PDFlib PLOP and PLOP DS
PDF Linearization, Optimization, Protection

What is PDFlib PLOP?

PDFlib PLOP is a versatile tool for linearizing, optimizing, repairing, analyzing, encrypting and decrypting PDF documents. The extended version PLOP DS offers the ability to apply digital signatures to PDF documents. The signatures can be validated in Adobe Acrobat and Adobe Reader, without the need for any additional software. Signatures can be created from digital IDs in the common PKCS#12 and PFX certificate formats. On Windows digital IDs from the Windows certificate store can also be used.

PLOP linearization and optimization features create efficient and small PDF documents for fast Web delivery. PLOP protection features encrypt or decrypt PDF documents and apply or remove permission settings, such as »printing not allowed« or »content extraction not allowed«. PLOP's repair mode automatically detects damaged PDF documents and fixes the problems if possible. PLOP analysis features can be used to query arbitrary properties of a PDF document. In addition, document metadata can be retrieved and set.

PDFlib PLOP Features

Linearization

With PDFlib PLOP you can linearize a PDF document for fast delivery over the Web (byteserving). Byteserving increases the perceived download speed since the first page is already visible while the remainder of the document is downloaded in the background.

Optimization

PLOP can significantly reduce the file size of a PDF document without affecting quality. It achieves this by removing unnecessary or redundant identical objects, such as repeatedly embedded fonts, images, identical ICC color profiles, etc.

Repair Mode

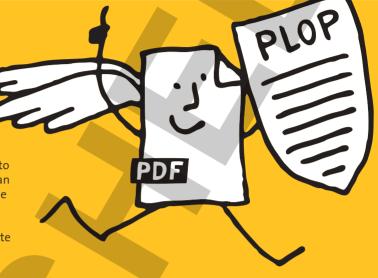Several kinds of damaged PDF documents are detected and automatically repaired, if possible.

Protection

PLOP can apply user and master passwords, and set access permissions to prevent the document from being printed with Acrobat, disallow text extraction or modification, etc.

PLOP uses RC4 or AES encryption. AES encryption has been introduced in Acrobat 7, and is considered secure.

Using PLOP's protection features you can:

- ▶ Encrypt a PDF document with user or master password, or both
- ▶ Remove PDF encryption (if you know the master password)
- ▶ Add or remove permission settings, e.g. »printing not allowed« or »text extraction not allowed« (if you know the master password)

- ▶ Query information about the security status (encrypted with user or master password), encryption scheme, permission settings, and document info fields

Document Metadata

- ▶ Read and set document info entries
- ▶ Automatic synchronization of XMP metadata

Analysis

The PLOP library includes the pCOS interface for querying details about a PDF document, such as font lists, metadata, page size, and many more (see separate datasheet for the pCOS product).

Creating Digital Signatures with PDFlib PLOP DS

PDFlib PLOP DS (Digital Signature) offers all features of PLOP, plus the ability to apply digital signatures to PDF documents.

PLOP DS can apply standard PDF signatures which can be verified with Adobe Reader or Acrobat 6 and above. Signature support is available in the PLOP DS library and in the command-line tool, and works as follows:

- ▶ PLOP DS reads certificates (digital IDs) from standard PKCS#12 or PFX files. On Windows, the certificate store can also be accessed to use certificates which are installed in the system.
- ▶ PLOP DS can create signatures in existing signature fields or generate new fields to hold the signature. The generated signatures can be invisible, or visible at a particular location on the page. Several signature properties which will be displayed in Acrobat can be specified, such as the reason of the signature, location, contact info, etc.
- ▶ PLOP DS supports all PDF versions up to and including PDF 1.7, the file format of Acrobat 8. Applying a signature can be combined with encryption (user password, master password, or permissions).

For specialized applications the crypto engine built into PLOP DS can be replaced with a custom engine, e.g. to leverage cryptographic hardware or certified cryptographic software modules.

Other Benefits

PLOP is PDF/A-aware: if the input document conforms to the PDF/A standard, the output document is guaranteed to still comply with PDF/A. Similarly, PLOP is PDF/X-aware.

Since PLOP accepts PDF input documents from a disk file or directly in memory, it can easily be combined with PDFlib for dynamic PDF generation. For example, using the combination of PDFlib and PLOP DS you can create PDF invoices and sign them before sending them to the customer.

PLOP Library or Command-Line Tool?

PLOP and PLOP DS are available as a programming library (component) for various development environments, and as a command-line tool for batch operations. The library and the command-line tool offer similar features, but are suitable for different deployment tasks.

The PLOP programming library is used...

...for integration into your desktop or server application. Examples for using the library with all supported language bindings are included in the PLOP package.

The PLOP command-line tool is suited...

...for batch processing PDF documents. It doesn't require any programming, but offers powerful command-line options which can be used to integrate it into complex workflows.

The PLOP command-line tool can also be called from environments which do not support the use of the PLOP library.

Supported Development Environments

PDFlib PLOP and PLOP DS are everywhere – they run on practically all computing platforms. We offer variants for all common flavors of Windows, Mac OS, Linux and Unix, as well as for IBM eServer iSeries and zSeries systems.

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

- ▶ COM for use with VB, ASP, Borland Delphi, etc.
- ▶ C and C++
- ▶ Java, including servlets and Java Application Server
- ▶ .NET for use with C#, VB.NET, ASP.NET, etc.
- ▶ Perl
- ▶ PHP hypertext processor
- ▶ RPG on iSeries

Benefits of using PDFlib Software

Rock-solid Products

Tens of thousands of programmers worldwide successfully use 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 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 options 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.

About PDFlib GmbH

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