ICEpdf
Open Source Java PDF

ICEPDF®

ICEpdf is an open source Java PDF library ideal for displaying and printing PDF documents within any Java application. The ICEpdf API is lightweight, fast, efficient and very easy to use. ICEpdf is 100% Java-based. ICEpdf is capable of rendering PDFs up to version 1.6 (Acrobat 7.0) and provides the following features:

- Seamless integration within Java clients, allowing complete control over the configuration, functionality, and user interface.
- A lightweight static and dynamic memory footprint.
- Easy deployment to any Java platform without the hassles of Java-to-native integration issues.
- Embeddable as a Java PDF viewer component and stand-alone application.
- Render PDFs to an image file (PNG, JPEG, or GIF) in a server-side web application.
- Robust, efficient, mature PDF parser.
- Supports all PDF embedded font types (Types 0-3, OpenType, TrueType) using the Font Engine included in ICEpdf Pro[1].
- Font substitution optimized per platform.
- Supports incremental document loading, reducing time to view first page.
- Supports Adobe Standard Security for password-protected documents (40 and 128 bit RC4 or AES).
- Support for interactive link annotation actions; uri, launch and resource.
- View all markup annotations.

ICEpdf can be used in a multitude of different ways. As a Java client (applet, thin client, Swing, Java Web Start) or deployed on a server in headless mode as a PDF servlet (JSP or JSF). Use ICEpdf in any of the following ways:

1) Java PDF Client:
ICEpdf can easily be integrated into any enterprise-level Java application to provide PDF viewing and navigation in a manner not possible with the Adobe Reader® application. This Java PDF Library includes an embeddable PDF viewer for easy integration within Java client applications. ICEpdf can also stand alone as an enterprise class Java PDF Viewer application. ICEpdf Java Viewer provides:

- Acrobat-like GUI and features: Zoom in/out, rotate, next/previous page, fit to window/width/actual size, pan.
- Multipage view support; continuous and side-by-side view types.
- Utility pane supports Outlines (bookmarks) and document search.
- Document Information and Permissions dialogs.
- Print, Print Setup.
- Keyboard shortcuts, mouse-wheel scrolling, drag-and-drop.

2) PDF Content Conversion:
ICEpdf is the ideal technology for the conversion and extraction of PDF content. This Java PDF Library can be used to convert rendered PDF pages to images, SVG documents, and other file formats.

3) PDF Content Extraction:
Use ICEpdf to extract PDF document meta-data, text, and images.

4) PDF Link Annotations:
Configure ICEpdf to support interactive link annotations via a mouse. An annotation callback gives developers flexibility in which types of link annotation actions they wish to support.

[1] ICEpdf is available in two versions; ICEpdf, the open source version, and ICEpdf Pro which includes an advanced Font Engine.

Supported Platforms

The ICEpdf product is 100% Java and capable of running on the following JVMs:

Windows:	Linux:	Solaris:	Mac OS X:
Sun J2SE 1.5	Sun J2SE 1.5	Sun J2SE 1.5	Apple J2SE 1.5
Sun J2SE 1.6	Sun J2SE 1.6	Sun J2SE 1.6	Apple J2SE 1.6
Sun J2SE 1.7	Sun J2SE 1.7	Sun J2SE 1.7	N/A

Note: For more information, see the ICEpdf Developer Guide.

Deployment Scenarios

Java Client Deployment

ICEpdf is 100% pure Java and can be used with any J2SE or J2EE JVM, v1.3.1 or greater. ICEpdf is fully deployable using standard mechanisms for Java application deployment, such as an Applet or via Java Web Start. ICEpdf can be deployed to both client workstations for interactive PDF viewing and navigation as well as headless server environments for non-visual PDF content conversion and extraction applications.

Java Servlet (JSP or JSF) Deployment

This ICEpdf Java PDF Library can also be deployed as a Servlet on any Java server to render PDF files. ICEpdf acts as Java EE PDF engine and renders the requested files server side, converts them to a specified image format, and serves the pages back in the formof a standard web page.

ICEpdf Font Engine

The ICEpdf Font Engine* provides embedded font support for:

- Type 1 Fonts (Standard and Multiple Master)
- Type3, CMaps (predefined and Embedded)
- Type 2 CID
- Type 1 (CFF)
- OpenType (CFF Type outlines)
- TrueType, Font Subsets
- Type 0 CID
- Type 0
- OpenType (True Type Outlines)

*The ICEpdf Font Engine is included in the Pro edition of ICEfaces. Refer to the ICEpdf Pro Support Options for pricing and detailed support information.

ICEpdf Support

Investing in ICEpdf Support allows you to develop and deploy your ICEpdf projects with confidence. These customized support packages deliver development and production support for all types of ICEpdf applications. Expert development and deployment advice, along with the added protection of Certified Releases and Emergency Patches allows your team to assuredly roll ICEpdf applications into a production environment, and maintain them over time.

ICEpdf Pro Support Options

	Basic	Standard	Professional	Enterprise
Software				
ICEpdf	✓	✓	✓	✓
ICEpdf Pro Font Engine	✓	✓	✓	✓
License Type	Commercial	Commercial	Commercial	Commercial
Update Services				
Software Update Notification		✓	✓	✓
Technical Alerts		✓	✓	✓
Certified Releases & Updates		✓	✓	✓
Test Support				
Functional Test			✓	✓
Load Test			✓	✓
Problem Resolution				
Number of Incidents		25	50	Unlimited
Email Access		✓	✓	✓
Phone Access			✓	✓
Support Access[1]		Standard Hrs.	Extended Hrs.	Extended Hrs.
7X24 Support		Optional[4]	Optional[4]	Optional[4]
Emergency Response Time[2]		24 Hours	8 Hours	4 Hours
Emergency Bug Fix Escalation			✓	✓
Emergency Patch				✓
Custom Build				✓
Support Tools & Training				
Online Case Management		✓	✓	✓
Remote Desktop Sharing				✓
Indemnification				
License Indemnification				✓
Response Time				
B1		1 Day	8 Hours	4 Hours
B2		5 Days	1 Day	1 Day
B3		7 Days	5 Days	5 Days
B4		15 Days	10 Days	10 Days

Pricing

Client Subscription Pricing	Basic	Standard	Professional	Enterprise
Pricing per Term per App.	$299	$2,000	$3,500	$5,000
Subscription Term	1 Year	1 Year	1 Year	1 Year
# of Named Developers	N/A	1	2	2
# of Client Deployments	100	1,000	20,000	Unlimited

Server Subscription Pricing	Basic	Standard	Professional	Enterprise
Pricing per Term per App.	$750	$2,000	$3,500	$5,000
Subscription Term	1 Year	1 Year	1 Year	1 Year
# of Named Developers	N/A	1	2	2
# of CPUs[3]	2	6	12	Unlimited

1 Standard Hours = 8:00 - 16:00 GMT / 8:00 - 18:00 EST. Extended Hours = 8:00 - 19:00 GMT / 8:00 - 19:00 EST
2 Emergency Response Times only apply to B1 issue.
3 CPU Definitions: Quad-Core = 2 CPU; Dual-Core = 1.5 CPU; Production CPU = 1 CPU; Backup CPU = 0.5 CPU; Staging CPU = 0.25 CPU.

Detailed list of Supported Feature in ICEpdf 3.0	PDF Ref Section	Introduced in PDF Spec Version							ICEpdf	ICEpdf Pro
		1.0	1.1	1.2	1.3	1.4	1.5	1.6	✓	✓
Filters										
ASCIIHexDecode	3.3.1	✓							✓	✓
ASCII85Decode	3.3.2	✓							✓	✓
LZWDecode	3.3.3	✓							✓	✓
FlateDecode	3.3.3			✓					✓	✓
RunLengthDecode	3.3.4	✓							✓	✓
CCITTFaxDecode										
Group 4	3.3.5	✓							✓	✓
Group 3, 1-D	3.3.5	✓							✓	✓
Group 3, 2-D	3.3.5	✓							✓	✓
DCTDecode (No transformations)	3.3.7	✓							✓	✓
File Structure										
File Body	3.4.2	✓							✓	✓
Cross-Reference Table	3.4.3	✓							✓	✓
File Trailer	3.4.4	✓							✓	✓
Incremental Updates	3.4.5					✓			✓	✓
Object Streams	3.4.6						✓		✓	✓
Cross-Reference Stream	3.4.7						✓		✓	✓
Encryption										
Standard Security Handler	3.5.2		✓						✓	✓
Document Structure										
Document Catalog	3.6.1		✓						✓	✓
Page Layout										
Singe Page View	3.6.1	✓							✓	✓
One Column View	3.6.1	✓							✓	✓
Two Column Left View	3.6.1	✓							✓	✓
Two Column Right View	3.6.1	✓							✓	✓
Two Page Left View	3.6.1						✓		✓	✓
Two Page Right View	3.6.1						✓		✓	✓
Page Tree	3.6.2		✓						✓	✓
Page Objects	3.6.2		✓						✓	✓
Inheritance of Page Attributes	3.6.2		✓						✓	✓
Functions										
Type0 (Sampled) Functions	3.9.1			✓					✓	✓
Type2 (Exponential Interpolation) Functions	3.9.2			✓					✓	✓
Type3 (Stitching) Functions	3.9.3			✓					✓	✓
Graphics										
Graphics States										
Device Independent										
Line Width	4.3.2	✓							✓	✓
Line Cap Style	4.3.2	✓							✓	✓
Line Join Style	4.3.2	✓							✓	✓
Miter Limit	4.3.2	✓							✓	✓
Line Dash Pattern	4.3.2	✓							✓	✓
Alpha Constant	4.3.2					✓			✓	✓
Path Construction										
Cubic Bezier Curves	4.4.1	✓							✓	✓
Sub Paths	4.4.1	✓							✓	✓
Lines	4.4.1	✓							✓	✓
Rectangles	4.4.1	✓							✓	✓
Path-Painting Operators										
Stroking	4.4.2	✓							✓	✓
Filling										
Nonzero Winding Number Rule	4.4.2	✓							✓	✓
Even-Odd Rule	4.4.2	✓							✓	✓
Clipping Path Operators	4.4.3	✓							✓	✓
Color Spaces										
Device Color Spaces										
Device Gray	4.5.3		✓						✓	✓
Device RGB	4.5.3		✓						✓	✓
Device CMYK	4.5.3		✓						✓	✓
CIE-Based Color Spaces										
ICCBased Color Spaces	4.5.4				✓				✓	✓
Special Color Spaces										
Pattern Color Spaces	4.5.5			✓					✓	✓
Indexed Color Spaces	4.5.5		✓						✓	✓
Separation Color Spaces	4.5.5			✓					✓	✓
DeviceN Color Spaces	4.5.5				✓				✓	✓
Patterns	4.6				✓				✓	✓
Shading	4.6.3				✓				✓	✓
External Objects	4.7	✓							✓	✓
Image XObjects	4.7	✓							✓	✓
Form XObjects	4.7	✓							✓	✓
Images										
Decode Arrays	4.8.4	✓							✓	✓

Detailed list of Supported Feature in ICEpdf 3.0	PDF Ref Section	Introduced in PDF Spec Version							ICEpdf	ICEpdf Pro
		1.0	1.1	1.2	1.3	1.4	1.5	1.6	✓	✓
Image Interpolation	4.8.4	✓							✓	✓
Masked Images										
Stencil Masking	4.8.5	✓							✓	✓
Explicit Masking	4.8.5				✓				✓	✓
Color Key Masking	4.8.5				✓				✓	✓
Inline Images	4.8.6	✓							✓	✓
Form XObjects										
Form Dictionaries	4.9.1	✓							✓	✓
Text										
Text State Parameters										
Character Spacing	5.2.1	✓							✓	✓
Word Spacing	5.2.2	✓							✓	✓
Horizontal Scaling	5.2.3	✓								✓
Leading	5.2.4	✓							✓	✓
Text Rise	5.2.6	✓							✓	✓
Simple Fonts										
Type 1 Fonts										
Standard Type 1 Fonts	5.5.1	✓								✓
Multiple Master Fonts	5.5.1	✓								✓
TrueType Fonts	5.5.2									✓
Font Subsets	5.5.3	✓								✓
Type 3 Fonts	5.5.4									✓
Composite Fonts										
CIDFonts	5.6.3									✓
Cmaps										
Predefined Cmaps	5.6.4									✓
Embedded Cmap Files	5.6.4									
Type 0 CIDFonts	5.8									✓
Type 2 CIDFonts	5.8									✓
Font Descriptors	5.7								✓	✓
Other Font Programs										
Type 0 Fonts	5.8									✓
Type 1(CFF)	5.8			✓						✓
OpenType (True Type outlines)	5.8							✓		✓
OpenType (CFF Type outlines)	5.8							✓		✓
Interactive Features										
Viewer Preferences										
Hide Tool bar	8.1	✓							✓	✓
Hide Menu bar	8.1	✓							✓	✓
Fit Window	8.1	✓							✓	✓
Center Window	8.1	✓							✓	✓
Display Document Title	3.1					✓			✓	✓
Document Page Mode	8.1	✓							✓	✓
Outlines	8.1	✓							✓	✓
Optional content group	8.1	✓							✓	✓
Print Scaling	8.1							✓	✓	✓
Document-Level Navigation										
Destinations	8.2.1	✓							✓	✓
Document Outline	8.2.1	✓							✓	✓
Link Annotation	8.4.5	✓							✓	✓
Go To actions	8.5.3	✓							✓	✓
Go to resource actions	8.5.3	✓							✓	✓
Go to launch actions	8.5.3	✓							✓	✓
URI actions	8.5.3	✓							✓	✓
Annotations*	8.4	✓							✓	✓
Annotation Flags	8.4.2		✓	✓	✓				✓	✓
Border Styles	8.4.3			✓					✓	✓
Appearance Streams	8.4.4			✓					✓	✓
Annotation Types	8.4.5									✓
Markup Annotations	8.4.5	✓							✓	✓
Annotation States	8.4.5						✓		✓	✓
Text Annotations	8.4.5	✓							✓	✓
Free Text Annotations	8.4.5				✓				✓	✓
Line Annotations	8.4.5				✓				✓	✓
Square & Circle Annotations	8.4.5				✓				✓	✓
Polygon and Polyline Annotations	8.4.5						✓		✓	✓
Text Markup Annotations	8.4.5				✓				✓	✓
Interactive Forms										
Button Fields										
Push Buttons	8.6.3			✓					✓	✓
Check boxes	8.6.3			✓					✓	✓
Radio Buttons	8.6.3			✓					✓	✓
Text Fields	8.6.3			✓					✓	✓
Choice Fields	8.6.3			✓					✓	✓