



The Chemical Society of Japan GUIDELINES FOR CREATING PDF FILES

*This document originally published by American Chemical Society, Information Technology/
Publications Decision, Washington, D.C.*

Copyright © 2001 American Chemical Society

Adapted and Reprinted with Permission.

**The Chemical Society of Japan
1-5 Kanda-Surugadai, Chiyoda-ku, Tokyo 101-8307
[TEL] +81-3-3292-6165 [FAX] +81-3-3292-6319**

1.0 GETTING STARTED

1.1 About this Guideline

This guideline presents information and instructions for creating Adobe Acrobat PDF files from your manuscript files. It is written to show beginners how to work with Adobe Acrobat screens and utilities and to provide experienced users with a quick reference to specific information and solving problems. This guideline is an introduction to working with PDF files and is not meant as a substitute for the Adobe Acrobat guideline or online HELP available on the Web.

1.2 Introduction to Creating PDF Files

Authors have the option to either submit a word processing file for conversion to Portable Document Format (PDF) by the CSJ or submit both a word processing file and a PDF file that you (the author) create. CSJ has adopted the Portable Document Format (PDF) for peer review of manuscripts, because it consolidates an array of document types into a unified file format, which are distributable across different computing platforms consistently. This allows editors and reviewers the ability to work with your materials. However, the PDF file you submit for peer review is not used for publication. The final publication processing of your manuscript uses the files you originally submitted (e.g., your word processing and ChemDraw files or other graphics files) in an entirely different composition process that ensures high-quality reproduction of your manuscript.

1.3 Guidelines for Creating PDF Files

In order to create successful PDF files of your manuscripts, please remember the following guidelines when making PDF files:

- Always embed all fonts,
- Always use embeddable Type 1 or TrueType fonts,
- Always create the PDF on the machine where the original document was created,
- Use U.S. Letter (8 1/2" by 11") paper size as the original document page size for all manuscripts. Do not use A4 or other size paper settings,
- Check how fonts appear to others. (Turn local fonts off (if using the full Acrobat 4.0 product) or go to another computer and view the PDF file). Be sure to PRINT the file and examine the graphics,
- Always check your results before submitting your manuscript, by using our Check PDF utility,
- Avoid using Adobe Acrobat PDFWriter.

NOTE: Adobe[®] Acrobat Reader cannot produce PDF files. In order to produce a PDF file, you must use [Adobe Acrobat](#).

NOTE: Do not use PDFWriter. Instead, use the Adobe Distiller component of Adobe Acrobat.

1.4 Requirements for Creating PDF Files

This section discusses the requirements for installing and using Adobe Acrobat successfully.

In order to create and view your PDF file, you must successfully install the complete Adobe Acrobat set of programs and utilities on either a PC running at least Microsoft Windows 95 or a Macintosh computer. If you have not, then please install them or see your systems administrator before continuing with these instructions. Additionally, you need to save your text materials in a popular word processing format (e.g., Microsoft Word, WordPerfect, or FrameMaker) or you can save your text in Rich Text Format (RTF).

The procedures in this document assume you are using a Microsoft Word document format created from your authoring application and bitmap (.bmp) file format for your graphics.

Note: For best results, we recommend using Adobe Acrobat v. 4.0 or later versions when working with the Web Manuscript Submission system.

1.5 Conventions Used in This Guideline

This guideline uses several printing and typographic conventions for presenting information and instructions while working with PDF files. The following list presents those conventions.

- Instructions for working through the procedures appear as numbered steps,
- Numbered steps and instructions appear to the right of their corresponding image as they occur in the process,
- The names of the control objects and fields used in the instructions appear capitalized and bold,
- Web page URLs appear underline,
- Screen, window, and pop-up names and titles appear bold.

1.6 Getting HELP

This guideline provides detailed information and instructions for working with and creating Adobe Acrobat PDF files according to how the CSJ Electronic Submission System uses them. For more help, please make a contact to CSJ Editorial Office.

Attn; Editorial Office of Chemistry Letters

The Chemical Society of Japan

1- 5, Kanda-Surugadai, Chiyoda-ku, Tokyo 101-8307, Japan

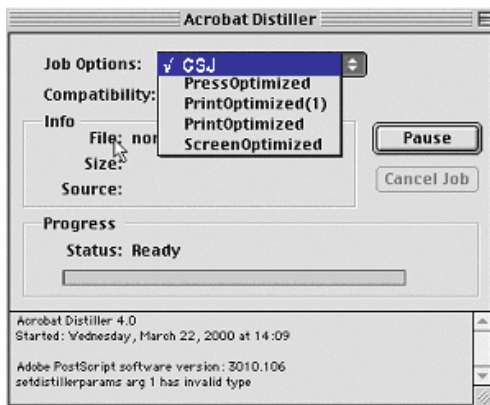
Phone: +81-3-3292-6165 Fax: +81-3-3292-6319 E-mail: chemlett@chemistry.or.jp

2.0 SETTING UP YOUR DESKTOP COMPUTER TO WORK WITH ADOBE ACROBAT

This chapter presents step-by-step instructions for installing and configuring Adobe Acrobat to work from your desktop computer.

2.1 *Setting up Adobe Distiller 4.x for Macintosh*

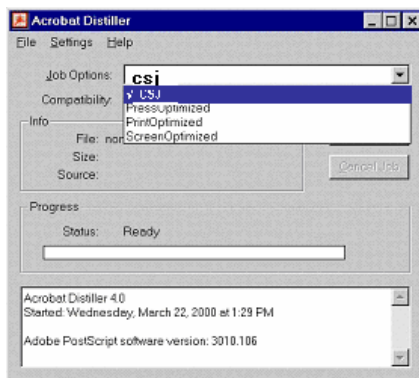
The **CSJ Job Options** file allows you to set up Adobe Distiller 4.X and avoid the problems that can occur when converting your word processing files to PDF. The **CSJ Job Options** file sets the correct parameters for converting your manuscript to a PDF file. Instructions for using the **CSJ Job Options** are available on the **Download Job Options** page.



1. Once **Acrobat Distiller** is open, select the **Job Options** box,
2. From the list, select the **CSJ Job Option** item,
3. You are now ready to create PDF files.

2.2 *Setting up Adobe Distiller 4.x or later versions for Microsoft Windows*

The **CSJ Job Options** file allows you to set up Adobe Distiller 4.X or later versions and avoid the problems that can occur when converting your files to PDF. The **Job Options** file sets the correct parameters for converting your manuscript to a PDF file. Instructions for using the **CSJ Job Options** are available on the **Download Job Options** page.



1. From Acrobat Distiller, click on the **Job Options** drop-down list,
2. From the drop-down list, select the **CSJ job option**,
3. You are now ready to create your PDF files.

3.0 CONVERTING FILES TO PDF

This chapter presents step-by-step instructions for creating PDF files from several types of word processing file formats.

3.1 Using Adobe Acrobat for Macintosh

This section presents instructions for creating PDF files from Macintosh computers.

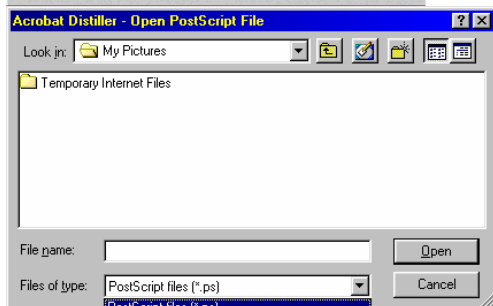
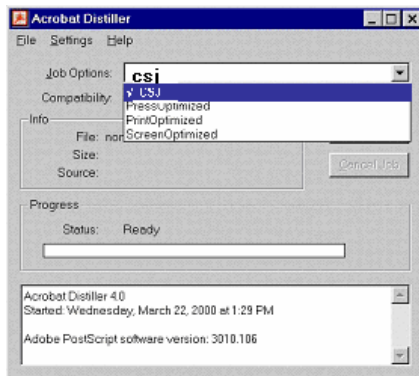
3.1.1 Using Adobe Distiller to convert PostScript files

There are two methods for distilling files from Adobe Acrobat Distiller. You can convert PostScript files directly to PDF or you can convert files to PDF from within your authoring application (e.g. MS WORD). These methods are described below.

Creating a PDF file directly

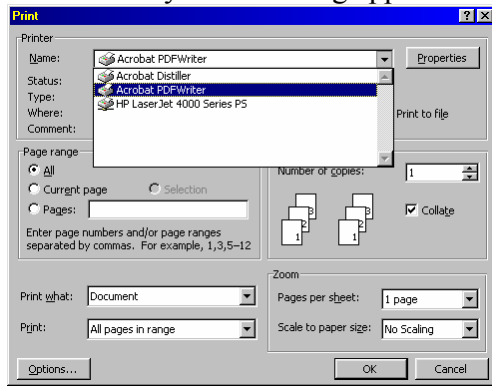
To create a PDF file directly from Adobe Acrobat Distiller, perform the following steps:

1. From within your application, save your file as a PostScript file. For detailed instruction on saving PostScript files, refer to 4.6 *Creating PostScript Files*,
2. From Adobe Distiller select the **Job Options** value **CSJ**,
3. Leave Adobe Distiller up and running,
4. From Adobe Distiller, select **File > Open**,
5. The **Acrobat Distiller Open PostScript File** window appears,
6. Select the PostScript file from the list. (*HINT*: Choose **All Files** from the **Files of Type** popup menu if the PostScript file does not appear in the list, since it might have an extension other than .ps (such as .pm)),
7. Click **Open**,
8. Enter a filename and location to save the PDF file,
9. Click **Save**.

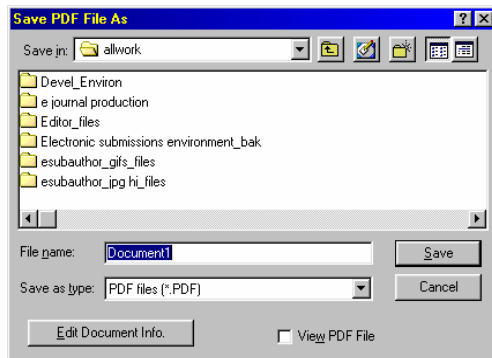


Converting files to PDF from within your authoring application

You can use Adobe Distiller Assistant to distill your file just as easily as printing it. In order to use it to create PDF files, you must have Adobe Distiller Assistant installed correctly in the Extensions folder within your System Folder. To convert files to PDF from within your authoring application, perform the following steps:



1. Save your authoring application document file to a directory on your computer,
2. Open Adobe Distiller and select **CSJ** as the **Job Options** that you want to use and then leave Adobe Distiller up and running,
3. From the authoring application (e.g., Word) menu bar select **File**,
4. From the dropdown options, select **Print**.
5. The **Print** popup window appears,
6. From the **Printer Name** list, select **Acrobat PDFWriter**. Be sure that your print range, number of copies, and other printing parameters are set correctly,
7. Click **OK**,
8. The **Save PDF File As** pop-up window appears and is ready to generate a PDF version of your document,
9. Specify the directory path, file type, and filename, then
10. Click **Save** when you are ready to save your file as PDF,
11. A new PDF version of your document is saved in the directory you specified,
12. Open your newly created PDF file to verify that it generated correctly,
13. Repeat steps 2-8 for each file you want to convert to PDF or if your new PDF file is not correct.



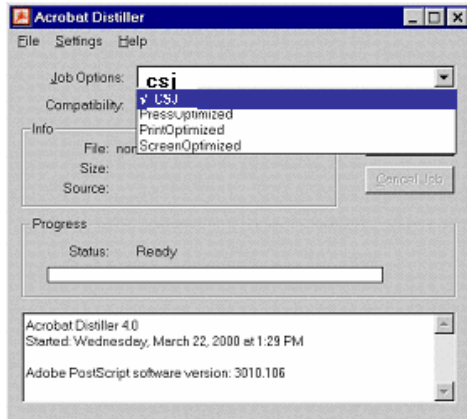
3.2 Using Adobe Acrobat for Microsoft Windows

This section presents instructions for working with Adobe Acrobat on computers running Microsoft Windows.

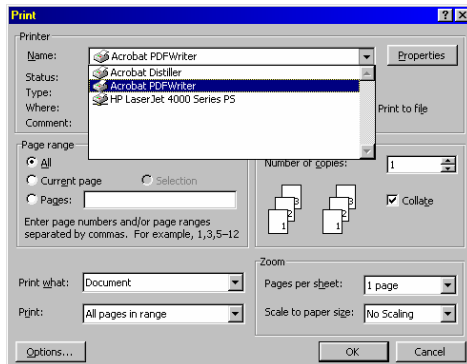
3.2.1 Converting files to PDF from Adobe Acrobat Distiller 4.x or later versions

You can use Adobe Distiller to convert PostScript files directly to PDF or you can use Distiller Assistant to convert files to PDF from within your authoring application. These methods are described below.

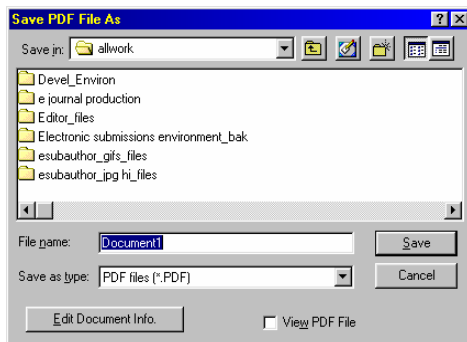
Creating a PDF file from Adobe Acrobat Distiller 4.x or later versions for Microsoft Windows



1. Save your authoring application document file to a directory on your computer,
2. Open Adobe Distiller and select **CSJ** as the **Job Options** that you want to use and then leave Adobe Distiller up and running,
3. From the authoring application (e.g., Word) menu bar select **File**,
4. From the drop-down options, select **Print**,
5. The **Print** pop-up window appears,



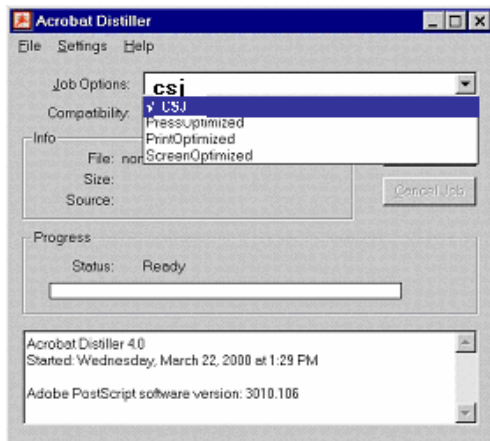
6. From the **Printer Name** list, select **Acrobat PDFWriter**. Be sure that your print range, number of copies, and other printing parameters are set correctly for your document,
7. Click **OK**,
8. The **Save PDF File As** pop-up window appears and is ready to generate a PDF version of your document,



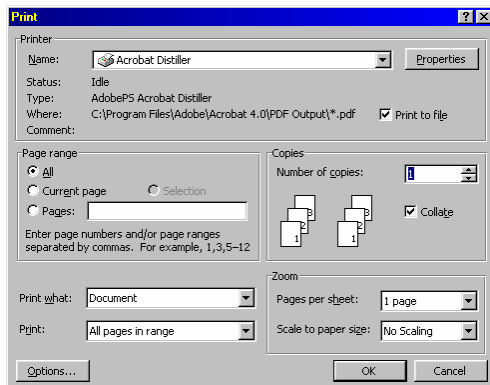
9. Specify the directory path, the file type, and filename,
10. Click **Save** when you are ready to save your file as PDF,
11. A new PDF version of your MS Word document is saved in the directory you specified,
12. Open your newly created PDF file to verify that it generated correctly,
13. Repeat steps 2-8 for each additional file you want to convert to PDF or if your new PDF file is not correct.

Creating a PDF file from Adobe Distiller Assistant 4.X or later versions for Microsoft Windows

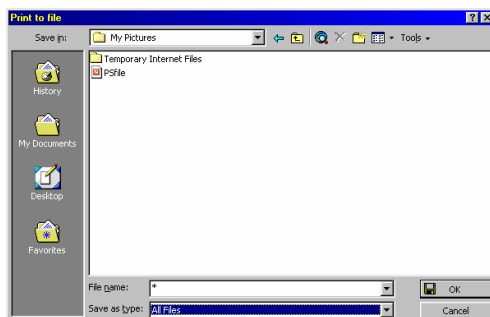
Acrobat 4.x or later versions include Adobe Distiller Assistant, which allows you to distill your file as easily as printing it. Adobe Distiller Assistant must be running for you to use it, so it should be listed in your computer's Startup folder. This enables it to start with Microsoft Windows and run continuously in the background.



1. Open Adobe Distiller and select **CSJ** as the Job Options that you want to use and then leave Adobe Distiller up and running,
2. Open the document in your authoring application (e.g., Microsoft Word),



3. Choose **File > Print**,
4. Select **Distiller Assistant** from the list of available printers,
5. Click on the **Print To File** checkbox,
6. Follow the authoring application's usual instructions to begin printing (e.g., click **Print**),




7. Adobe Distiller Assistant creates a PostScript file in the background, and then starts Adobe Distiller, which displays a dialog box where you can specify a PDF filename,
8. Specify a file name and location for the PDF file in the **Print to File** window,
9. Click **Save**,
10. After Adobe Distiller creates the PDF file, Adobe Distiller Assistant closes Distiller and then opens the PDF file in an Acrobat viewer.

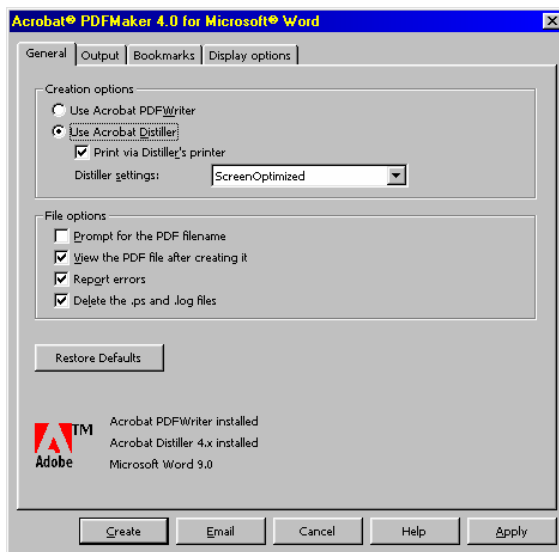
3.2.2 Converting files to PDF from Adobe Distiller

In order to work with Adobe Distiller, you must have the proper settings configured. Refer to the previous chapter for setting up Adobe Distiller.

Creating PDF from Adobe Distiller Assistant



1. From within your authoring application, open the file you want to convert to PDF,
2. From either the toolbar or the **File** menu bar option, click  or select **Create Adobe PDF**,



3. Your authoring application's Acrobat PDFMaker appears,
4. Select the following options before converting your file:
 - Acrobat Distiller option
 - Print via Distiller's Printer
 - Distiller settings **CSJ**
5. When you are ready, click on **Create**,
6. The process starts printing the file to Distiller.

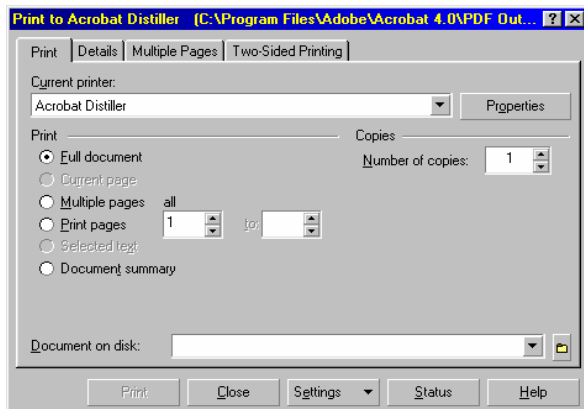
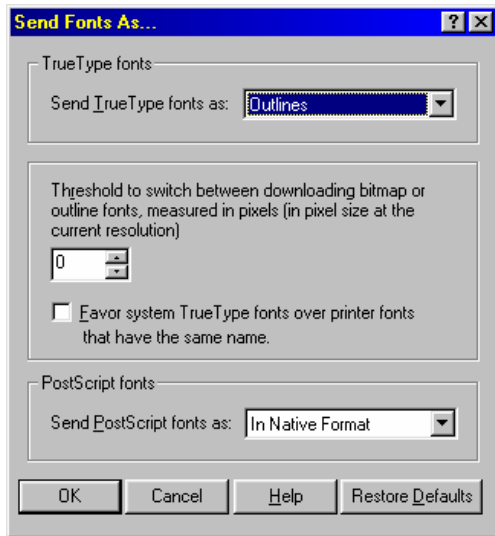
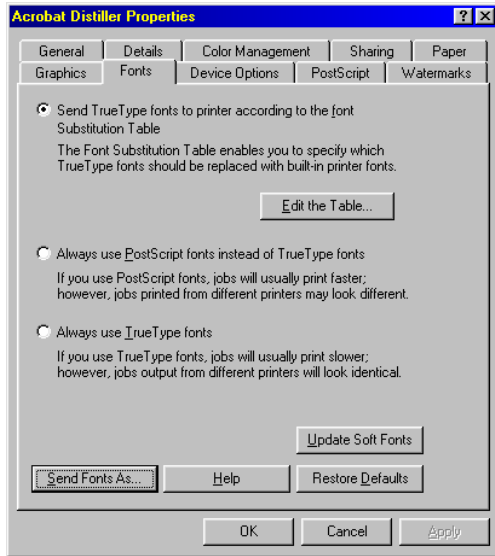
3.2.3 Embedding WordPerfect math fonts

Adobe Distiller 4.0 or later versions do not allow WordPerfect users to embed WordPerfect math fonts because of font licensing restrictions. Newer versions of these WordPerfect fonts are expected to have the font licensing issue corrected.

If you have a version of the fonts that do not allow Adobe Distiller to embed them, you can specify that the print driver for Adobe Distiller send the fonts as outlines. To configure Adobe Distiller to send the fonts as outlines, perform the following steps:

1. From your Windows desktop, open the print driver properties. Click **Start -> Settings -> Printers**,
2. From the Printers window, right click on the **Adobe Distiller** driver and select **Properties**,
3. Click on the **Fonts** tab,

CSJ Guidelines for Creating PDF Files



1. From your Windows desktop, open the print driver properties. Click **Start -> Settings -> Printers**,
2. From the Printers window, right click on the **Adobe Distiller** driver and select **Properties**,
3. Click on the **Fonts** tab,
4. From the **Fonts** tab, click **Send Fonts As...**
5. The **Send Fonts As** window appears,
6. From the **Send TrueType fonts as** pull-down menu, change the default setting **Type 42** to **Outlines**,
7. Click **OK** two times (twice),
8. Open Adobe Distiller and choose the **CSJ Job Options** file,
9. In WordPerfect, choose **Adobe Distiller** as your printer and print your file.
10. A PDF file is generated with sufficient font information to reproduce the file,
11. Check your results by viewing the PDF file.

WordPerfect 9 (part of WordPerfect Office 2000), has a **Publish to PDF** function that bypasses the need for Adobe Acrobat Distiller or Ghostscript and embeds WordPerfect fonts.

There are some problems with the initial **Publish to PDF** version in WordPerfect 9, which have since been resolved in recent [service packs](#). However, problems with lines and complex graphics remain. If you experience problems with graphics, then try working directly with Adobe Distiller or Ghostscript to create PDF files. (Refer to the instructions above, especially regarding setting TrueType fonts as Outlines to embed font information.)

3.3 Checking the Quality of Your PDF File

We recommend that you print your newly created PDF file(s) to your printer. This is the best method for you to physically verify the quality and completion of your materials before distributing them.

3.3.1 Common problems

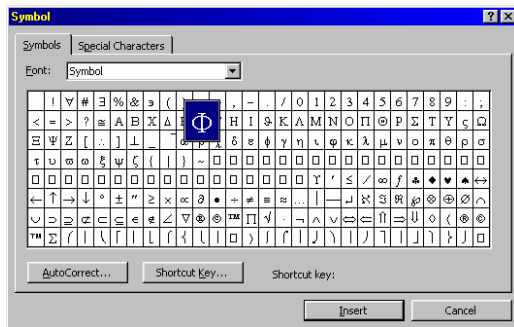
3.3.1.1 Cropped image

Sometimes while creating PDF files from your Microsoft Windows authoring application, a warning appears indicating that your image will not fit on the page. Determine if you need to resize your original file so the image fits inside the margins or you need to change the page orientation to portrait.

3.3.1.2 Improperly displayed symbols

Sometimes PDF files do not display symbols properly. Adobe Acrobat creates and displays symbols having a character set number, NOT a Unicode number. In order to correctly display symbols in your PDF file, return to the original authoring application file and insert the correct symbol by performing the following steps:

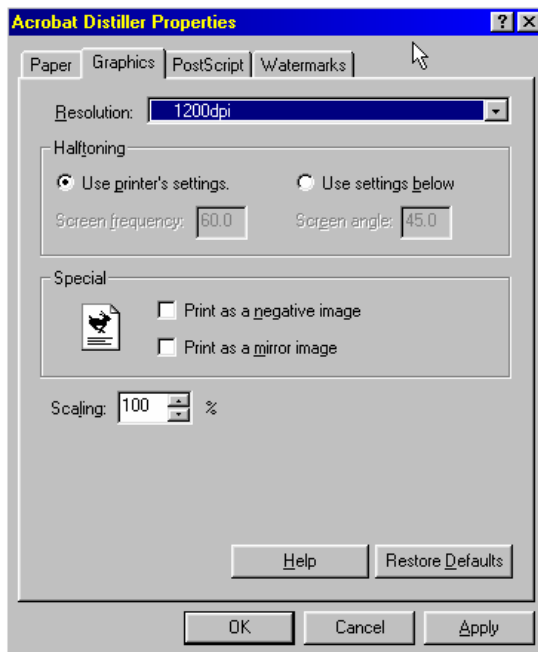
1. From within your authoring application (e.g., Microsoft Word) move to the location within the body text of the incorrect symbol
2. Highlight the symbol,
3. From the **Insert** menu bar option, select the **Symbol** drop-down option,



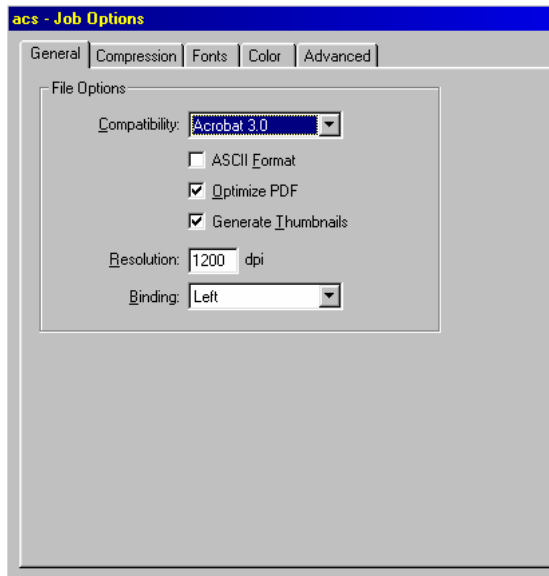
4. From the **Symbol** window use the menu of symbols drop-down list to locate and highlight the symbol you want to add to your document,
5. Look in the status bar at the lower left corner of the application screen to verify that the symbol has a unique symbol character number,
6. If the character symbol is displayed, click **Insert** to paste the symbol into your document at the location of your cursor,
7. The replacement symbol appears where the original symbol was located.

3.3.1.3 Low-resolution images

Sometimes while inspecting your PDF files, you might notice poor quality images inside your materials. If the default resolution does not display your information's images correctly, then you need to regenerate the PDF file at a higher resolution.



1. From your authoring or word processing application select **File > Print**,
2. Select **Acrobat Distiller** from the list of available printers,
3. Before performing the normal print procedures, raise the graphics setting, by clicking on **Properties and Graphics**,
4. Select a higher **Resolution** from the dropdown list,
5. Click on **Apply > OK**,
6. From the Print window, click **OK** to regenerate the PDF file at the higher graphic resolution.



To change the resolution for Acrobat Distiller, perform the following steps:

1. From Acrobat Distiller, select **Settings > Job Options**,
2. From the Job Options window, enter a higher number in the **Resolution** field,
3. Click **OK** when finished,
4. Now you can regenerate the PDF file using the newly configured Job Options setting.

4.0 GUIDELINES FOR CREATING PDF FILES

This chapter presents information and guidelines we have found useful while working with Adobe Acrobat to produce CSJ manuscripts and publications.

4.1 Do Not Use Adobe PDFWriter

If you have Adobe PDFWriter, you should also have Adobe Distiller, which is available in the same package. Use Adobe Distiller, since PDFWriter does not work properly with encapsulated PostScript figures and will significantly blur your images. In addition, PDFWriter will not subset fonts at the proper threshold.

Another frequent, and critical, problem occurs when combining PDFWriter documents with other PDF files. Typically, the fonts do not display properly in the combined file.

4.2 Always Embed Fonts in the PDF File

Embedding fonts means including in the PDF file the information necessary to faithfully recreate the characters used in your PDF file. If fonts are not embedded and do not reside on the computer where the PDF file is viewed, another font available to the PDF reader will be substituted, and PDF viewers/printers may replace your fonts with substitutes. This can produce unwanted results for reviewers. The substitute font may have different characteristics or characters (e.g., a bracket in a mathematical equation can be replaced by a column of letters). If you have the full version of Acrobat 4, you can determine how others will see your document by turning off local fonts.

If you are using Adobe Acrobat 4.x, you can automatically embed fonts by downloading the **CSJ Job Options**, then open Adobe Acrobat and select the **CSJ Job Options**. This automatically embeds fonts when converting files to PDF.

4.3 Create the PDF File on the Same Computer on Which the Original Document Was Created

It is important to create your PDF file on the same computer where the original document was created. This ensures that the fonts used to create the document exist on the computer where the PDF file is being generated, so that the fonts needed for viewing and printing the resulting PDF file are available during PDF creation.

4.4 Testing How Fonts Appear for Others

It is important to have the fonts you used embedded in the PDF file. If they are not embedded and they do not reside on the computer or printer rendering the file, then available fonts might be substituted and cause serious errors in your PDF document. The

results can be that your PDF will look fine on your computer but will look incorrect on another computer that does not have your fonts installed.

To test how your document might appear on other computers, check the results of your PDF file with local fonts turned off (if using the full Acrobat 4.0 product) or place the file on a different computer and view the PDF file there. Compare a printout from the second computer with a printout from the original computer.

In the full Acrobat 4.x product (but not Acrobat Reader 4.x), you can see how the fonts in your PDF file look on a computer system that does not have the fonts installed.

To specify whether Acrobat should ignore the fonts installed on your system, select **View -> Use Local Fonts**. (The command has a check mark beside it when Acrobat is using the fonts and no check mark when Acrobat is ignoring the fonts.)

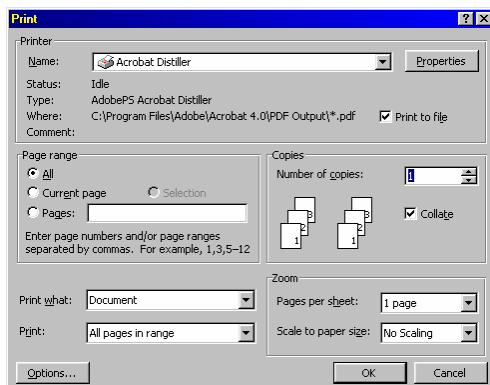
When **Use Local Fonts** is turned off (that is, it does not have a check mark beside it), Acrobat displays the PDF file with substitute fonts for all fonts that are not embedded. If a font cannot be substituted, the text formatted with that font appears as bullets, and Acrobat displays an error message. If the text in your PDF file appears as bullets when **Use Local Fonts** is off, you need to embed the fonts used to format that text.

4.5 Converting Figures to PDF

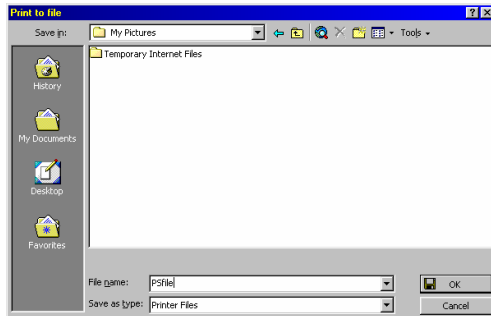
By default, Acrobat Distiller and PDFWriter lowers the resolution of your images by downsampling. This can produce blurred images. The **CSJ Job Options** file for Acrobat Distiller 4.x automatically sets figures to a higher resolution output.

4.6 Generating PostScript Files

4.6.1 Using Microsoft Windows 95 to create PostScript files



1. From your authoring application, open the document you want to convert to PostScript,
2. Select **File > Print**,
3. Select **Acrobat Distiller** from the printer list, and click **OK**,
4. The **Print To File** window appears,



5. Enter a pathname and filename for the PostScript file, using .ps as a file extension,
6. Select **All Files (*.*)** from the **Save As Type** menu,
7. When ready, click **OK**.

Note: Some applications insist on using a .prn extension instead of the .ps extension that you designate. When this happens, after you have created the PostScript file, simply rename it with a .ps extension to allow Distiller to recognize and process the file correctly.

4.6.2 Setting up PSPrinter 8.3.1 with the Acrobat Distiller PPD (Macintosh)

1. If PSPrinter 8.3.1 is installed, then select **Chooser**,
2. Click the **PSPrinter** icon. Select any printer (preferably a printer to which you do not normally print),
3. Click **Setup**,
4. Navigate to the **System Folder: Extensions: Printer Descriptions**,
5. Select **Acrobat Distiller (PPD)**, and click **Select**,
6. Close **Chooser**.

4.6.3 Creating a PostScript file (Macintosh)

1. Start your authoring application, and open the document to be printed to a PostScript file,
2. Select **Chooser**,
3. Click the PSPrinter icon. Select the Acrobat Distiller PPD printer option,
4. Close **Chooser**,
5. Return to your authoring application,
6. Choose **File > Print**,
7. Select **File** as the destination. If the document is a color document or contains grayscale images, select the **Color/Grayscale** print option. (If you are using PSPrinter, click **Options** to set the **Color/Grayscale Print** option.)
8. Click **OK**,
9. In the **Save As** dialog box, select a path, and enter a name for the PostScript file,
10. Select the **Binary** and **Level 2 Only** buttons. Selecting these buttons creates the smallest and most efficient PostScript file,
11. Select **All But Standard 13** from the **Font Inclusion** menu. Any TrueType and PostScript fonts used in the original document will be included in the PDF file,
12. Click **Save** to create the PostScript file.
13. Your authoring application returns.