softXpansion

PDF Xpansion SDK 17 Guide
Libraries for Electronic Documents

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ABOUT THE PDF XPANSION SDK GUIDE

This document is intended to provide a brief introduction to the PDF Xpansion SDK:

- ➢ Overview
- ➢ Functionality and properties
- ➢ Licensing
- ➢ Prices

It is not a programming guide; it contains a general overview of the SDK and a guide to the licensing models and prices. Two types of licenses are described; the prices apply to the Business license, which is the most frequently used model.

The important chapters "Electronic Invoicing" and "Electronic Ordering" show possibilities for processing documents according to the new standards for commercial documents.

For technical questions, please refer to the following resources:

- ➢ PDF Xpansion SDK Reference – part of the SDK documentation
- ➢ Technical support via pdf@soft-xpansion.com

PORTABLE DOCUMENT FORMAT (PDF, PDF/A)

A PDF document is a file saved in the Portable Document Format (PDF or PDF/A). The resulting file has the extension ".pdf". Adobe Systems Inc. proposed this format in 1993 as an open standard for document exchange. It enables consistent and uniform display of documents independently of the hardware or software used to create or view them. Each PDF file encapsulates one document with a complete description of the page content according to a fixed layout, including the text, fonts, graphics and other information needed to display it.

From 1993 to 2006 Adobe Systems actively developed the PDF format and released 7 new versions, up to version 1.7. The PDF format has spread widely through very different areas of electronic document management around the world. The PDF format is now the de facto standard in various application areas.

At the start of 2007, Adobe Systems applied to the International Organization for Standardization (ISO) to register the PDF format as an ISO standard. The ISO published the approved ISO 32000-1 standard based on PDF version 1.7 in July 2008. PDF thus became a de jure standard as well. PDF 2.0 (ISO 32000-2) was published in July 2017, and the 2nd edition of the current PDF specification has also been available since December 2020 (ISO 32000-2: 2020).

A PDF file contains document data in a binary format. A special program required to read a PDF file – a PDF reader. You also need a special program to save a PDF file – a PDF creator (writer). To process a PDF file, you need a PDF editor program. The PDF Xpansion SDK is a good platform for creating any of these applications or an all-in-one solution. PDF Xpansion's features grant you the power and flexibility to handle any task involving PDF files.

The structure of a PDF document contains many of interrelated objects: pages, annotations, images, fonts, etc. If you use the PDF Xpansion SDK to process PDF documents, you do not need to know or consider the peculiarities of a PDF document: the PDF Xpansion SDK ensures its internal integrity and correctness. At the same time, professional developers gain a wide range of powerful options for processing PDF documents.

PDF/A format is to be used for long time archiving of the electronic documents. It should be constructed according to the standards:

PDF/A-1 a, b – ISO 19005-1

PDF/A-2 a, b, u – ISO 19005-2

PDF/A-3 – ISO 19005-3

PDF/A-4 f, e – ISO 19005-4

Electronic invoices that are intended to comply with the ZUGFeRD and Factur-X standards must use PDF/A-3.

ELECTRONIC INVOICING

Electronic invoices (e-invoices) are the files in XML format or PDF+XML according to the European standard EN 16931 and further national norms and standards.

e-invoices should be transmitted electronically, automatically received, processed and saved. This enables continuous digital processing from the creation of the invoice to the payment of the invoice amounts.

The main file format for e-invoices is XML. The most common standards are XRechnung (XML), ZUGFeRD (PDF+XML) in Germany, Factur-X (PDF+XML) in France.

XRechnung standard was approved in version 1.0 in Germany on 22 June 2017 at the 23rd meeting of the IT Planning Council for the Federal and State Governments. Two syntaxes are supported: UN/CEFACT (United Nations Centre for Trade Facilitation and Electronic Business) and UBL (Universal Business Language).

ZUGFeRD standard (Zentraler User Guide des Forums elektronische Rechnung Deutschland). ZUGFeRD invoice consists of human readable part PDF/A-3 and embedded XML data file, using 6 profiles. The 6th profile is XRechnung standard; it provides a compatibility of standards.

The French invoice standard conforms to EN 16931-1 and is technically identical to ZUGFeRD from the version 2.1.

Other European countries use different standards, all of them are based on EN 16931:

- Austria - ebInterface
- Spain – FacturaE
- Italy – FatturaElectronica/FatturaPA
- The Netherlands, Sweden – Peppol BIS
- Portugal – SaftPT

and so on.

ELECTRONIC ORDERING

E-Orders are also provided for automatic exchange and processing of orders between supplier and buyer. We support two standards for processing of e-orders: Order-X and Peppol BIS.

Order-X

Order-X e-ordering is an electronic ordering format that combines elements of the traditional electronic order (e-order) process with a detailed view of invoicing information. Developed as a lightweight, modern standard, Order-X aims to streamline and simplify the procurement process by integrating ordering and invoicing information into a single, standardized document.

Order-X is a FeRD format on the Basis of UN/CEFACT Supply Chain Reference Data Model (SCRDM). It uses, just like the ZUGFeRD format does for electronic invoices, two data formats: PDF/A-3 and embedded XML file. Several profiles can be used: Basic, Comfort und Extended. Following steps will be supported:

- Order or request from buyer to supplier

- Order_Response – confirmation, rejection or wish for changes from supplier to buyer

- Order_Change – change of the order, being sent by buyer to the supplier.

Key Features of Order-X e-ordering:

- **Hybrid Document**: Order-X combines order and invoice data in one structured format. This means that an electronic order created using Order-X can contain pre-invoicing information, simplifying the subsequent invoicing process.

- **Standardized Format**: It is based on international standards such as UN/CEFACT (United Nations Centre for Trade Facilitation and Electronic Business) and UBL (Universal Business Language), ensuring that it can be easily adopted by various systems.

- **Seamless Exchange**: By using a single format for both ordering and invoicing, Order-X improves the interoperability between different systems and reduces the need for manual intervention.

- **Automation**: It enables full automation in the order-to-invoice process, reducing the need for multiple steps and ensuring data consistency between purchase orders and invoices.

- **Interoperability**: Order-X supports global interoperability, making it possible for companies to engage in cross-border e-ordering and e-invoicing with greater ease.

Peppol BIS

Peppol is an open, cross-border network for exchanging of electronic procurement documents with all partners registered in the Peppol network via a single connection. Peppol not only covers e-invoicing, but the entire tendering and procurement process (eProcurement).

The Peppol BIS (Business Interoperability Specification), has been developed by the OpenPeppol AISBL Post Award Coordinating Community and is published as part of the Peppol specifications.

Peppol BIS (Business Interoperability Specifications) e-ordering is a standardized framework for the exchange of electronic orders between businesses and government entities across borders in Europe and globally. It is part of the broader **Peppol network**, which facilitates electronic document exchange through a structured format that ensures compatibility between different systems.

Here's a breakdown of key components:

➢ **Peppol Network**: Peppol (Pan-European Public Procurement On-Line) is a network that enables standardized electronic document exchange for procurement. It allows different organizations to exchange eDocuments like invoices and orders across borders using a common set of specifications.

➢ **BIS (Business Interoperability Specifications)**: These are the technical specifications that ensure businesses can communicate seamlessly by following a standard format for documents, such as e-invoices or e-orders. BIS defines how information should be structured within these documents.

➢ **E-Ordering**: Peppol BIS e-ordering enables businesses to send and receive purchase orders electronically. The standardized format ensures that the document can be understood and processed by the recipient's system, regardless of the software or ERP system they are using.

PDF XPANSION SDK

Overview

The PDF Xpansion SDK provides a set of APIs that you can use to create high-performance PDF/XPS-enabled applications and/or software solutions.

The PDF Xpansion technology grants you wide-ranging options for creating and editing PDF or XPS documents, displaying and printing them, converting between these two formats, exporting and/or importing to/from other file formats, and much more.

Main functionality of SDK you can find in the SDK Main Functions chapter.

You will find a detailed description of the PDF Xpansion SDK API and all the required information about programming resources in the PDF Xpansion SDK Reference included in the SDK delivery package.

General Structure of the PDF Xpansion SDK

PDF Xpansion SDK contains about 200 modules and functions for processing of PDF, PDF/A, XPS, some other related data formats and also e-invoices and e-orders according to actual standards.
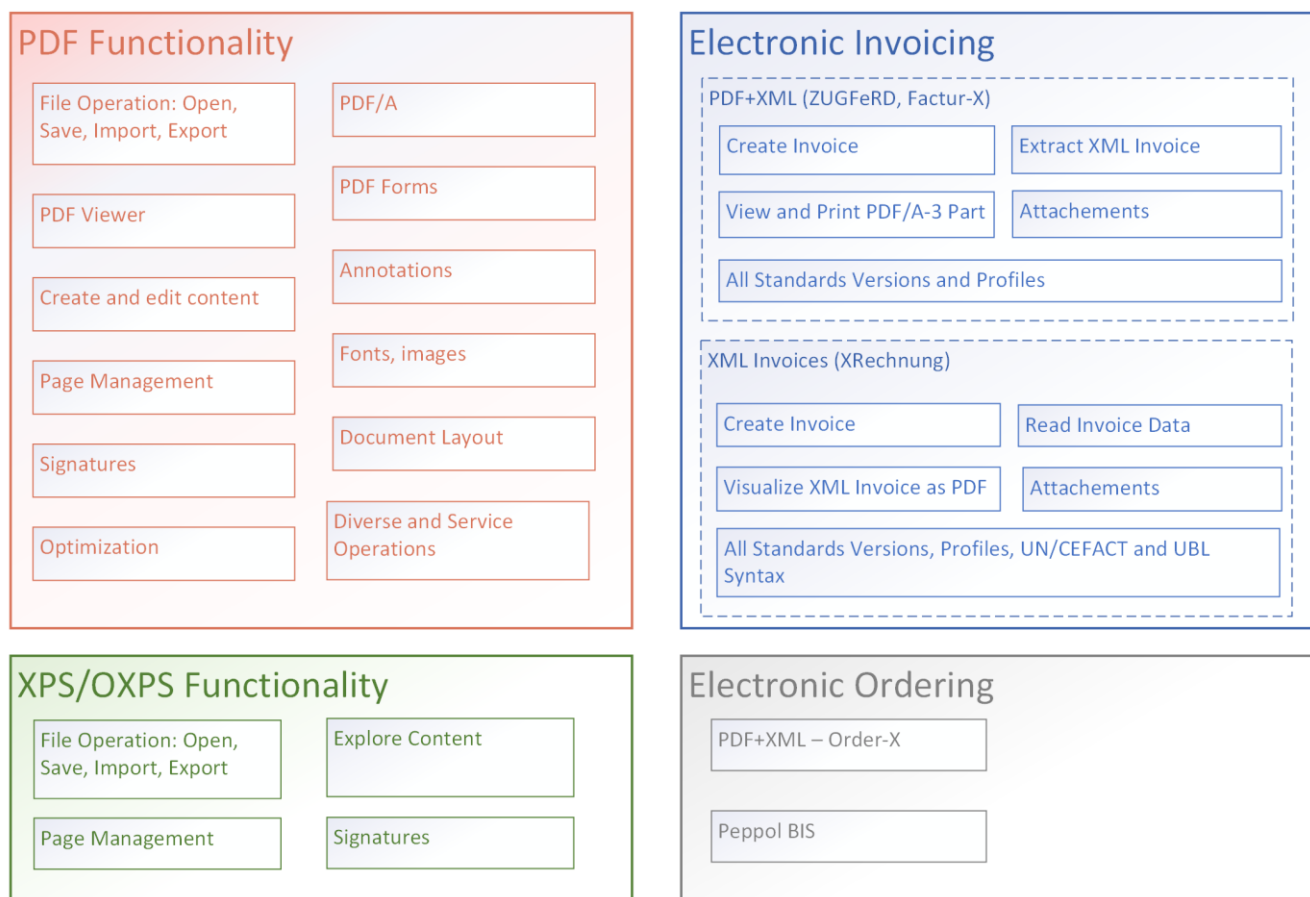
Experience

Soft Xpansion has been developing its PDF Xpansion technology for over 20 years. It draws upon our twenty years of software development experience and our deep knowledge of the PDF document format and document management techniques.

Our clients have integrated the six previous generations of the PDF Xpansion SDK into hundreds of applications, products and solutions. Using the SDK as a base, we have developed and provide:

➢ Extended consumer product family: Perfect PDF

➢ A high-performance server solution (PDF Render Center)

➢ Many customized DMS solutions.

Please consult our Competence Center for more info.

New Generation

The new generation of PDF Xpansion technology is **PDF Xpansion SDK 17**.

Development Platforms

This generation of the SDK provides three sets of APIs with similar structures and functionalities:

- **Windows** – applications / services written in C++ as the classic Windows x86/x64 programs.

- **DotNET** – .NET Framework applications. PDF Xpansion SDK can be used in every.NET application, only .NET Framework, arbitrary version, should be installed.

- **COM** – applications written in Delphi, Builder, VBA and languages which support OLE Automation. VBA can be used in all Office applications.

Operating System Platforms

PDF Xpansion SDK can be used without any functional restrictions and third-party components on following Windows versions:

- Windows 11, 10

- Windows Server 2016, 2019, 2022

The currently valid system requirements are listed on a PDF Xpansion SDK web page: https://soft-xpansion.com/support/sys-lic/#sdk.

You will find more information about redistributing the SDK in the Redistribution of PDF Xpansion chapter of the PDF Xpansion SDK Reference.

Hardware Platforms

The PDF Xpansion SDK contains a set of libraries for the x86 and x64 platforms.

Multithreading

The PDF Xpansion SDK libraries are safe for multithreaded operations with multiple document objects. You can process several documents in multiple threads without any synchronization. The interface of document object and child objects cannot be considered to be thread-safe. In practice, this means that you cannot access a document and/or child objects from two or more threads without additional synchronization.

Unicode and Internationalization

The PDF Xpansion SDK libraries are fully Unicode-enabled and provide data types for Unicode-only programming. The libraries do not contain any localizable data or messages. All groups of world languages, incl. Asian and RTL (right-to-left) languages are covered by the PDF Xpansion SDK. Please refer to the section on OCR possibilities for different languages as well.

Try it?

If you would like to test the performance and functionality of the PDF Xpansion SDK, you can download the current version of the SDK with a trial license from our [website](). This license allows you to use all the SDK's functionality but applies a demo watermark to the document pages. Use the samples included in the SDK for a quick start or read the Getting Started chapter in the PDF Xpansion SDK Reference.

E-invoices in the trial version will have incorrect calculated values, generated PDF documents will have watermark also.

> Try our Perfect PDF desktop applications, like [Perfect PDF]() product family, to experience their powerful features and performance as well. You will also find our **PDF Xpansion SDK-based application** in the [Windows Store.]() Please note that the SDK version used in the applications may differ from the current one.

Buy it!

The licensing model is simple, flexible and ensures our clients a reasonable price. You will find more information about the licensing model and prices in the [SDK Licensing Model]() chapter.

SDK Main Functions

Here you can read about the main functionality of PDF Xpansion SDK. The document "PDF Xpansion SDK 17 Reference" provides information on the full set of features.

PDF File/Document

Create PDF Document

There are many ways to create a new PDF document from different sources:

1) Import or convert a PDF document from:

➢ The print output of any printable application sent to the virtual printer in EMF/EMF+ format

➢ XPS or OXPS documents

➢ Plain text

➢ Raster images: BMP, TIF, JPG, PNG, GIF, etc.

➢ Vector images: SVG

➢ HTML files & websites

➢ eBook formats: EPUB, MOBI, FB2 files

2) Create a new PDF page from an empty page and combine the sequence of pages and metadata

in the new PDF document

Open

The SDK loads a document from any file or stream that conforms to the PDF specification (versions 1.0 – 1.7), to ISO 32000 standards (versions 1 and 2) or to any PDF subset (PDF/A, PDF/X., etc.).

Save

The SDK saves documents to files or streams conforming to ISO 32000 standards (versions 1 and 2).

Print

The SDK enables the printing of PDF documents – individual pages, content, comments, forms, etc.

View/Render Pages

The SDK provides a draw procedure for displaying pages or rendering pages as raster images. This procedure uses the Direct2D API. This functionality can be used as a basis for programming your own PDF viewer.

Combine (Merge) Pages

The content of different pages can be combined into a new page. You can use different methods and layouts to combine the content into one page. Copying selected pages from one document to another is also supported.

Manage Document Pages

The pages in a document can be added, removed, copied, moved within the document structure, resized and rotated without changing their content.

Search in Text, Export Text

The SDK can search within a document's text. It is also possible to export plain text.

Encryption (Document Security)

The SDK loads not only non-encrypted PDF files but also files encrypted using a password security handler and a public-key security handler. The algorithms RC4 and AES are supported, as are different key lengths that are declared in ISO 32000. Additionally, the SDK supports the encryption algorithm specified in ISO 32000-2 and used in Adobe Acrobat X or higher.

The SDK allows you to encrypt documents using these two security handlers and any combination of supported algorithms and key lengths. You can specify user permissions for the encrypted documents.

Support for custom encryption algorithms or security models is available upon request.

Digital Signatures

The SDK provides an API for signing documents and validating signatures according to all the signature and digest formats declared in the PDF specification. The SDK also supports timestamping signatures.

In addition, the SDK offers support for PAdES signatures (PDF Advanced Electronic Signatures) according to the PAdES standard ETSI (European Telecommunications Standards Institute) EN 319 142. With the PDF Xpansion SDK, documents with conformity levels B, T, LT and LTA can be signed and validated.

Form Fields

The SDK provides access to data from form fields. It is possible read or write field values. The SDK also allows you to modify forms: add, remove or edit form fields. It enables use of the FDF (Forms Data Format – a file format for representing form data and annotations that are contained in a PDF form) and XFDF (XML Forms Data Format) formats for saving and exchanging form field content.

Dynamic Forms – XFA Format

The PDF Xpansion SDK provides a restricted usage of XFA forms (XML Forms Architecture). The following operations are available:

➢ Previewing forms in a PDF viewer (filling is not supported)

➢ Printing XFA forms

➢ API for access to form data (read and fill form content)

Combine and Split Documents

Using the SDK, you can copy pages from one document to another and combine or split new documents. The combine function allows you to copy not only pages but also to correctly copy links, bookmarks, fields, annotations, layers and other elements of PDF documents to a new document.

Revisions (Incremental Updates)

If a document contains several document versions (revisions), the SDK loads the document in the state of the last version. You can switch to any other revision before you begin editing the document. You can save any changes to the currently loaded document as a new version (revision, incremental update).

Document Properties and Metadata

The SDK provides an API for accessing different document properties and metadata.

Metadata in XML format (eXtensible Metadata Platform) is supported via the XMP API. All standard XMP schemes are available.

Fonts

Embedding, enumeration, using fonts for text content.

Images

Insert and extract images of different formats (raster, svg), export pages as raster images, compress raster images.

Document Outline (Bookmarks), Links and Named Destinations

The SDK allows you to use and/or edit the table of contents within a document as well as hyperlinks and named destinations.

Layers (Optional Content)

The SDK provides an API for using or managing document layers.

Embedded Files and Portfolio

Insert and explore other files that are embedded in the PDF file. Support for portfolio functionality according to the PDF specification.

Annotations

The SDK supports most common types of PDF annotations and design elements: text markup, forms (lines, squares, circles, etc.), notes, textboxes, stamps, watermarks, pen, eraser, redactions, media and 3D annotations, embedded files as comments and replies in comments. It provides an API for managing annotation properties and allows you to generate appearances after changes in properties. It is possible to create and edit annotations and to display them in Viewer (Viewer functionality) as well as to create end user tools for working with annotations in your application.

Rich Content Functionality

Rich Content is intended for creating PDF content from the very beginning and for editing content in existing PDF files. It provides close access to the page content of PDF and XPS documents. With Rich Content you can create content for new pages (fill the blank pages) and edit the content of pages created by other applications. You can also explore the content of the pages to reveal the placement of content objects (text, images, vector elements) on the page, format the text, etc. The Rich Content component required for enabling editing functionality in your own application.

If you intend to create your own PDF page content editor, you can use our Page Content Editor Tool module, which supplies not only the content editing functionality but also the required user handling.

Convert to PDF/A

The SDK converts PDF documents to make them compliant with the PDF/A-1, PDF/A-2, PDF/A-3 and

PDF/A-4 formats. A, B and U levels of conformity are supported for the respective sub formats.

Import from XPS

The SDK enables the quick, high-quality conversion of XPS documents to PDF documents.

Viewer

The SDK provides several platform-oriented implementations of our document viewer. Using these viewer implementations, you can quickly and easily integrate powerful PDF, XPS, text and image viewers into your application. You can also display your documents in your own structure and layout using these viewer implementations.

The viewer provides a wide spectrum of traditional document viewer functions: different layouts, zooming, scrolling, etc. Using powerful and effective event mechanisms provided by the viewer, your application can extend the standard functionality of the viewer and implement custom tools (please refer to the viewer's ToolMode property in the PDF Xpansion SDK Reference) for the visual processing of PDF or other documents.

The viewer is a window or control (according to the development platform) that displays PDF, XPS or other documents and processes for end user activity (touchscreen, mouse and keyboard input).

Navigation

The layout canvas can be scrolled by the program or by the end user. The viewer allows navigation to specific pages or exact places on the page. The viewer also supports hyperlinks in PDF and XPS documents.

Interactive Forms

The viewer provides the possibility to fill interactive form fields in PDF files.

Read and Edit Document Notes

The viewer implements dynamic popups for markup annotations in PDF documents – the end user can read and/or edit annotations and notes in the PDF file.

Annotation Tools

The viewer implements multiple interactive tools. These tools provide the end user with the ability to make annotations in PDF documents: text markup, textboxes and callouts, pen markup, sticky notes, stamps, etc. as well as to edit or delete the existing annotations. The annotations can be viewed in popup windows, inline as well as in a panel view. Dynamic notes are also supported.

Interactive End User Tools

Some common tools provide additional comfort to the end user:

- ➢ Magnifying glass and snapshot (screenshot tools)
- ➢ Tracker and rectangle zones tool for visual annotation processing
- ➢ Stylus pen

Electronic Invoice Processing: ZUGFeRD, Factur-X, XRechnung

The ZUGFeRD (abbreviation for *Zentraler User Guide des Forum elektronische Rechnung Deutschland*) data format – a universal format for electronic invoice processing and interchange – is supported by the PDF Xpansion SDK. The format is defined in several specifications (versions). For all specifications, the PDF Xpansion SDK offers functionality to read ZUGFeRD compliant invoices with access to the metadata, to verify their structure and to create new ones, i.e. to perform all steps of ZUGFeRD compliant processing of invoices. All ZUGFeRD profiles can be used in the PDF Xpansion SDK.

ZUGFeRD 2.0 and higher versions have been developed in close coordination with the French data format Factur-X. Both formats are identical from the technical point of view. The PDF Xpansion SDK supports Factur-X as well.

The data structure of ZUGFeRD 2.0 and higher versions is based on the EU standard EN 16931 – just like the German data format XRechnung. ZUGFeRD 2.0 and higher offer a profile named "EN 16931", which in so far is identical to XRechnung. This profile may be used to send invoices to public authorities. In Germany, XRechnung is the official electronic invoice format in business relations with public authorities.

Moreover, the current version of PDF Xpansion SDK 17 also supports XRechnung directly, i.e. in its syntax formats UN/CEFACT and UBL. Details on how the two syntaxes are supported can be seen in the price list, section "Electronic Invoicing.".

All e-invoicing standards and versions of these standards that are currently supported by the PDF Xpansion SDK 17 can be found on the product page.

The PDF Xpansion SDK offers visualization of the content of XML files, especially XRechnungen, for all profiles in the form of a PDF file created with PDF Xpansion SDK. This file contains all of the data that is in an XML file, but unlike the XML file in a human-readable form that can also be printed out in a legible manner. By default, the SDK provides existing templates that have already been created. Additionally, the creation of templates according to your company´s specifications can be purchased separately.

There is also a possibility to apply digitally signatures to the ZUGFeRD / Factur-X invoice files, also including PAdES signatures. Entering a stamp is also possible. The corresponding PDF functions must be licensed for this functionality.

Electronic Orders Processing

Order-X

Order-X is a process where customer orders are received, validated, and fulfilled. The processing typically involves the following steps:

- ➢ Order placement: a customer places an order through an e-commerce platform or business system
- ➢ Order validation: the order details are checked for accuracy (e.g., payment confirmation, product availability)
- ➢ Inventory management: the system verifies stock levels and reserves the ordered items
- ➢ Order fulfillment: the warehouse or fulfillment center picks, packs, and ships the products
- ➢ Shipping and tracking: the order is handed off to a carrier, and tracking details are sent to the customer
- ➢ Delivery and confirmation: the customer receives the order, and the process is closed once delivery is confirmed

This streamlined process ensures efficient handling and fulfillment of customer orders.

Peppol BIS

According to OpenPeppol AISBL, Post-Award Coordinating Community the ordering process flow can be described as follows:

- ➢ A buyer submits an order to the Seller requesting for delivery of goods or services
- ➢ An order may refer to a framework agreement for its terms and conditions; otherwise, the Buyer's terms and conditions apply
- ➢ An order may contain items (goods or services) with item identifiers or items with free text description
- ➢ The seller may acknowledge that the order is received
- ➢ The seller may accept the order, committing himself to the conditions stated therein by means of an order response transaction
- ➢ Alternatively, the seller may reject the order by means of the order response transaction
- ➢ An order rejection may contain reasons for rejection
- ➢ If contractually agreed, the seller also may respond to the order, changing details that are acceptable by the Buyer
- ➢ If an order is accepted with change, the buyer and seller need to have an agreement between

them regarding the processing of the changed order, i.e when a contract is concluded and when the items can be shipped

➢ If the order was accepted a contract is concluded. If the order was rejected, no contract and no residual obligations exist

➢ After the receipt of an order response that rejects the order, the Buyer may start a new ordering process, considering the reasons for the rejection by the Seller.

XPS File/Package/Document

Open

The SDK loads packages from any file or stream that conforms to the XPS specification.

Save

The SDK saves packages to files or streams conforming to the XPS specification.

Properties

The SDK provides package properties for reading and editing.

Documents and Pages

The SDK provides an API for managing documents within packages and pages within documents.

Print

The SDK makes it possible to print a single document or all the documents in a package.

View/Render Pages

The SDK provides a draw procedure for displaying pages or rendering pages as raster images. This procedure uses the Direct2D API.

Search in Text, Export Text

The SDK provides search functionality for text search within a document or package. Exporting plain text is possible.

Outline, Links and Named Destinations

The SDK provides an API for navigating within documents/packages and for editing outline structures, links and named destinations.

Export to PDF

The SDK enables the quick, high quality conversion of XPS documents to PDF documents.

Rich Content Functionality for XPS

Rich Content provides functionality for creating and editing XPS files similar to the functionality provided for PDFs.

Customization

You can customize and extend the viewer functionality using the viewer API and the flexible event model.

Global Settings and Object Factory

Global SDK Settings

You can get or set several common SDK settings and properties: memory usage, file caching, local time offset, etc.

Object Factory

You can create several SDK objects using the object factory interface.

SDK Licensing Model – Pay Only Once!

This chapter describes the licensing model and is intended to help you select the optimal type of license. It is not a license itself.

The licensing model is simple, flexible and ensures our clients a reasonable price. This model has many **advantages** that distinguish it from other licenses for similar technologies.

Advantage 1: Royalty-free license

You only pay for it once. The price does not depend on the number of the customers the licensee has, on the number of products produced by the licensee using the PDF Xpansion SDK or on the number of products sold. The license does not require sales reports for products using the SDK libraries nor are there royalty payments. The license does not stipulate any annual payments during the whole period of using the purchased version of the PDF Xpansion SDK, except for optional maintenance payments.

Advantage 2: No developer licenses

The license does not stipulate that you should buy "developer licenses", which means that it does not restrict the number of workstations at a single company location where the library can to be integrated into the licensee's products.

Advantage 3: Pay for what you really need

You purchase only the functionality you now need and do not have to pay for the whole SDK or for

unnecessary components.

Advantage 4: Extend functionality – it is easy!

The only thing you need to do is order the additional functionality. You only pay for the additional components or features. There is no processing fee.

License Conditions

➢ The scope of the licenses is limited to service functionality: using the PDF Xpansion SDK as the main functionality of a customer's products is not permitted. This means that the SDK cannot be used as the kernel or core of an application, but it can be used as a service or a component of it.

➢ The PDF Xpansion SDK may not be passed on to third parties, either in modified or unmodified form, in such a way that these third parties can use it themselves as a development tool.

➢ PDF Xpansion SDK components may only be used/invoked by and as part of components and (sub)projects created by Licensee. All applications and projects may only be published by the same copyright holder.

➢ The final decision about an applicable license type will be made by the licensor, soft Xpansion.

Maintenance

You can purchase technical support service and assistance with the integration of the SDK into client products, as well as maintenance, as an add-on. This is a paid service. Purchasing the service entitles you to:

➢ Free SDK updates – after the release of a new SDK version you will receive a license with the permissions included in the previous one

➢ Professional tech support via email or by phone

➢ Quick, priority bug fixing with short response times

➢ Small improvements to the current SDK version at the client's request, following coordination with the developers and based on the required technical resources

➢ Newly published standards and versions of standards for e-invoices are supported, but only in the most actual SDK version

License Types

There are two license types for the PDF Xpansion SDK: Business and Corporate.

Business License

The license permits the use of the PDF Xpansion SDK as follows:

➢ Use in Licensee's own software within the buyer company (also in Licensee's own computer network, with unlimited number of company locations in one country), whereby all company locations together may have fewer than 500 employees. Additionally, the PDF Xpansion SDK must not process more than 5000 documents per month, on a one-year basis

➢ There is no limit to the maximum amount of developers allowed to use the product

➢ Distribution of standard applications created by the Licensee. These applications must be available as ready-made standalone programs and be published by a single copyright owner. Manufacture and sale may take place worldwide without a quantity limitation (royalty-free) with a special fee.

The Business license cannot be used in the following cases:

➢ Using the Product in several individual projects (non-standard apps) for the customers of the Licensee company

➢ Using the Product in high-productivity server or internet-based solutions in document management systems (processing 5,000+ documents per month)

➢ Using the Product as a part of another SDK or development tool

➢ Software development and distribution in a worldwide corporate group (concern, holding, etc.) with several legal persons within the group.

Corporate License

The special Corporate license permits the use of the PDF Xpansion SDK in cases that are not covered by the Business licenses.

The license allows the Licensee to use the Product for its own software development projects as follows:

➢ Use of the Product in licensee´s own applications inside the licensee´s company (also in Licensee's own computer network), without any restrictions with regard to the number of workstations (both developers and users of developed software) and the number of locations/branch offices of the same legal entity

➢ There is no limit to the maximum amount of developers allowed to use the product

➢ Sales and distribution of standard applications developed by licensee to his clients without restriction with regard to the number of sold copies. All applications should belong to Licensee as a copyright holder.

➢ Sales and distribution of developer tools created by licensee. The license agreement of such

tools (agreement between licensee and his clients) must stipulate that licensee´s clients must not use/call up the Product components directly, but only indirectly via the licensee´s developer tools

➢ Sales and distribution of individual licensee´s projects, without any restrictions with regard to number of projects

➢ Worldwide use (development, use in own applications and sales/distribution)

Contact us for our Corporate license prices and conditions.

For both license types:

➢ The scope of the current license is limited to "service tasks", i.e., the Product cannot appear as a central element of the Licensee's application or perform a primary function in it. It can only be used to provide additional functionality to the application.

➢ The Product itself, in the same or similar form as delivered to the Licensee, may not be distributed to any third party. Third parties have no right to use the Product directly. This means that the Licensee has the right to distribute the Product's components only as part of the Licensee's applications or their components. The Product's functionality may not be used by any third party as a development tool.

License Agreement

You will find more information about the various licenses and maintenance services in the license agreement. You can request the agreement template via email.

Prices

The price for the PDF Xpansion SDK depends on the type of license and is consists of three components:

➢ Required functionality – only the features you need (one royalty-free fee)

➢ Additional properties and services – supported platforms, languages, etc. (additional one-time royalty-free fee)

➢ Maintenance – optional service, annual fee

Below you will find the current price list for the individual features, properties and services. Only the prices for the Business license are listed. They are intended to serve as an orientation and may vary depending on the actual requirements of the licensee. The prices for the Corporate license depend on how the PDF Xpansion SDK will be used in the licensee's tasks and projects and are calculated individually. Please contact us to request an offer based on your needs.

Functionality	Price (€)
PDF Functionality	
Open file/stream	1000
Save file/stream	1000
Open/save encrypted documents (open and save permissions required), incl. encryption of the documents	300
Split/combine documents (open and save permissions required)	1000
Compose pages (merge the content of pages, copy pages within a document)	500
Page management (add, move, remove, resize, etc.)	300
Search text (and export plain text)	1000
Print document	500
Render and/or display pages	2000
Signatures – verify and sign, timestamps, certification signatures	1000
PAdES signatures, verification of all conformance levels, signing with B & T conformance levels	500
PAdES signatures, signing with LT & LTA conformance levels	1000
Form fields – fill and read values, create and edit properties	1000
Links, Bookmarks (TOC, Outline), Named destinations	500
Annotations – processing using the SDK API	
Text markup	300
Notes, stamps, watermarks	300
Textbox & callout	300
Pen, eraser	300
Redactions	500
Shape (line, rectangle, circle, etc.)	500
Layers	500
Embedded files, associated files (relationships of embedded files)	500
Processing XMP metadata	500
Fonts / raster images collections	500
Logical document structure and marked content (tagged PDF)	1000
Create/Process	
Explore PDF content (Rich Content API, non-interactive)	2000
Create PDF content (Rich Content API, non-interactive)	3000
Edit PDF content = Explore + Create	4500
Convert to PDF/A-1[1]	1500

Convert to PDF/A-2[1]	1000
Convert to PDF/A-3[1]	1000
Convert to PDF/A-4[1]	1000
Import GDI metafiles (EMF) as a page	1000
Import GDI+ metafiles (EMF+) as a page	1500
Optimization	
Flatten fields, annotations and layers	1000
Optimization of page content	500
Optimization of DOM	500
Text vectorization	500
Text processing	
Support for Asian languages	500
Support for Arabic, Hebrew and other RTL languages	2000
Electronic Invoicing and Ordering	
PDF/A based e-invoices and e-orders (Factur-X, ZUGFeRD, Order-X)	
Extract e-invoice/e-order (XML file) from PDF/A file, including validation of embedding and metadata	1000
Create e-invoice/e-order (PDF/A file) using compliant e-invoice/e-order (XML file) and PDF file, including converting to PDF/A-3	2000
Display PDF/A part of e-invoice or visualization of XML part in the viewer	2000
Print PDF/A part of e-invoice	500
XML based e-invoices (XRechnung, Factur-X, ZUGFeRD)	
Read e-invoice data, UN/CEFACT CII and UBL syntaxes, including validation of XML structure and syntax, excluding Extended profile and XRechnung Extension	1000
Create e-invoice using SDK API (structured according to UN/CEFACT CII syntax), including save in UN/CEFACT CII or UBL syntaxes, excluding Extended profile and XRechnung Extension	2000
Extended profile and XRechnung Extension support for read or create functions	500
Visualize e-invoice (generate PDF file using e-invoice (XML file) and design template), read function is **required**	1500
Customization of design templates for the visualization	on demand
PDF and XML based e-invoices	
Attachments (embedded documents and files)	500
XML based e-orders	
Process (read data or create) Order-X files	2000
Process (read data or create) Peppol BIS order files	3000

Viewer Functionality	
Basic functionality (open document and display pages permissions required)	1000
Form filling	500
Thumbnail view, popups, snapshots (viewer state)	500
Interactive end user tools	
Magnifying glass & snapshot (screenshot) tools	300
Tracker tool (supports creating notes, stamps & watermarks)	300
Rectangle zones tool (supports creating/editing form fields, links, etc.)	300
Text selection, text markup	300
Stylus	300
Management of PDF annotations (move, resize, delete, etc.)	300
PDF textbox & callout	300
PDF pen, eraser	300
PDF shapes (line, rectangle, circle, etc.)	300
Page content editor tool (Rich Content permissions required)	2000
Text Box editor	500
Perfect Print	
Mass creation of PDF documents based on templates	2000
Other Functionality	
Compare text in two PDF documents, mark changes to display them in the viewer or save them as a text markup	1000
Import HTML, local files and/or by HTTP/HTTPS connection	2000
Import HTML, structure of linked files (local and/or by HTTP/HTTPS connection)	3000
Rich text box	500
Developer Platform	% Fee
Windows Desktop/Service apps (C++)	--
.NET Framework (C#/Visual Basic)	10%
COM API (for C++Builder, Delphi, VBA, etc.)	10%

[1] If you buy two or three versions of PDF/A, you will receive a 500 EUR discount. If you buy all versions of PDF/A, you will receive a 1000 EUR discount.

INTEGRATION WITH TEXT RECOGNITION FUNCTIONALITY (OCR)

Text recognition (OCR) is included in the PDF Xpansion SDK and is implemented using the Tesseract OCR engine (HP, Google). This feature enables you to detect text in images in your PDF files and to make your scanned PDF documents searchable. The detected text can also be exported as plain text from scanned PDF pages or from images that contain text content. See the PDF Xpansion SDK Reference for more information. You do not need to use the Tesseract engine directly in order to use this feature.

Current version: 3.xx.

Number of supported languages: 60.

This feature in the PDF Xpansion SDK is completely FREE!

The Tesseract OCR engine is available under the Apache License 2.0.

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