

# Chapter 16

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## PDF

PDF (Portable Document Format) is a widely used format for storing and distributing formatted documents. You can use EXP in conjunction with third-party PDF software such as Adobe Acrobat to create PDF files from EXP documents. EXP does not create PDF files itself. You must have Adobe Acrobat or some other PDF software installed on your system to create PDF files from EXP documents.

The PDF format was developed by Adobe Systems Incorporated. The Adobe product for creating and manipulating PDF files is Adobe Acrobat. Adobe sells two editions of Acrobat: Standard, and Professional. Either edition works equally well with EXP. The Professional edition provides additional features for manipulating PDF files. However, as far as EXP is concerned, you can use either edition.


Many other companies have also developed software to create and manipulate PDF files. These non-Adobe PDF products often cost significantly less than the official Adobe Acrobat product and many EXP users have used them with success. However, some of these products may not support all PDF features. This documentation is written under the assumption that you are using Adobe Acrobat 6.0 or later.

## Basics

When you install Adobe Acrobat, the Acrobat installation program installs a specialized printer driver called "Adobe PDF" into Windows. Any Windows program, such as EXP, that performs printing using the standard Windows printing infrastructure can generate a PDF file simply by printing to the "Adobe PDF" printer. To create a PDF file from EXP, it is simply a matter of instructing EXP to print to the "Adobe PDF" printer.

### **To create a PDF file from an EXP document using Adobe Acrobat**

1. Start EXP.
2. Open the EXP document you want to convert to a PDF file.
3. From the File menu, choose Printer Setup (ALT, F, R).  
EXP will display the Printer Setup dialog box.
4. In the dialog box, use the Name control to select the printer called "Adobe PDF".
5. Choose the OK button to close the Printer Setup dialog box.  
EXP will reformat the document for the Adobe PDF printer. If you are concerned about page breaks, review the page breaks and make any necessary formatting adjustments.

6. From the File menu, choose Print (ALT, F, P).  
–or–  
Press CTRL+P.  
–or–  
Click the  button on the Math Panel.  
  
EXP will display the Print dialog box.
7. In the dialog box, select the option All to print the entire document to the PDF file. You do not need to select the option Print to file because Acrobat prints to a file by default.
8. Choose the OK button to close the Print dialog box and begin the PDF creation process.

After EXP and Acrobat finish producing the PDF file, Acrobat will display the PDF file automatically.

#### **To create a PDF file directly from Windows Explorer**

1. Use Windows Explorer to navigate to the folder containing the .wpx file for your EXP document.
2. Right-click on the .wpx file.
3. From the popup menu, choose "Convert to Adobe PDF".  
  
EXP will start and display its Printing Status dialog box. Almost immediately afterwards, Acrobat will display its "Save PDF File As" dialog box.
4. Choose the OK button to accept Acrobat's proposed filename for the PDF file.

After EXP and Acrobat finish producing the PDF file, EXP will exit and Acrobat will display the PDF file automatically.

The one disadvantage of this method of producing a PDF file is that it does not give you the opportunity to review page breaks.

## **Font Embedding**

EXP is distributed with a number of TrueType fonts that contain the EXP symbols. These fonts are not available on Windows systems on which EXP is not installed. If you are using EXP with Adobe Acrobat 6.0 or later, you do not need to concern yourself with the issue of font embedding because Acrobat embeds a document's fonts in the PDF file automatically.

If you are using EXP with Adobe Acrobat 5.0 or earlier, you must turn on the option in Acrobat to embed a document's fonts in the PDF file. This same comment applies if you are using EXP with other PDF software that does not embed fonts automatically. For information about configuring Adobe Acrobat's handling of fonts, please refer to your Acrobat documentation or contact Adobe technical support. Symbol Dynamics cannot assist you in this matter.

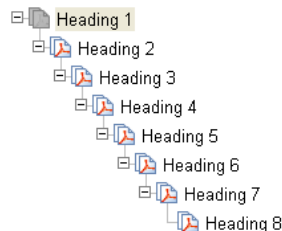
Because Adobe Acrobat 6.0 and later work smoothly with EXP right out of the box, Symbol Dynamics recommends using one of these versions of Acrobat with EXP.

## PDF Bookmarks

The PDF format supports a useful feature called bookmarks. If a PDF file contains one or more bookmarks, Acrobat displays the Bookmarks Navigation Tab that enables you to jump quickly to different locations within the file. The Bookmarks Navigation Tab is like a table of contents for a PDF file. Note that bookmarks in a PDF file are not related to bookmarks in an EXP document. There is no relationship between these two different types of bookmarks.

EXP creates PDF bookmarks for you automatically when you use the heading styles in the Normal style sheet. The Normal style sheet provides heading styles called "Heading 1" through "Heading 8". If you use these heading styles in an EXP document and then you create a PDF file from the EXP document, you will be able to use Acrobat's Bookmarks Navigation Tab to jump quickly to any heading in the document.

Acrobat's Bookmarks Navigation Tab displays a hierarchical view of the bookmarks in a PDF file. EXP's heading styles define a hierarchy to the headings of an EXP document. When you use EXP with Acrobat to create a PDF file, EXP converts the hierarchy of EXP headings to a hierarchy of PDF bookmarks, as shown in the following picture of Acrobat's Bookmarks Navigation Tab:



A PDF bookmark generated by EXP style "Heading 2" is indented relative to a PDF bookmark generated by EXP style "Heading 1", and so on.

### How EXP Generates PDF Bookmark Titles

When EXP detects that it must create a PDF bookmark for a heading, it generates a title for the bookmark from the heading. Because a PDF bookmark title cannot contain EXP symbols or special formatting, EXP applies the following transformations to convert a heading to a PDF bookmark title:

- All symbols and graphics are ignored.
- All character-level formatting is ignored.

- All codes are ignored, with the following exceptions:
  - Automatic numbers are supported.
  - The PageNumber code is supported.
  - The special spaces nsspace, nbspace, and hardspace are converted to a regular space.
  - A tab is converted to a single space.
  - The NewLine code is converted to a colon followed by a space.

If the next paragraph is also a heading and has the same style, EXP treats the next paragraph as a continuation of the current heading. To generate the PDF bookmark title for a multi-paragraph heading, EXP converts each internal paragraph mark to a colon followed by a space. For example, EXP would convert the heading paragraphs

Chapter 5  
Jupiter

to the PDF bookmark title "Chapter 5: Jupiter".

## PDF Bookmarks and LaTeX Markup

EXP determines whether it should treat a particular paragraph as a heading by examining the paragraph-level LaTeX markup assigned to the paragraph. If the paragraph-level LaTeX markup indicates that the paragraph is a heading, EXP considers the paragraph a heading for PDF bookmark purposes as well as for LaTeX conversion purposes. The heading styles "Heading 1" through "Heading 8" in the Normal style sheet apply the appropriate LaTeX markup. The following table shows the paragraph-level LaTeX markup applied by each heading style in the Normal style sheet:

Heading Style	Paragraph-Level LaTeX Markup
Heading 1	Heading:part*
Heading 2	Heading:chapter*
Heading 3	Heading:specialsection*
Heading 4	Heading:section*
Heading 5	Heading:subsection*
Heading 6	Heading:subsubsection*
Heading 7	Heading:paragraph*
Heading 8	Heading:subparagraph*

If you create your own styles and style sheets, you should assign the appropriate paragraph-level LaTeX markup to your heading styles so EXP will generate the appropriate PDF bookmarks.

## The PDFDrivers.ini File

When you instruct EXP to print a document, EXP must determine whether it should send PDF bookmark information to the printer driver. EXP is careful not to send PDF bookmark information to printer drivers that might not support the PDF bookmark feature. In order for EXP to treat a printer driver as compatible with the PDF bookmark feature, the printer driver must be PostScript compatible and the printer driver must be

listed in EXP's PDFDrivers.ini file. The Adobe Acrobat printer driver is PostScript compatible. However, some non-Adobe PDF software is not PostScript compatible.

Because it is not feasible for Symbol Dynamics to test EXP with every piece of PDF software, Symbol Dynamics has taken the cautious approach of only allowing EXP to send PDF bookmark information to a printer driver if that printer driver has been certified to support the PDF bookmark feature. The names of certified printer drivers are listed in a file called PDFDrivers.ini. The master PDFDrivers.ini file is located in the following folder:

C:\Program Files\Symbol Dynamics\EXP 6.0\System

You can use Windows Notepad to examine the master PDFDrivers.ini file on your system. If the name of the printer driver for your PDF software is not listed in the master PDFDrivers.ini file, you can create a personal PDFDrivers.ini file and add your printer driver to it.

#### **To add a printer driver to your personal PDFDrivers.ini file**

1. Use Windows Explorer to copy the master PDFDrivers.ini file to your "My EXP Files\System" folder.
2. Use Windows Notepad to open your personal copy of the PDFDrivers.ini file.

Note that the PDFDrivers.ini file is a plain text file and *not* an EXP document.

3. Delete all lines in the file after the line "[PDF Drivers]".
4. Insert a new line after the line "[PDF Drivers]" and type the name of your PDF printer driver followed by "=1". For example:

```
PrinterDriverName=1
```

The names of all the printer drivers installed on your system are listed in EXP's Printer Setup dialog box. You can determine the exact name of the printer driver for your PDF software by examining this list.

5. Save the PDFDrivers.ini file.

Once you have added your printer driver's name to your personal PDFDrivers.ini file, you can use EXP to determine whether your printer driver supports the PDF bookmark feature.

#### **To determine whether a printer driver supports PDF bookmarks**

1. Start EXP.
2. Press CTRL+N to create a new document based on the Normal document template.
3. Use the Style Control on the Format Panel to select the style "Heading 1".
4. Type the text "My Heading".
5. Print the document to your PDF printer driver.

6. Use Adobe Reader to open the newly created PDF file. If Adobe Reader's Bookmarks Navigation Tab displays a bookmark called "My Heading", your printer driver supports the PDF bookmark feature. Otherwise, your printer driver does not support the PDF bookmark feature. In this case, you should remove the line you added to your personal PDFDrivers.ini file to prevent EXP from attempting to send PDF bookmark information to the printer driver in the future.

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**User's Guide**

**Version 6.0**