PDFX Manual

Navigation: bookmarks, internal links and opening mode

A PDF does more than display pages: it also carries its own table of contents. Bookmarks appear in the reader's navigation pane, and internal links move from a contents list to a chapter without leaving the document. This manual is produced by the engine it describes: every heading below also exists as a bookmark, and every contents line is a clickable area.

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No dependencies: no COM, no third-party DLL, no temporary file.

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CHAPTER 1

Getting started

Three calls are enough to obtain a valid PDF: _PDFX_New creates the document, the drawing functions fill the pages, and _PDFX_Save writes the file. The handle returned by _PDFX_New holds the whole state: fonts, colours, margins, bookmarks and links. No global variable is required in the calling script.

Installation

1. Copy PDFX.au3 next to your script.
2. Add #include "PDFX.au3" at the top.
3. Call _PDFX_New, draw, then _PDFX_Save.
4. Check the file with Tools/pdfcheck.py if needed.

Nothing needs to be registered: the engine writes the PDF directly.

CHAPTER 2

First document

A minimal document fits in a few lines. The header and footer are set once, then repeated on every page with the {page}, {pages} and {date} tokens. The footer of this manual already uses them.

```
#include "PDFX.au3"
Local $d = _PDFX_New("A4", "P", 18)
_PDFX_SetFont($d, "Helvetica", 12)
_PDFX_Text($d, 40, 60, "Hello")
_PDFX_Save($d, "hello.pdf")
```

Header and footer

The header sits in the top margin, the footer in the bottom margin; the body text starts below both. _PDFX_SetHeader and _PDFX_SetFooter each take three zones: left, centre and right. An empty string hides the corresponding zone, which makes it easy to compose a quiet pagination.

CHAPTER 3

Reference

This chapter covers the two navigation mechanisms: bookmarks, which structure the document in the reader's pane, and destinations, which define the exact point where each bookmark or link opens.

Bookmarks

A bookmark is a title, a level and a destination. _PDFX_AddBookmark returns its ordinal number, which makes a table of contents easy to verify. Level 0 is the root; a bookmark can descend at most one level below the previous one. A deeper request is clamped to that maximum, without any error: an outline always stays valid.

Destinations

Without a vertical position, the destination is /Fit: the whole page is shown. With one, it becomes /XYZ and the reader places that point at the top of the window. That is what makes a bookmark open on a precise paragraph rather than on the beginning of a chapter.

REFERENCE (CONTINUED)

Internal links

_PDFX_LinkPage turns a rectangle into a clickable area. The target page may not exist yet: this is the case of the table of contents, written before the chapters. The engine keeps the request pending and writes it at save time, when every page finally has its object number. A link to a page that was never created is ignored without error.

Back to contents

The rectangle above targets page 2, which already exists: it is a backward link. The contents entries pointed to future pages: two cases handled by the same call.

Colophon

Document produced by PDFX 1.4.0 for AutoIt, with no external library and no COM component. Content streams are compressed with FlateDecode by a compressor written in AutoIt. The document identifier is a deterministic fingerprint: two runs over the same content produce the same file, timestamps aside.

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Forum: https://www.autoitscript.com/forum/

Reference: ISO 32000-1, section 12.3 (interactive features, outlines and annotations)