

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

<b>PDF flavors</b>	PDF 1.4 – PDF 1.7 extension level 8 and PDF 2.0
	Linearized (web-optimized) PDF for byteserving over the Web
	High-volume output and arbitrary PDF file size (beyond 10 GB)
<b>ISO standards for PDF</b>	ISO 32 000-1: standardized version of PDF 1.7
	ISO 32 000-2: PDF 2.0 (including dated revision ISO 32000-2:2020)
	ISO 15 930: PDF/X-3/4/5 for data exchange the graphic arts industry
	ISO 19 005-1/2/3: PDF/A-1/2/3 for archiving
	ISO 16612-2: PDF/VT-1 for variable and transactional printing
	ISO 14289-1: PDF/UA-1 for universal accessibility
<b>Fonts</b>	TrueType (TTF and TTC) and PostScript Type 1 fonts
	OpenType fonts with PostScript or TrueType outlines (TTF, OTF, OTC)
	WOFF fonts (Web Open Font Format)
	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
	Access fonts which are installed on Windows or macOS
	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 (use missing glyphs from another font)
<b>Text output</b>	Text output in different fonts; underlined, overlined, and strikethrough text
	Glyphs in a font can be addressed by numerical value, Unicode or glyph name
	Kerning for improved character spacing
	Artificial bold, italic, and shadow text
	Text on a path
	Configurable replacement of missing glyphs
<b>Accessibility</b>	Create Tagged PDF for accessibility
	Tagging of interactive elements, e.g. annotations and form fields
	Automatic table and artifact tagging
	PDF/UA-1 for universal accessibility
<b>Internationalization</b>	Full Unicode support
	Support for a variety of 8-bit and legacy multi-byte CJK encodings (e.g. Shift-JIS; Big5)
	CJK fonts and CMaps for Chinese, Japanese, and Korean text
	Ideographic variation sequences (IVS) for CJK variant glyphs
	Vertical writing mode for Chinese, Japanese, and Korean text
	Character shaping for complex scripts, e.g. Arabic, Thai, Devanagari
<b>SVG vector graphics</b>	Bidirectional text formatting for right-to-left scripts, e.g. Arabic and Hebrew
	Import vector graphics in SVG format; ICC profiles; CMYK and spot colors in SVG, CSS
<b>Images</b>	Load BMP, GIF, PNG, TIFF, JBIG2, JPEG, JPEG 2000, and CCITT raster images
	Query image information (pixel size, resolution, ICC profile, clipping path, etc.)
	Use clipping path in TIFF and JPEG images
	Use alpha channel (transparency) in TIFF and PNG images
	Image masks (transparent images with a color applied), colorize images with a spot or DeviceN color
<b>Color</b>	Grayscale, RGB (numerical, hexadecimal, HTML color names), CMYK, CIE L*a*b* color
	Integrated support for PANTONE® and HKS® colors
	DeviceN (n-colorant) color space based on process or spot colors
	User-defined spot color
	Color gradients (smooth shadings) between process colors or spot colors, pattern fills and strokes

<b>Color management</b>	ICC-based color with ICC profiles
	Rendering intent for text, graphics, and raster images
	ICC profiles as output intent for PDF/A and PDF/X; multi-colorant profiles for PDF/X-5n
<b>Archiving</b>	PDF/A-1a/1b, PDF/A-2a/b/u and PDF/A-3a/b/u
	XMP extension schemas for PDF/A
<b>Graphic arts</b>	PDF/X-3, PDF/X-4, PDF/X-4p, PDF/X-5n
	Embedded or externally referenced output intent ICC profile
	Overprint and text knockout
<b>Variable Document Printing (VDP)</b>	PDF/VT-1 for variable and transactional printing
<b>Textflow Formatting</b>	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
	Flexible image placement and formatting
	Wrap text around images or image clipping paths
<b>Table formatting</b>	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, SVG graphics, PDF pages, path objects, annotations, and form fields
	Table cells can be formatted with ruling and shading options
	Matchbox concept for referencing the coordinates of placed images or other objects
<b>Vector graphics</b>	Common vector graphics primitives: lines, curves, arcs, ellipses, rectangles, etc.
	Transparency (opacity) and blend modes
	External graphical content (Reference XObjects) for variable document printing
	Reusable path objects and clipping paths imported from images
<b>Layers</b>	Optional page content which can selectively be displayed
	Annotations and form fields can be placed on layers
<b>Security</b>	Encrypt PDF document or attachments
	Unicode passwords
	Document permission settings, e.g. printing or copying not allowed
<b>Interactive elements</b>	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 (comments) such as PDF links, launch links (other document types), Web links
	Named destinations for links, bookmarks, and document open action
	Create page labels (symbolic names for pages)
<b>Multimedia</b>	Embed 3D animations in PDF
	Embed Sound and Movie in PDF and control it with JavaScript
<b>Georeferenced PDF</b>	Create PDF with geospatial reference information
<b>Metadata</b>	Document information: common fields (Title, Subject, Author, Keywords) and user-defined fields
	Create XMP metadata from document info fields or XMP streams
	User-supplied custom XMP metadata
	Process XMP image metadata in TIFF, JPEG, JPEG 2000 and SVG
<b>Programming</b>	Language bindings for C, C++, Java, .NET and .NET Core, Objective C, Perl, PHP, Python, RPG, Ruby
	Virtual file system for supplying data in memory, e.g., images from a database
	Generate PDF documents on disk file or directly in memory
<b>Embedded Systems</b>	PDFlib Mini Edition (ME) with reduced memory requirements