



Adobe

pdfmark Reference Manual

Adobe Developer Support

Technical Note #5150

05 December 1994

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1 Introduction

The Acrobat™ Distiller™ application converts PostScript® language files into Portable Document Format (PDF) files. PDF files can include special features such as notes, links, bookmarks, articles, info dictionary entries, and page cropping. This information is not normally present in a PostScript language file and therefore cannot be incorporated into the PDF file by the distilling process.

Note The terms note, link, and bookmark are used in this document in the same way as they are in the user interface of Acrobat Exchange and Acrobat Reader. These correspond, respectively, to the text annotation, link annotation, and outline entry objects that appear in a PDF file (see the Portable Document Format Reference Manual and Technical Note #5156, Updates to the Portable Document Format Reference Manual, for a description of the PDF file format).

This document describes the syntax and use of the **pdfmark** operator, which is used in PostScript language files to represent PDF features. **pdfmark** is present in implementations of the PostScript Level 2 interpreter used in the Distiller application. This document describes the implementation of the **pdfmark** operator that is present in version 2 of the Distiller application. Use of **pdfmark** makes it possible for an Independent Software Vendor (ISV) already supporting the PostScript language to support PDF features without having to write PDF files directly.

2 pdfmark operator

The **pdfmark** operator takes as its arguments a mark object, a variable number of key–value pairs, and a name object. The **pdfmark** operator does not return any values. Each instance of the **pdfmark** operator in a PostScript language file is referred to as a *marker*.

To ensure that PostScript devices, such as printers, that do not implement the **pdfmark** operator can use files containing the **pdfmark** operator, the following PostScript language code should be placed in the prolog of the

PostScript language file. Its effect is to make each marker a no-op if the PostScript interpreter processing the file does not implement the **pdfmark** operator.

```
/pdfmark where
{pop} {userdict /pdfmark /cleartomark load put} ifelse
```

3 Syntax

This section describes the various forms of use of the **pdfmark** operator. Section 4 contains definitions of each key–value pair mentioned in this section.

Note Some markers can accept arbitrary key–value pairs. All keys must be name objects. Unless otherwise stated, values may be boolean, number, string, name, or array objects. Array elements are also limited to these types.

3.1 Notes

Notes are specified using the **pdfmark** operator in conjunction with the name ANN. The syntax for a note marker is:

```
[/Contents string /Rect [llx lly urx ury] /SrcPg pagenum
/Open boolean /Color colorspec /Title string /ModDate datestring
/ANN pdfmark
```

The Rect and Contents keys are required; all other keys are optional. A note marker that contains the optional SrcPg key may be placed anywhere in the PostScript language file. A note marker that does not contain this key must occur within the PostScript language description for the page on which the note is to appear.

In addition to the keys listed here, notes may also specify arbitrary key–value pairs.

3.2 Links

Links are specified by using the **pdfmark** operator in conjunction with the name LNK. The syntax for a link marker is:

```
[/Action action /Dest destname /Page pagenum /View [destination]
/File string /MacFile string /DOSFile string /WinFile string
/Dir string /Op string /Params string /ID [string string]
/Rect [llx lly urx ury] /Border [bx by c [d]] /SrcPg pagenum
/Color colorspec /Title string /ModDate datestring
/LNK pdfmark
```

The Color, Title, ModDate, Border, SrcPg, ID, and Action keys are optional. The Dest, Page, View, File, MacFile, DOSFile, WinFile, Dir, Op, and Params keys may be optional, depending on the Action key. See the description of the Action key in Section 4 for more information.

A link marker that contains the optional SrcPg key may be placed anywhere in the PostScript language file. A link marker that does not contain this key must occur within the PostScript language description for the link's source page.

In addition to the keys listed here, links may also specify arbitrary key–value pairs.

3.3 Bookmarks

A bookmark is specified by using the **pdfmark** operator in conjunction with the name OUT. The syntax for a bookmark marker is:

```
[/Action action /Dest destname /Page pagenum /View [destination]  
/File string /MacFile string /DOSFile string /WinFile string  
/Dir string /Op string /Params string /ID [string string]  
/Title string /Count int  
/OUT pdfmark
```

A bookmark must have either an Action key, a Dest key, or a View key. The Page, File, MacFile, DOSFile, WinFile, Dir, Op, Params, and ID keys may be optional, depending on the Action key. See the description of the Action key in Section 4 for more information.

Bookmark markers may occur anywhere in the PostScript language file subject only to the ordering constraints imposed by the **Count** key described in Table 1.

3.4 Articles

Articles consist of a title and a list of rectangular areas called *beads*. Each bead is specified by using the **pdfmark** operator in conjunction with the name ARTICLE. Beads are added to the article in the order that they are encountered in the PostScript language file. The syntax for a bead marker is:

```
[ /Title string /Rect [llx lly urx ury] /Page pagenum  
/ARTICLE pdfmark
```

The Title key determines the article to which a bead belongs.

The Page key is optional. A bead marker that contains the optional Page key may be placed anywhere in the PostScript language file. A bead marker that does not contain this key must occur within the PostScript language description for the page on which the article bead is to appear.

In addition to the keys listed here, the first bead in an article may also specify arbitrary key–value pairs. Suggested keys are Subject, Author, and Keywords.

3.5 Named destinations

An action's destination may be specified as a name instead of as a page number and view. The advantage of using a named destination, particularly for cross-document links, is that it allows the document containing a link's destination to be revised asynchronously from the document containing the link's source, eliminating concern over whether link destinations moved to different pages. A named destination is specified by using the **pdfmark** operator in conjunction with the name **DEST**. The syntax for a named destination marker is:

```
[ /Dest name /Page pagenum /View destination
/DEST pdfmark
```

The **Page** and **View** keys are optional. If **View** is omitted, it defaults to a null destination (lower left corner of the page at a zoom of 100%).

A named destination marker that contains the optional **Page** key may be placed anywhere in the PostScript language file. A named destination marker that does not contain this key must occur within the PostScript language description for the destination page.

In addition to the keys listed here, named destinations may also specify arbitrary key–value pairs.

3.6 Pass-through PostScript language commands

Blocks of PostScript language code can be specified by using the **pdfmark** operator in conjunction with the name **PS**. Any PostScript language code specified in this manner is copied directly into the PDF file without being distilled, and is ignored when the PDF file is viewed using Acrobat Exchange or Reader. It is only used when the file is printed to a PostScript printer. The syntax for specifying a block of pass-through PostScript language code is:

```
[ /Datasource string or file /Level1 string or file
/PS pdfmark
```

The **Level1** key is optional. If present, its value is a block of PostScript Level 1 language code that is used instead of the value of the **Datasource** key when printing to a printer that supports only PostScript Level 1.

See the discussion of the **file** operator in the *PostScript Language Reference Manual, Second Edition* for information on specifying files.

This marker must be placed in the PostScript language program at the point where the block of code is to be executed during printing.

3.7 Page cropping

Page cropping is specified by using the **pdfmark** operator in conjunction with the names **PAGES** and **PAGE**. **PAGES** specifies the default page cropping for all pages in a document, while **PAGE** specifies the page cropping only for the current page.

The syntax for specifying the default page cropping for a document is:

```
[/CropBox [llx lly urx ury] /PAGES pdfmark
```

This marker can be placed anywhere in the PostScript language program, but it is recommended that it be placed at the beginning of the file, in the Document Setup section between the document structuring comments **%%BeginSetup** and **%%EndSetup**, before any marks are placed on the first page. If the Distiller application is set up to produce thumbnails, incorrect thumbnails will be produced if this marker is not placed at the beginning of the file.

The syntax for specifying a non-default page cropping for a particular page in a document is:

```
[/CropBox [llx lly urx ury] /PAGE pdfmark
```

This marker must be placed before the **showpage** operator for the page it is to affect. It is recommended that it be placed before any marks are made on the page.

3.8 Info dictionary

A document's Info dictionary contains key–value pairs that provide various pieces of information about the document. Info dictionary information is specified by using the **pdfmark** operator in conjunction with the name **DOCINFO**. The syntax for specifying Info dictionary entries is:

```
[/Author string /CreationDate string /Creator string  
/Producer string /Title string /Subject string /Keywords string  
/ModDate string  
/DOCINFO pdfmark
```

All keys are optional. Info dictionary markers may occur anywhere in the PostScript language file. See the *Portable Document Format Reference Manual* and Technical Note #5156, *Updates to the Portable Document Format Reference Manual*, for a description of the Info dictionary keys.

In addition to the keys listed here, arbitrary keys can be specified. Values must be string objects.

3.9 Catalog dictionary

A document's Catalog dictionary contains key–value pairs that provide various pieces of information about the document. Catalog dictionary information is specified by using the **pdfmark** operator in conjunction with the name **DOCVIEW**. The syntax for specifying Catalog dictionary entries is:

```
[/Action action /Dest destname /Page pagenum /View [destination]
/File string /MacFile string /DOSFile string /WinFile string
/Dir string /Op string /Params string /ID [string string]
/PageMode name
/DOCVIEW pdfmark
```

The Action and PageMode keys are optional. The value of the Action key specifies an action that executes when the document is opened. The value of the PageMode key specifies whether bookmarks, thumbnail images, or neither are to be shown when the document is opened, or whether the document is to be opened in full screen mode.

The Dest, Page, View, File, MacFile, DOSFile, WinFile, Dir, Op, Params, and ID keys may be optional, depending on the Action key. See the description of the Action key in Section 4 for more information.

Catalog dictionary markers may occur anywhere in the PostScript language file.

4 Key–value pair definitions

Table 1 is an alphabetical list of the key–value pairs used with the **pdfmark** operator. All keys must be name objects.

Note Throughout this note, it is extremely important to understand how pages in a PDF document are numbered. PDF currently has no knowledge of the page number that may appear on a page. Instead, PDF uses the sequence number of the pages; PDF always considers pages in a document to be numbered sequentially, beginning with page 1. All page numbers mentioned in this note must be specified using this sequence number, not the page number as it appears on the printed page.

Table 1 *Key–value pair definitions*

<i>Key</i>	<i>Type</i>	<i>Semantics</i>
Action	name	<p>Specifies the action type. Used with document opening, links, and book-marks. Must be one of the following:</p> <p>GoTo — Jumps to a specified page and zoom factor within the current document. Requires the Dest key, or both the Page and View keys.</p> <p>GoToR — Opens another PDF document at a specified page and zoom factor. Requires the Dest key, or both the Page and View keys, plus file-specifier keys (see the following paragraph).</p> <p>Launch — Launches an application. Requires file-specifier keys.</p> <p>Article — Jumps to an article, either in the current document or another PDF document. Requires the Dest key. In addition, required file-specifier keys if the article is in a different PDF file.</p> <p>The file-specifier keys File, MacFile, DOSFile, and ID define an external file. At least one of these keys must be defined for actions that require a file-specifier key. The WinFile, Dir, Op, and Params keys are used only with the Launch action, and are optional. All the action-related keys are described elsewhere in this table.</p> <p>Action is optional, and defaults to GoTo if omitted:</p>
Border	array	<p>Specifies a link’s border properties. Border is of the form $[b_x \ b_y \ c \ [d]]$, <i>i.e.</i> an array of three numbers and an array. All elements are specified in user space coordinates. The first three element are required, and set the horizontal corner radius (b_x), the vertical corner radius (b_y), and the width (c) of the link’s border. The fourth element (d) is an optional dash array. If present, it specifies the lengths of dashes and gaps. If the dash array is absent, Border is of the form $[b_x \ b_y \ c]$, and a solid border is used.</p> <p><i>Note</i> <i>Version 2.0 of the Acrobat viewers (Exchange and Reader) support dash arrays containing up to 10 elements. The current implementations of the Acrobat viewers ignore the values of b_x and b_y.</i></p>

Table 1 *Key–value pair definitions*

<i>Key</i>	<i>Type</i>	<i>Semantics</i>
Color	array	Specifies the border color of a link, the background color of a note icon, the title bar color of an open active note’s window, or the window frame color of an inactive open note’s window. The value is an array of numbers between 0 and 1 inclusive. The number of elements in the array also determines the color space — a length of 1 implies DeviceGray, a length of 3 implies DeviceRGB, and a length of 4 implies DeviceCMYK. See Section 6.8.5 in the <i>Portable Document Format Reference Manual</i> for a description of these color spaces.
Contents	string	Contains the annotation text string. The maximum length of the Contents string is 65,535 characters. The encoding and character set used is the PDFDocEncoding as described in Appendix C of the <i>Portable Document Format Reference Manual</i> .
Count	integer	<p>Specifies the number and visual appearance of subordinate bookmarks, using the following rules:</p> <ol style="list-style-type: none">1. Bookmark markers must appear in sequential order in the PostScript language file.2. A bookmark with no subordinate bookmarks must omit the Count key.3. A bookmark with subordinate bookmarks (e.g. a chapter bookmark with several subordinate section headings) must include the Count key. The value of this key is the number of bookmarks immediately subordinate (<i>i.e.</i>, excluding subordinates of subordinates). If the value is positive, the parent bookmark is open; if negative, the parent bookmark is closed. An open bookmark shows its subordinates, while a closed bookmark does not. See Section A.5 in Appendix A of the <i>Portable Document Reference Manual</i> for an example.
CropBox	array	Specifies the location and size of the viewable area of the page. CropBox is an array of four numbers [<i>llx lly urx ury</i>] specifying the lower-left <i>x</i> , lower-left <i>y</i> , upper-right <i>x</i> , and upper-right <i>y</i> coordinates — measured in <i>default</i> user space — of the rectangle defining the cropped page. The minimum allowed page size is 1×1 inch (72×72 units in the default user space coordinate system) and the maximum allowed page size is 45×45 inches (3240×3240 units in the default user space coordinate system).
DataSource	string or file	The PostScript language code that is to be passed through into the PDF file. See the description of the file operator in the <i>PostScript Language Reference Manual, Second Edition</i> , for more information about file objects.

Table 1 *Key–value pair definitions*

<i>Key</i>	<i>Type</i>	<i>Semantics</i>
Dest	destination	Specifies an Article action’s destination, or a named destination for any action. If it is a named destination, the value must be a name object that matches the name of a destination defined with the DEST pdfmark. For an Article destination, the value may be an integer that specifies the article’s index in the document (the first article in a document has an index of 0), or a string that matches the article’s Title.
Dir	string	An optional string specifying the default directory of a Windows application started with the Launch action. See the description of WinFile .
DOSFile	string	Specifies the MS-DOS pathname (in the PDF pathname format), of the PDF file for GoToR and Article actions, or the application for Launch actions. Acrobat viewer applications on Windows and DOS computers ignore the File key if the DOSFile key is present. See Technical Note #5156, <i>Updates to the Portable Document Format Reference Manual</i> , for a description of the pathname format.
File	string	Specifies the device-independent pathname of the PDF file for GoToR and Article actions, and the application for Launch actions. See Technical Note #5156, <i>Updates to the Portable Document Format Reference Manual</i> , for a description of the pathname format.
ID	array	An optional array of two strings specifying the PDF file ID for GoToR and Article actions. This key can be used to ensure the correct version of the destination file is found. If present, the destination PDF file’s ID is compared with ID , and the user is warned if they are different. See Technical Note #5156, <i>Updates to the Portable Document Format Reference Manual</i> , for a description of the file ID.
MacFile	string	Specifies the Macintosh filename (in the PDF pathname format), of the PDF file for GoToR and Article actions, or the application for Launch actions. Acrobat viewer applications on Macintosh computers ignore the File key if the MacFile key is present. See Technical Note #5156, <i>Updates to the Portable Document Format Reference Manual</i> , for a description of the pathname format.

Table 1 *Key–value pair definitions*

<i>Key</i>	<i>Type</i>	<i>Semantics</i>
ModDate	string	<p>Specifies an optional last-modified date for a link or note. The date should be specified in the form:</p> <p>(D:YYYYMMDDHHmmSSOHH'mm')</p> <p>“D:” is an optional prefix. YYYY is the year. All fields after the year are optional. MM is the month (01-12), DD is the day (01-31), HH is the hour (00-23), mm are the minutes (00-59), and SS are the seconds (00-59). The remainder of the string is optional and defines the relation of local time to GMT. O is either + for a positive difference (local time is later than GMT) or – for a negative difference. HH' is the absolute value of the offset from GMT in hours, and mm' is the absolute value of the offset in minutes.</p>
Op	string	<p>An optional string specifying the operation to perform for a Launch action. See the description of WinFile. The string must be open or print. The default is open. If WinFile specifies an application, not a document, this key is ignored and the application is launched.</p>
Open	boolean	<p>Specifies whether the annotation should be displayed opened. If the Open key is omitted or is <i>false</i>, the annotation will appear closed (as an icon).</p>
Page	integer or name	<p>Specifies the destination page for GoTo and GotoR actions. If an integer value is specified, it must be the sequence number of the page within the PDF file. The first page in a file is page 1, equivalent to the ordinal argument of the %%Page: document structuring convention comment.</p> <p>For links and articles, the name objects Next and Prev are also valid page destination values.</p> <p>If the destination page of a link is the same page, the Page key should be omitted. If the value of the Page key is 0, the bookmark or link will have a null destination.</p>
PageMode	name	<p>Specifies how the document will be displayed when it is opened. Must be one of the following:</p> <ul style="list-style-type: none"> UseNone — Open the document without displaying either bookmarks or thumbnail images. UseOutlines — Open the document and display bookmarks. UseThumbs — Open the document and display thumbnail images. FullScreen — Open the document in full screen mode.
Params	string	<p>An optional string specifying the parameters passed to a Windows application started with the Launch action. See the description of WinFile. If WinFile keys specifies an application, Params must not be present.</p>

Table 1 *Key–value pair definitions*

<i>Key</i>	<i>Type</i>	<i>Semantics</i>
Rect	array	An array of four numbers [<i>llx lly urx ury</i>] specifying the lower-left <i>x</i> , lower-left <i>y</i> , upper-right <i>x</i> , and upper-right <i>y</i> coordinates — in user space — of the rectangle defining the open annotation window or link button.
SrcPg	integer	Specifies the source page on which a link button or note is located. The first page in a document is page 1, not 0, equivalent to the ordinal argument for the <code>%%Page:</code> document structuring convention comment. For links and notes, SrcPg may be omitted if the pdfmark occurs within the PostScript language description of the page on which the link or note is to appear.
Title	string	Contains an article title, a link title, a note title, or a bookmark’s text. Title has a maximum length of 65,535 characters, although a practical limit of 32 characters is advised for bookmark, link, and note titles so that they can be easily read in the Acrobat viewer. The encoding and character set used is the PDFDocEncoding as described in Appendix C of the <i>Portable Document Format Reference Manual</i> .
View	array	Specifies a link or bookmark’s destination. Table 2 describes the View array’s elements.
WinFile	string	Acrobat 2.0 viewer applications running under Windows use the Windows function <code>ShellExecute()</code> to launch an application specified using the Launch action. The keys WinFile , Dir , Op , and Params correspond to the parameters of <code>ShellExecute()</code> . WinFile is the MS-DOS filename of the document or application to launch.

Table 2 describes the destination types supported by the **pdfmark** operator. Destinations are specified as an array containing a name from the table, followed by any parameters required with that name, as shown in the table.

Table 2 *View array destination names and parameters*

<i>Name</i>	<i>Parameters and semantics</i>
Fit	<i>No parameters.</i> Fit the page to the window. This is a shortcut for specifying FitR with the rectangle being the crop box for the page.
FitB	<i>No parameters.</i> Fit the bounding box of the page contents to the window.

Table 2 View array destination names and parameters

Name	Parameters and semantics
FitH	<i>top</i> Fit the width of the page to the window. <i>top</i> specifies the distance in default user space from the page origin to the top of the window. This is a shortcut for specifying FitR with the rectangle having the width of the page, and both y-coordinates equal to <i>top</i> .
FitBH	<i>top</i> Fit the width of the bounding box of the page contents to the window. <i>top</i> specifies the distance in default user space from the page origin to the top of the window.
FitR	$x_1\ y_1\ x_2\ y_2$ Fit the rectangle specified by the parameters (in default user space) to the window.
FitV	<i>left</i> Fit the height of the page to the window. <i>left</i> specifies the distance in default user space from the page origin to the left edge of the window. This is a shortcut for specifying FitR with the rectangle having the height of the page, and both x-coordinates equal to <i>left</i> .
FitBV	<i>left</i> Fit the height of the bounding box of the page contents to the window. <i>left</i> specifies the distance in default user space from the page origin to the left edge of the window.
XYZ	<i>left top zoom</i> <i>left</i> and <i>top</i> specify the distance in default user space from the origin of the page to the top-left corner of the window. <i>zoom</i> specifies the zoom factor, with 1 being 100% magnification. If <i>left</i> , <i>top</i> or <i>zoom</i> is null, the current value of that parameter is retained. For example, specifying a view destination of /View [/XYZ null null null] will go to the specified page and retain the same horizontal and vertical offset and zoom as the current page. A zoom of 0 has the same meaning as a zoom of null.

Note There is only a single zoom factor for both the horizontal and vertical directions, not separate zoom factors. As a result, more of the page may be shown

than specified by the destination. For example, when using **FitR**, portions of the page outside the destination rectangle will appear in the window, unless the window happens to have the same aspect ratio (height-to-width ratio) as the destination rectangle.

A common destination is “upper left corner of the specified page, with a zoom factor of 1.” This can be obtained using the **XYZ** destination form, with a *left* of -4 and a *top* equal to the top of the **CropBox** (or the page size if no **CropBox** was specified) plus 4. The offset of 4 is used to slightly move the page corner from the corner of the window, to provide a visual cue that the corner of the page is being shown.

Note In version 1.0 of Acrobat Exchange and Acrobat Reader for the Microsoft® Windows™ environment, the position of a document within a window is not completely arbitrary. As a result, the offset displayed may not be exactly the offset of 4 that was specified.

5 Example

This section contains an example illustrating many uses of the **pdfmark** operator. Each use is begun by a boldface line.

```

%!PS-Adobe-3.0
%%BeginProlog
/bd {bind def} bind def
/fsd {findfont exch scalefont def} bd
/sms {setfont moveto show} bd
/ms {moveto show} bd
/pdfmark where
  {pop} {userdict /pdfmark /cleartomark load put} ifelse
%%EndProlog

%%BeginSetup
% File open action
[ /PageMode /UseOutlines
  /Page 2 /View [/XYZ null null null]
  /DOCVIEW
pdfmark

% Info Dictionary
[ /Title (My Test Document)
  /Author (John Doe)
  /Subject (pdfmark 2.0)
  /Keywords (pdfmark, example, test)
  /Creator (Hand Programmed)
  /ModificationDate (D:19940912205731)
  /MyKey (My private information)
  /DOCINFO
pdfmark

% Crop all pages
[ /CropBox [54 403 558 720]
  /PAGES

```

```

pdfmark

/DrawBorder
  {58 407 moveto 554 407 lineto 554 716 lineto
   58 716 lineto closepath stroke
} bd

/F1 10 /Helvetica fsd
/F2 10 /Helvetica-Oblique fsd
/F3 10 /Helvetica-Bold fsd
/F4 12 /Helvetica-Bold fsd
%%EndSetup

%%Page: 1 1
DrawBorder
(This is Page 1) 75 690 F4 sms
(Below is a closed, default note created using pdfmark:) 75 670 F1 sms
(Below is an open note with a custom color and label:) 75 570 F1 sms

% Simple Note
[ /Rect [ 75 586 456 663 ]
/Contents (This is an example of a note. You can type text directly into a note or copy text
  from the clipboard.)
/ANN pdfmark

% Fancy Note
[ /Rect [ 75 425 450 563 ]
  /Open true
  /Title (John Doe)
  /Contents (This is an example of a note. \nHere is some text after a forced line break.

This is another way to do line breaks.)
  /Color [1 0 0]
  /Border [0 0 1]
  /ANN
pdfmark
showpage

%%Page: 2 2
DrawBorder
(This is Page 2) 75 690 F4 sms
(Click here to go to page 3.) 75 660 F2 sms
(Click here to go to page 3.) 75 560 F2 sms

% Create text for the article "Now is the Time"
(Now is the Time \(Article\)) 230 690 F4 sms
(Now is the time for all good men to come to the aid of their country.) 230 670 F1 sms
(Now is the time for all good men to come to the aid of their country.) 230 655 ms
(Now is the time for all good men to come to the aid of their country.) 230 640 ms
(Now is the time for all good men to come to the aid of their country.) 230 625 ms
(Now is the time for all good men to come to the aid of their country.) 230 610 ms
(Now is the time for all good men to come to the aid of their country.) 230 595 ms
(Now is the time for all good men to come to the aid of their country.) 230 580 ms
(Now is the time for all good men to come to the aid of their country.) 230 565 ms
(Now is the time for all good men to come to the aid of their country.) 230 550 ms
(Now is the time for all good men to come to the aid of their country.) 230 535 ms
(Now is the time for all good men to come to the aid of their country.) 230 520 ms
(Now is the time for all good men to come to the aid of their country.) 230 505 ms

```

% Simple link

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[ /Rect [ 70 650 210 675 ]
  /Page 3
  /View [ /XYZ -5 797 1.5]
  /LNK
pdfmark
```

% Fancy link

```
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  /Border [ 0 0 2 [ 3 ] ]
  /Color [0 1 0]
  /Page /Next
  /View [ /XYZ -5 797 1.5]
  /LNK
pdfmark
showpage
```

%%Page: 3 3

% Crop this page

```
[/CropBox [0 0 612 792] /PAGE pdfmark
```

(This is Page 3) 75 690 F4 sms

(Click here to go to page 1.) 75 660 F2 sms

(Click here to open test.doc.) 75 610 F2 sms

% Continue text for the article "Now is the Time"

(Now is the Time continued...) 230 690 F2 sms

(Now is the time for all good men to come to the aid of their country.) 230 670 F1 sms

(Now is the time for all good men to come to the aid of their country.) 230 655 ms

(Now is the time for all good men to come to the aid of their country.) 230 640 ms

(Now is the time for all good men to come to the aid of their country.) 230 625 ms

(Now is the time for all good men to come to the aid of their country.) 230 610 ms

(Now is the time for all good men to come to the aid of their country.) 230 595 ms

(Now is the time for all good men to come to the aid of their country.) 230 580 ms

(Now is the time for all good men to come to the aid of their country.) 230 565 ms

(Now is the time for all good men to come to the aid of their country.) 230 550 ms

(Now is the time for all good men to come to the aid of their country.) 230 535 ms

(Now is the time for all good men to come to the aid of their country.) 230 520 ms

(Now is the time for all good men to come to the aid of their country.) 230 505 ms

% Link

```
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  /Border [ 16 16 1 ]
  /Color [1 0 0]
  /Page 1
  /View [ /FitH 5]
  /LNK
pdfmark
```

% Link that launches another file

```
[ /Rect [ 70 600 210 625 ]
  /Border [ 16 16 1 ]
  /Color [0 0 1]
  /Action /Launch
  /File (test.doc)
  /LNK
```

pdfmark

% Article containing two beads

```
[ /Title (Now is the Time)
  /Author (John Doe)
  /Subject (Coming to the aid of your country)
  /Keywords (Time, Country, Aid)
  /Rect [ 225 500 535 705 ]
  /Page 2
  /ARTICLE
```

pdfmark

```
[ /Title (Now is the Time)
  /Rect [ 225 500 535 705 ]
  /Page 3
  /ARTICLE
```

pdfmark

% Pass-through PostScript language code

```
[ /DataSource (0 0 moveto 100 700 lineto stroke)
  /PS
```

pdfmark

showpage

% Bookmarks

```
[/Count 2 /Page 1 /View [/XYZ 44 730 1.0] /Title (Open Actions) /OUT pdfmark
  [/Action /Launch /File (test.doc) /Title (Open test.doc) /OUT pdfmark
  [/Action /GoToR /File (test.pdf) /Page 2 /View [/FitR 30 648 209 761]
    /Title (Open test.pdf on page 2) /OUT pdfmark
```

```
[/Count 2 /Page 2 /View [/XYZ 44 730 1.0] /Title (Fixed Zoom) /OUT pdfmark
  [/Page 2 /View [/XYZ 44 730 2.0] /Title (200% Magnification) /OUT pdfmark
  [/Count 1 /Page 2 /View [/XYZ 44 730 4.0] /Title (400% Magnification) /OUT
pdfmark
  [/Page 2 /View [/XYZ 44 730 5.23] /Title (523% Magnification) /OUT pdfmark
```

```
[/Count 3 /Page 1 /View [/XYZ 44 730 1.0] /Title (Table of Contents #1) /OUT pdfmark
  [/Page 1 /View [/XYZ 44 730 1.0] /Title (Page 1 - 100%) /OUT pdfmark
  [/Page 2 /View [/XYZ 44 730 2.25] /Title (Page 2 - 225%) /OUT pdfmark
  [/Page 3 /View [/Fit] /Title (Page 3 - Fit Page) /OUT pdfmark
```

```
[/Count -3 /Page 1 /View [/XYZ 44 730 1.0] /Title (Table of Contents #2) /OUT pdfmark
  [/Page 1 /View [/XYZ null null 0] /Title (Page 1 - Inherit) /OUT pdfmark
  [/Page 2 /View [/XYZ null null 0] /Title (Page 2 - Inherit) /OUT pdfmark
  [/Page 3 /View [/XYZ null null 0] /Title (Page 3 - Inherit) /OUT pdfmark
```

```
[/Count 1 /Page 0 /Title (Articles) /OUT pdfmark
  [/Action /Article /Dest (Now is the Time) /Title (Now is the Time) /OUT pdfmark
```

%%EOF

Appendix: Changes Since Earlier Versions

Changes since January 26, 1994 version

- Complete update for version 2.0 of the Acrobat products. New features include articles, actions, named destinations, Info and Catalog dictionary entries, and pass-through PostScript language code.
- Replaced examples with a larger, single example.

Changes since June 19, 1993 version

- — Corrected the description of the **Count** key for bookmarks to state that the value of this key specifies the number of immediate subordinate bookmarks, not the total number of subordinate bookmarks at all levels.
- Example code for Figure 6 — Updated the value of the **Count** key to be consistent with the correct definition of the **Count** key.

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