be embedded if they are included in the PostScript file or are available in one of the font locations Distiller monitors. By selecting the Embed All Fonts in Distiller option, you can ensure readers view your documents the way you intended. And to keep your Adobe PDF file size small, you can set the Subset All Embedded Fonts Below option to 100 percent so that Distiller embeds only those characters used in the document.

Is embedding fonts illegal?

Embedding certain typefaces in Adobe PDF documents is legal, but readers cannot use those fonts in their own documents. In addition, readers may not edit documents with embedded typefaces unless those typefaces are licensed to and installed on the computer performing the editing. Typefaces in the Adobe Type Library that were created by Adobe, Linotype, ITC, Monotype, Agfa, and Fundicion Tipografica Neufville may be embedded in Adobe PDF documents for viewing and printing the document. Fonts from other companies may or may not be approved for embedding in Adobe PDF files. Check the end-user license agreement included with your font package or contact the company that licensed you their typefaces to determine if embedding is legal. TrueType font vendors embed a special flag set in their fonts that either enables or disables font embedding. If a TrueType font cannot be embedded, then it will not show up in the Embedding list in Distiller Job Options > Fonts and will not be embedded by Distiller.

COLOR SETTINGS

The Color panel lets you specify how Distiller uses ICC profiles (“tags”) and whether it converts colors when distilling files.

The settings control which color spaces are assumed when the resulting Adobe PDF documents are exchanged between different applications and output devices. When you select the Convert All Colors To sRGB/CalRGB option, Distiller calibrates color in the file, making the color device-independent.

With Acrobat 4.0 compatibility selected in the General dialog box, CMYK and RGB images are converted to sRGB. With Acrobat 3.0 compatibility selected, CMYK and RGB images are converted to calibrated RGB (CalRGB).

Because RGB is the native color space used on monitors, using RGB images in your file means that no color conversion is necessary during display, which enables faster online viewing. Therefore, converting colors to RGB is ideal for documents that will be viewed on-screen.

It’s a good idea to specify sRGB IEC61966-2.1 for your RGB images because it is becoming an industry standard and is recognized by many output devices. For CMYK, the recommended setting is Adobe CMYK, which is the default setting.

ADVANCED SETTINGS

The Advanced job options specify DSC comments to keep in an Adobe PDF document, define a default page size, and set other options that affect the conversion from PostScript. In a PostScript file, DSC comments contain information about the file (such as the originating application, the creation date, and the page orientation), which can be useful when your document is being printed.

The default page size is used if a PostScript file does not specify a page size. Typically, PostScript files include this information, but EPS files do not—they provide a bounding box size but not a page size. For files you intend to distribute electronically, selecting the Allow PostScript file to Override Job Options, Preserve Level 2 copypage Semantics, Process DSC Comments, and Resize Page and Center Artwork for EPS files options is recommended.

For more detailed information on the Advanced Settings in Acrobat Distiller, visit www.adobe.com/products/acrdis.

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