

datasheet

PDFlib, PDFlib+PDI, PDFlib Personalization Server (PPS) 8

What is PDFlib?

PDFlib is the leading developer toolbox for generating and manipulating files in the Portable Document Format (PDF). PDFlib's main targets are dynamic PDF creation on a Web server or any other server system, and to implement »Save as PDF« in existing applications. You can use PDFlib to dynamically create PDF documents from database contents, similar to dynamic Web pages. PDFlib has proven itself in a wide range of other use cases as well. Application programmers need only decent graphics or print output experience to be able to use PDFlib quickly. Since PDFlib frees you from the technicalities of the PDF file format, you can focus on acquiring the data and arranging text, graphics, and images on the page.

The PDFlib product family is available in three different flavors: PDFlib, PDFlib+PDI (PDF Import), and the PDFlib Personalization Server (PPS).

PDFlib

PDFlib offers all functions required to generate PDF documents with text, graphics, images, and interactive elements such as annotations or bookmarks. Use PDFlib for the following tasks:

- ▶ Add »Save as PDF« capability to your application
- ▶ Create PDF documents on a Web server in real time
- ▶ Create database reports in PDF
- ▶ Create PDF/X-1/3/4/5 documents for commercial printing
- ▶ Convert TIFF, JPEG, or other image formats to PDF
- ▶ Create PDF/A for archiving

PDFlib+PDI (PDF Import)

PDFlib+PDI includes all PDFlib functions, plus the PDF Import Library (PDI). With PDI you can open existing PDF documents and incorporate some pages into the PDFlib output. Use PDFlib+PDI for all PDFlib tasks plus the following:

- ▶ Impose multiple PDF pages on a single sheet for printing
- ▶ Add text, such as headers, footers, stamps, or page numbers to existing PDF pages
- ▶ Place images, e.g. company logo, on existing pages
- ▶ Add barcodes to existing PDF pages
- ▶ Assemble existing PDF pages
- ▶ Add content to PDF/X or PDF/A documents

PDFlib Personalization Server (PPS)

The PDFlib Personalization Server (PPS) includes PDFlib+PDI plus additional functions for variable data processing using PDFlib Blocks. PPS makes applications independent from layout changes. The designer creates the page layout and converts it to PDF. She takes into account areas as placeholders for variable text and images. In Acrobat she drags a rectangular Block for each area using the PDFlib Block Plugin. Each Block contains a variety of Block properties, such as font size, color, image scaling. The PDFlib Block Plugin offers a Preview feature which shows the results of filling Blocks according to their properties.

The programmer writes code to fill PDFlib Blocks with text, images, or PDF pages. He doesn't need to know the formatting or position of a Block. Use PPS for all PDFlib+PDI tasks plus the following:

- ▶ Customize direct mailings with text and images
- ▶ Fill templates for transactional and statement processing
- ▶ Personalize promotional material with address data
- ▶ Generate individual parts catalogs from a database
- ▶ Produce customized documentation for multiple similar products

What's new in PDFlib 8?

New PDF Features for Acrobat 9

PDFlib supports various PDF features according to Acrobat 9 (technically: PDF 1.7 Adobe extension level 3):

- ▶ External graphical content (Reference XObjects)
- ▶ Layer variants (also called layer configurations)
- ▶ PDF Portfolios
- ▶ Georeferenced PDF
- ▶ AES-256 encryption and Unicode passwords
- ▶ PDFlib+PDI and PPS can import and process Acrobat 9 data.

Font Handling and Text Output

Quite a number of new typographical features can be found in PDFlib 8:

- ▶ Complex script shaping and bidirectional formatting for Arabic, Thai, Hindi, and many other writing systems
- ▶ Fallback fonts
- ▶ OpenType layout features, e.g. ligatures and swash characters
- ▶ Retain fonts across documents
- ▶ SING fonts for CJK Gaiji characters
- ▶ Redesigned font engine
- ▶ Wrap text around image clipping paths
- ▶ Text on a path

PDFlib Block Plugin and the PDFlib Personalization Server

The PDFlib Block Plugin is used to prepare PDF documents for Block filling (personalization) with the PDFlib Personalization Server (PPS). New features:

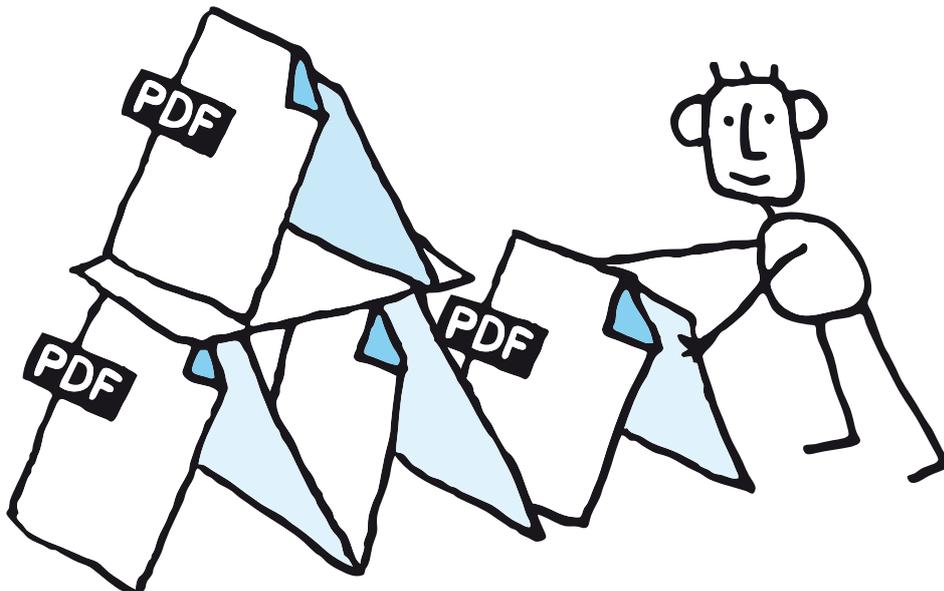
- ▶ Preview PPS Block processing in Acrobat
- ▶ Redesigned user interface
- ▶ Snap-to-grid for quickly layout out Blocks in a raster
- ▶ Additional Block properties, e.g. for transparency
- ▶ Clone PDF/A or PDF/X status of the Block container
- ▶ Leverage PDFlib 8 features with Blocks

Other important features

There are a number of other important new features, details can be found in the product documentation:

- ▶ Reusable path objects
- ▶ PDF/X-4 and PDF/X-5
- ▶ Alpha channel in TIFF and PNG images
- ▶ JBIG2-compressed images
- ▶ Compressed object streams and cross-reference streams
- ▶ Built-in PANTONE® Goe™ color libraries

PDFlib 8 also introduces a variety of improvements in existing functions.



Common Features in PDFlib, PDFlib+PDI, and the PDFlib Personalization Server

PDF output	Generate PDF documents on disk file or directly in memory (for Web servers) High-volume output and arbitrary PDF file size (even beyond 10 GB) Suspend/resume and insert page features to create pages out of order
PDF flavors	PDF 1.3 – PDF 1.7ext3* (Acrobat 4–9) including ISO 32000-1 (=PDF 1.7) Linearized (web-optimized) PDF for byteserving over the Web Tagged PDF for accessibility and reflow Marked Content for adding application-specific data or alternate text without Tagging*
ISO standards	ISO 15930: PDF/X for the graphic arts industry* ISO 19005: PDF/A for archiving ISO 32000: standardized version of PDF 1.7*
Graphics	Common vector graphics primitives: lines, curves, arcs, ellipses*, rectangles, etc. Smooth shadings (color blends), pattern fills and strokes Transparency (opacity) and blend modes External graphical content (Reference XObjects) for variable data printing* Reusable path objects and clipping paths imported from images*
Layers	Optional page content which can selectively be displayed Annotations and form fields can be placed on layers Layers can be locked, automatically activated depending on zoom factor, etc. Layer variants* (production-safe groups of layers) for PDF/X-4 and PDF/X-5
Fonts	TrueType (TTF and TTC) and PostScript Type 1 fonts (PFB and PFA, plus LWFN on the Mac) OpenType fonts with PostScript or TrueType outlines (TTF, OTF) Support for dozens of OpenType layout features for Western and CJK text output, e.g. ligatures, small caps, old-style numerals, swash characters, simplified/traditional forms, vertical alternates* Directly use fonts which are installed on the Windows or Mac system («host fonts») Font embedding for all font types; subsetting for TrueType, OpenType, and Type 3 fonts User-defined (Type 3) fonts for bitmap fonts or custom logos EUDC and SING* fonts (glyphlets) for CJK Gaiji characters Fallback fonts (pull missing glyphs from an auxiliary font)* Retain fonts across documents to increase performance*
Text output	Text output in different fonts; underlined, overlined, and strikethrough text Glyphs in a font can be addressed by numerical value, Unicode value, or glyph name* Kerning for improved character spacing Artificial bold, italic, and shadow* text Create text on a path* Proportional widths for standard CJK fonts* Configurable replacement of missing glyphs
Internationalization	Unicode strings for page content, interactive elements, and file names*; UTF-8, UTF-16, and UTF-32 formats Support for a variety of 8-bit and legacy multi-byte CJK encodings (e.g. Shift-JIS; Big5) Fetch code pages from the system (Windows, IBM eServer iSeries and zSeries) Standard and custom CJK fonts and CMaps for Chinese, Japanese, and Korean text Vertical writing mode for Chinese, Japanese, and Korean text Character shaping for complex scripts, e.g. Arabic, Thai, Devanagari* Bidirectional text formatting for right-to-left scripts, e.g. Arabic and Hebrew* Embed Unicode information in PDF for proper text extraction in Acrobat

Images	Embed BMP, GIF, PNG, TIFF, JBIG2*, JPEG, JPEG 2000*, and CCITT raster images
	Automatic detection of image file formats
	Query image information (pixel size, resolution, ICC profile, clipping path, etc.)*
	Interpret clipping paths in TIFF and JPEG images
	Interpret alpha channel (transparency) in TIFF and PNG images*
Color	Image masks (transparent images with a color applied), colorize images with a spot color
	Grayscale, RGB (numerical, hexadecimal strings, HTML color names), CMYK, CIE Lab color
	Integrated support for PANTONE® colors (incl. PANTONE® Goe™)* and HKS® colors
Color management	User-defined spot colors
	ICC-based color with ICC profiles; support for ICC 4 profiles*
	Rendering intent for text, graphics, and raster images
	Default gray, RGB, and CMYK color spaces to remap device-dependent colors
Archiving	ICC profiles as output intent for PDF/A and PDF/X
	PDF/A-1a and PDF/A-1b (ISO 19005-1)
	XMP extension schemas for PDF/A-1
Graphic arts	PDF/X-1a, PDF/X-3, PDF/X-4*, PDF/X-4p*, PDF/X-5p*, PDF/X-5pg* (ISO 15930)
	Embedded or externally referenced* output intent ICC profile
	External graphical content (referenced pages) for PDF/X-5p and PDF/X-5pg*
	Create OPI 1.3 and OPI 2.0 information for imported images
	Separation information (PlateColor)
Textflow Formatting	Settings for text knockout, overprinting etc.
	Format text into one or more rectangular or arbitrarily shaped areas with hyphenation (user-supplied hyphenation points required), font and color changes, justification methods, tabs, leaders, control commands; wrap text around images
	Advanced line-breaking with language-specific processing
	Flexible image placement and formatting
Table formatting	Wrap text around images or image clipping paths*
	Table formatter places rows and columns, and automatically calculates their sizes according to a variety of user preferences. Tables can be split across multiple pages.
	Table cells can hold single- or multi-line text, images, PDF pages, path objects, annotations, and form fields
	Table cells can be formatted with ruling and shading options
	Flexible stamping function
	Matchbox concept for referencing the coordinates of placed images or other objects
Security	Encrypt PDF output with RC4 (40/128 bit) or AES encryption algorithms (128/256* bit)
	Unicode passwords*
Interactive elements	Specify permission settings (e.g. printing or copying not allowed)
	Create form fields with all field options and JavaScript
	Create actions for bookmarks, annotations, page open/close and other events
	Create bookmarks with a variety of options and controls
	Page transition effects, such as shades and mosaic
	Create all PDF annotation types, such as PDF links, launch links (other document types), Web links
Multimedia	Named destinations for links, bookmarks, and document open action
	Create page labels (symbolic names for pages)
	Embed 3D animations in PDF
GeoPDF	Create PDF with geospatial reference information*
Tagged PDF	Create Tagged PDF and structure information for accessibility, page reflow, and improved content repurposing; links and other annotations can be integrated in the document structure

Metadata	Document information: common fields (Title, Subject, Author, Keywords) and user-defined fields Create XMP metadata from document info fields or from client-supplied XMP streams Process XMP image metadata in TIFF, JPEG, and JPEG 2000 images*
Programming	Language bindings for Cobol, COM, C, C++, Java, .NET, Perl, PHP, Python, REALbasic, RPG, Ruby, Tcl Virtual file system for supplying data in memory, e.g., images from a database
<i>*New or considerably improved in PDFlib/PDFlib+PDI/PPS 8</i>	

Additional Features in PDFlib+PDI and the PDFlib Personalization Server

PDF input (PDI)	Import pages from existing PDF documents Import all PDF versions up to PDF 1.7 extension level 3 (Acrobat 9) Import documents which are encrypted with any of PDF's standard encryption algorithms (master password required)* Query information about imported pages* Clone page geometry of imported pages (e.g. BleedBox, TrimBox, CropBox)* Delete redundant objects (e.g. identical fonts) across multiple imported PDF documents Repair malformed input PDF documents* Copy PDF/A or PDF/X output intent from imported PDF documents
pCOS interface	pCOS interface for querying details about imported PDF documents*
<i>*New or considerably improved in PDFlib+PDI and PPS 8</i>	

Additional Features in the PDFlib Personalization Server

Variable Data Processing (PPS)	PDF personalization with PDFlib Blocks for text, image, and PDF data
PDFlib Block Plugin	PDFlib Block plugin for creating PDFlib Blocks interactively in Acrobat on Windows and Mac Redesigned user interface* Preview PPS Block filling in Acrobat* Snap-to-grid for interactively creating or editing Blocks in Acrobat* Clone PDF/X or PDF/A properties of the Block container* Convert PDF form fields to PDFlib Blocks for automated filling Textflow Blocks can be linked so that one Block holds the overflow text of a previous Block List of PANTONE® and HKS® spot color names integrated in the Block plugin*
<i>*New or considerably improved in PPS 8</i>	

Supported Development Environments

PDFlib is everywhere – it runs on practically all computing platforms. We offer 32- and 64-bit variants for all common flavors of Windows, Mac OS X, Linux and Unix, as well as for IBM eServer iSeries and zSeries mainframes.

The PDFlib core is written in highly optimized C code for maximum performance and small overhead. Via a simple API (Application Programming Interface) the PDFlib functionality is accessible from a variety of development environments:

- ▶ COM for use with VB, ASP, Borland Delphi, etc.
- ▶ C and C++
- ▶ Cobol (IBM eServer zSeries)
- ▶ Java, including servlets and Java Application Server
- ▶ .NET for use with C#, VB.NET, ASP.NET, etc.
- ▶ PHP
- ▶ Perl
- ▶ Python
- ▶ REALbasic
- ▶ RPG (IBM eServer iSeries)
- ▶ Ruby
- ▶ Tcl

Benefits of using PDFlib Software

Rock-solid Products

Tens of thousands of programmers worldwide are working with our software. PDFlib products meet all quality and performance requirements for server deployment. All products are suitable for robust 24x7 server deployment and unattended batch processing.

Speed and Simplicity

PDFlib products are incredibly fast – up to thousands of pages per second. The programming interface is straightforward and easy to learn.

PDFlib Products all over the World

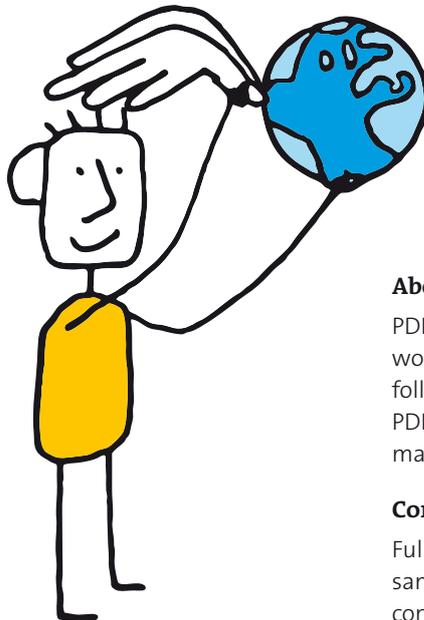
Our products support all international languages as well as Unicode. They are used by customers in all parts of the world.

Professional Support

If there's a problem, we will try to help. We offer commercial support to meet the requirements of your business-critical applications. By adding support you will have access to the latest versions, and have guaranteed response times should any problems arise.

Licensing

We offer various licensing programs for server licenses, integration and site licenses, and source code licenses. Support contracts for extended technical support with short response times and free updates are also available.



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PDFlib GmbH is completely focused on PDF technology. Customers worldwide use PDFlib products since 1997. The company closely follows development and market trends, such as ISO standards for PDF. PDFlib GmbH products are distributed all over the world with major markets in North America, Europe, and Japan.

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