



Release Notes

Release Notes

3-Heights™ and Classic PDF Tools

Version 4.11.25.1



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1 Overview

The 3-Heights™ PDF tools represent the most recent product line from PDF Tools AG. The 3-Heights™ PDF tools are available as programming libraries (APIs), command line tools and Windows services. The tools allow for a wide variety of manipulation of PDF files including viewing, printing, extracting of information, conversion, digitally signing, validation, repairing, and optimization.

The Classic PDF Tools (formerly known as GLANCE Tools) represent the original product line from PDF Tools AG. Similar to the 3-Heights™ product line the Classic PDF Tools are available as programming libraries (APIs) and command line shell versions but not Windows services. The tools are packaged in two products, the Command Line Suite and the Prep Tool Suite.

1.1 How to Download the Trial Software

The 3-Heights™ PDF tools can be downloaded from the product description pages on <https://www.pdf-tools.com/>. There is no charge for downloading product kits and evaluation license keys (valid for a 30 day period).

1.2 Technical Support

Please report problems by contacting our support team by mail: pdfsupport@pdf-tools.com

1.3 Operating Systems

Most of the products are available for the following operating systems:

- Windows 7, 8, 8.1, 10 – 32 and 64 bit
- Windows Server 2008, 2008 R2, 2012, 2012 R2, 2016 – 32 and 64 bit
- HP-UX 11i and later PA-RISC2.0 – 32 bit
- HP-UX 11i and later ia64 (Itanium) – 64 bit
- IBM AIX 6.1 and later – 64 bit
- Linux 2.6 – 32 and 64 bit
- Oracle Solaris 2.8 and later, SPARC and Intel
- FreeBSD 4.7 and later (32 bit) or FreeBSD 9.3 and later (64 bit, on request)
- macOS 10.4 and later – 32 and 64 bit

Windows Vista is no longer supported by this version.

Some tools are only available on Windows platforms. These are:

- PDF Producer
- Document Converter
- The components which are based on the GDI-based rendering engine: PDF Viewer, PDF Printer, PDF to EMF Converter

Some GDI-based tools have been ported to the new rendering engine which is available on all platforms. These tools have the suffix R2 in their names such as the PDF-to-Image Converter R2.

Other platforms are available on request. Please refer to the individual product information on the website or in the respective manual to obtain information on supported operating system platforms.

1.4 Compiler Versions

The release kits are generated with the following compiler versions for C/C++:

Platform	Compiler	Library
Windows	MSVC 14.0	toolset v140_xp
macOS 10.5 x86	gcc 4.0.1	glibc 1.0.0
Linux Intel	gcc 4.1.2 gcc 4.7	glibc 2.5 glibc 2.22
FreeBSD Intel/x64	gcc 4.1.2	glibc 2.3
Oracle Solaris 5.10/SPARC	gcc 3.4.6	glibc 1.2.10
Oracle Solaris 5.10/Intel	gcc 3.4.6	glibc 1.2.10
IBM AIX 6.1	gcc 4.6.4	glibc 2.3
HP UX 11.i (11.23)	gcc 4.1.2	glibc 2.3
HP UX 11.23 IA64	gcc 4.6.0	glibc 2.3
Raspian 7/Linux 3.18 ARMv7	gcc 4.6.3	glibc 2.14.1

1.5 Runtime Environment

The Windows variants of the components have been compiled with Visual Studio 2015. The C++ based components are statically linked so there is no need for a redistributable package.

The C++ code has been compiled and linked using the v140_xp toolset. Although, the software may run on Windows XP systems we only provide support for operating systems which are listed under system requirements.

.NET based solutions and desktop applications such as the 3-Heights™ Document Converter, the 3-Heights™ Document Assembler and the 3-Heights™ PDF Viewer, are compiled with version 4.5.2 of the .NET Framework. Although the code has been developed using C#, these components may require a C++ redistributable package as they are combined with native C++ code.

For .NET components (API), version 2.0 of the .NET Framework is required.

For Java components (API), version 1.6 is required as minimum runtime version.

2 New and Enhanced Products

2.1 3-Heights™ PDF OCR

The 3-Heights™ PDF OCR enhances PDF documents using information detected by an OCR engine.

All text in PDF documents can be made extractable, regardless of how text is included in the document. Specifically, text in images, text written with vector graphics or other graphical effects (e.g. transparency effects), or text using a font that does not provide extractable text (i.e. Unicode information) can be detected.

Tagging of OCR text for accessibility is supported. This is useful as preparation for PDF/A level A conversion or to process tagged documents.

Detected barcodes and QR codes can be extracted or embedded into the document's metadata.

The product is optimized for performance, which guarantees low latency and high document throughput. This is achieved by minimizing the number of required OCR operations. Furthermore, OCR operations are executed asynchronously, if supported by the OCR engine.

The product is available for all operating systems as shell and API variant.

2.2 PDF 2.0

The new PDF standard ISO 32'000-2 was released in July 2017. More information on the standard can be found at [PDF 2.0 - Next Generation](#)

With this release of 3-Heights™ software, PDF 2.0 files can be read and written. The new rendering engine can also render PDF 2.0 files perfectly. Processing functions, such as merge / split, optimization and more, will not be supported until the next releases. The products of the Classic line are currently rejecting the processing of PDF 2.0 files.

2.3 PAdES

We have implemented the new PAdES standard in our software such that digital signatures in PDF can be easily created, updated and verified in applications that need to conform to the European eIDAS regulations.

3 New Features to Classic Products

- PDF 2.0 input detection and rejection
- pdinfo: list PDF version (including PDF 2.0)
- pdmerge: new option -ax to supply XMP metadata

3.1 Classic PDF Batch Stamp Tool

No functional changes.

3.2 Classic PDF Prep Tool Suite

No functional changes.

4 New Features to 3-Heights™ Products

Some of the documented changes below may be preceded by a marker that specifies the interface technologies the change applies to. E.g. [C, Java] applies to the C and the Java interface.

4.1 3-Heights™ AFP to TIFF Conversion Utility

No functional changes.

4.2 3-Heights™ Certificate Store Utility for PKCS#11

No functional changes.

4.3 3-Heights™ PDF Document Assembler

- **New** support for reading and writing PDF 2.0 documents.
- **New** support for the creation of output files larger than 10GB (not PDF/A-1).
- **Improved** search in installed font collection to also find fonts by other names than TrueType or PostScript names.
- **Improved** font subsetting of CFF and OpenType fonts.
- **Improved** repair of corrupt image streams.
- **New** Optimization profile: **Optimize for archive**

4.4 3-Heights™ Document Converter

- **New** support for reading and writing PDF 2.0 documents.
- **New** support for the creation of output files larger than 10GB (not PDF/A-1).
- **Improved** repair of corrupt image streams.
- Digital Signatures
 - **New** ability to sign documents that are larger than 2GB (64-bit version only).
- Stamping
 - PNG images are now Flate compressed by default.
- **Improved** MS Word DOCX processing: attached templates are removed before conversion (avoid load attempt when path is not local)
- **New** support for OXPS format
- **New** options TEXT.TITLE and TEXT.LANG for text to PDF conversion (TXT2PDF)
- **Improved** Email header formatting support for finer styling granularity of header items, such as skipped and failed attachments

4.5 3-Heights™ Font to PDF Utility

No functional changes.

4.6 3-Heights™ Image Compare Utility

No functional changes.

4.7 3-Heights™ Image to PDF Converter

- **New** support for reading and writing PDF 2.0 documents.
- **Improved** font subsetting of CFF and OpenType fonts.
- **Improved** repair of corrupt image streams.
- Merged manual PdfOcrShell.pdf into Image2PdfShell.pdf.
- Merged manual PdfOcrAPI.pdf into Image2PdfAPI.pdf.

API Img2PdfAPI

No functional changes.

4.8 3-Heights™ OCR Enterprise Add-on

Plugin service

- **New** feature: Intelligent load balancing.
- **New** feature: Backpressure to avoid overload.
- **Improved** handling of many concurrent requests.
- **New** feature: Asynchronous processing.
- **New** feature: Support for recognition of document structure information.

Server configuration file OcrSvr.xml

- **New** attribute `max-queue` to specify the maximum internal job queue size.

Client configuration file ocrserver.ini

- **New** key `Proxy` to specify a proxy server for all connections.
- **New** key `Timeout` to specify the general response timeout.
- **New** key `BlockingTimeout` to specify the response timeout for explicitly blocking operations.
- **New** key `NonBlockingTimeout` to specify the response timeout for explicitly non-blocking operations.

Plugin abbyy11

- **New** feature: Recognition of page structure elements like blocks, paragraphs, headings and tables.
- **New** feature: Recognition of individual character position and suspicious characters.
- **New** feature: Recognition of text locale (language).
- **Improved** license reloading in case the credits are exhausted.

Plugin abbyy10

- **New** feature: Recognition of individual character position and suspicious characters.
- **Improved** license reloading in case the credits are exhausted.

4.9 3-Heights™ PDF Analysis & Repair

- **New** support for reading and writing PDF 2.0 documents.
- **New** support for the creation of output files larger than 10GB (not PDF/A-1).
- **New** treatment of the DocumentID. In contrast to the InstanceID the DocumentID of the output document is inherited from the input document.

API PdfRepairAPI

No functional changes.

Shell pdfrepair

No functional changes.

Service PdfRepairSvr

No functional changes.

4.10 3-Heights™ PDF Annotation API

- **New** support for reading PDF 2.0 documents.

4.11 3-Heights™ PDF Checker API

- **New** support for reading PDF 2.0 documents.

4.12 3-Heights™ PDF Compare Utility

- **Improved** option -o to write Unicode log file.
- **Improved** context information for certain types of objects.
- **Improved** comparison of documents with ambiguous mapping between objects.

4.13 3-Heights™ PDF Creator Library

- **New** support for writing PDF 2.0 documents.
- **New** support for the creation of output files larger than 10GB (not PDF/A-1).
- **Improved** search in installed font collection to also find fonts by other names than TrueType or PostScript names.
- **Improved** font subsetting of CFF and OpenType fonts.

Enumeration Conformance

- [.NET, C, COM, Java] **New** item Pdf20.

4.14 3-Heights™ PDF Extract

- **New** support for reading PDF 2.0 documents.
- **Improved** repair of corrupt image streams.

API PdfExtractAPI

- [PHP] **New** Interface for Windows and Linux. Supported versions are PHP 5.6 & 7.0 (non thread safe). The Pdf-Parser PHP interface is contained in the 3-Heights™ PDF Tools PHP5.6 Extension and the 3-Heights™ PDF Tools PHP7.0 Extension.
- [C] **Changed** 32-bit binaries on Windows that link to the API need to be recompiled due to a change of the used mangling scheme.
- [.NET, C, COM, Java, PHP] **New** [Interface DPartNode](#), [Interface DPartRoot](#), and [Interface PageRange](#) to allow the extraction of document parts from a PDF 2.0 or a PDF/VT document.

Interface Annotation

- [.NET, C, COM, Java] **New** property [QuadPoints](#) for extracting annotation quad points.

Interface Document

- [.NET, C, COM, Java, PHP] **New** property [DPartRoot](#) for extracting the document part information.

Interface DPartNode

- [.NET, C, COM, Java, PHP] **New** property [ChildrenCount](#) and method [Child](#) for extracting the child nodes of a document part node.
- [.NET, C, COM, Java, PHP] **New** property [DPM](#) to extract a node's document part metadata.
- [.NET, C, COM, Java, PHP] **New** property [PageRange](#) to extract a node's page range.

Interface DPartRoot

- [.NET, C, COM, Java, PHP] **New** property [NodeNameCount](#) and method [NodeName](#) for extracting the document parts' node name list.
- [.NET, C, COM, Java, PHP] **New** property [RecordLevel](#) for extracting the document parts' record level.
- [.NET, C, COM, Java, PHP] **New** property [RootNode](#) to access the root node in the document part hierarchy.

Interface PageRange

- [.NET, C, COM, Java, PHP] **New** properties [First](#) and [Last](#) to access the first and last page number in a page range.

Interface PDFObject

- [.NET, C, COM, Java, PHP] **New** property [TextStringValue](#) to extract the value of a string PDF object as a decoded string.

Interface Text

- [.NET, C, Java, PHP] **New** property `QuadPoints` for extracting the enclosing parallelogram.

Shell pdfextract

- **Improved** reporting of colorants for pattern color spaces.

Shell pdtxt

No functional changes.

4.15 3-Heights™ PDF Merge Split

- **New** support for reading and writing PDF 2.0 documents.
- **New** support for the creation of output files larger than 10GB (not PDF/A-1).
- **New** optimization of output file size for documents that contain structure information.
- **New** support for the creation of appearance streams for free text annotations that contain rich text content.

API PdfSp1MrgAPI

No functional changes.

Shell pdfsp1mrg

- **New** treatment of the DocumentID. In contrast to the `InstanceID` the `DocumentID` of the output document is inherited from the input document when copying a single document.

Shell pdfsplitpage

No functional changes.

4.16 3-Heights™ PDF Optimizer

- **New** support for reading and writing PDF 2.0 documents.
- **New** support for the creation of output files larger than 10GB (not PDF/A-1).
- **Improved** font subsetting of CFF and OpenType fonts.
- **Improved** repair of corrupt image streams.
- **New** treatment of the DocumentID. In contrast to the `InstanceID` the `DocumentID` of the output document is inherited from the input document.
- **New** support for the creation of appearance streams for free text annotations that contain rich text content.

API PdfOptimizeAPI

- [.NET, C, COM, Java, PHP] **Changed** enum `TPDFPermission`: Added a new value `ePermSameAsInput` to adopt the encryption parameters from the input document.

- [.NET, C, COM, Java, PHP] **New** property `ErrorMessage`.

Shell `pdfoptimize`

- **Changed** option `-p`: Added a new value `i` to adopt the encryption parameters from the input document.

Service `PdfOptimizeSvr`

- **Changed** option `-p`: Added a new value `i` to adopt the encryption parameters from the input document.
- **New** directory `Logs` in which an error log file is generated for each failed operation.
- **Improved** robustness of the watched folder service.

4.17 3-Heights™ PDF Printer

- **New** support for reading PDF 2.0 documents.

API `PrinterOCX`

- **New** Property `PrinterStatus` queries the current status of the printer.
- **New** Property `PrinterStatusMessage` provides a human readable message listing all active statuses.

Shell `pdprint`

- **New** option `-dmax`: Set the maximum DPI that is used for images sent to the printer. Useful for printers with low memory capacity.
- **New** option `-st`: Query the current printer status before printing

Service `PdfPrintSvr`

No functional changes.

4.18 3-Heights™ PDF Producer

- **New** support for the creation of output files larger than 10GB (not PDF/A-1).
- **Improved** font subsetting of CFF and OpenType fonts.

4.19 3-Heights™ PDF Security

- **New** support for reading and writing PDF 2.0 documents.
- **New** support for the creation of output files larger than 10GB (not PDF/A-1).
- **Improved** search in installed font collection to also find fonts by other names than TrueType or PostScript names.
- **New** treatment of the DocumentID. In contrast to the `InstanceID` the `DocumentID` of the output document is inherited from the input document.

- Digital Signatures
 - **New** support to create Document Time-Stamp signatures using Swisscom All-in Signing Service.
 - **New** ability to sign documents that are larger than 2GB (64-bit version only).
- Stamping
 - PNG images are now Flate compressed by default.

API PdfSecureAPI

- [.NET, C, COM, Java, PHP] **Changed** enum TPDFPermission: Added a new value `ePermSameAsInput` to adopt the encryption parameters from the input document.

Interface PdfSecure

- **New** property `DocMdpPermissions`: Return the document access permissions of a DocMDP signature.
- [PHP] **Removed** the method `Terminate`: It is now called automatically by the "PdfTools" PHP extension and has thereby been rendered obsolete.

Shell pdfsecure

- **Changed** option `-p`: Added a new value `i` to adopt the encryption parameters from the input document.
- **New** option `-afn`: to specify name of signature form field. This can be used to specify the name of a new form field or to sign an existing one.

Service PdfSecureSvr

- **Changed** option `-p`: Added a new value `i` to adopt the encryption parameters from the input document.
- **New** directory `Logs` in which an error log file is generated for each failed operation.

4.20 3-Heights™ PDF Studio Utility

No functional changes.

4.21 3-Heights™ PDF to EMF Converter

- **New** support for reading PDF 2.0 documents.

4.22 3-Heights™ PDF to Image Converter

- **New** support for reading PDF 2.0 documents.
- **Improved** search in installed font collection to also find fonts by other names than TrueType or PostScript names.

API Pdf2ImgR2API

No functional changes.

Shell pdf2imgR2

- **Improved** option `-pgs` to also address pages from the back of the document as well as reordering pages freely.

Service Pdf2ImgSvrR2

No functional changes.

4.23 3-Heights™ PDF to PDF/A Converter

- **New** support for reading PDF 2.0 documents.
- **New** support for the creation of output files larger than 10GB (not PDF/A-1).
- **Improved** search in installed font collection to also find fonts by other names than TrueType or PostScript names.
- **Improved** font subsetting of CFF and OpenType fonts.
- **Improved** repair of corrupt image streams.
- **New** treatment of the DocumentID. In contrast to the InstanceID the DocumentID of the output document is inherited from the input document.
- CJK (Chinese, Japanese, Korean) fonts are now substituted if an exact match is missing.
- **Improved** conversion of files with optional content (layers) to minimize visual differences while also preserving all content.
- **New** support for the creation of appearance streams for free text annotations that contain rich text content.
- Digital Signatures
 - **New** ability to sign documents that are larger than 2GB (64-bit version only).

API Pdf2PdfAPI

Interface Pdf2Pdf

- **New** property `TryConvertEmbPDF` to activate conversion of embedded PDF documents (PDF/A-3 only).
- [PHP] **Removed** the method `Terminate`: It is now called automatically by the “PdfTools” PHP extension and has thereby been rendered obsolete.

Shell pdf2pdf

- **New** option `-cef` to activate conversion of embedded PDF documents (PDF/A-3 only).

Service Pdf2PdfSvr

- **New** option `-cef` to activate conversion of embedded PDF documents (PDF/A-3 only).

4.24 3-Heights™ PDF Toolbox API

- **New** support for reading and writing PDF 2.0 documents.
- **New** support for the creation of output files larger than 10GB (not PDF/A-1).
- **Improved** search in installed font collection to also find fonts by other names than TrueType or PostScript names.

- **Improved** font subsetting of CFF and OpenType fonts.
- **New** optimization of output file size for documents that contain structure information.

Interface Document

- [.NET, C, Java] **Changed** method `CreateDeviceColorSpace`: PDF/A conformance of the document is now removed if not explicitly requested and if no output intent is set.

Enumeration Conformance

- [.NET, C, Java] **New** item `Pdf20`.

4.25 3-Heights™ PDF Uncompress Utility

- **New** option `-c` to re-compress a file that has previously been uncompressed.
- **New** option `-b` to uncompress all data, even binary.

4.26 3-Heights™ PDF Validator

- **New** support for reading PDF 2.0 documents.

API PdfValidatorAPI

No functional changes.

Shell pdfvalidator

No functional changes.

4.27 3-Heights™ PDF Viewer

- **New** support for reading PDF 2.0 documents.

API PdfViewerOCX

No functional changes.

API PdfViewerAPI

No functional changes.

API PdfViewerWPF

No functional changes.

Desktop viewer

No functional changes.

4.28 3-Heights™ Scan to PDF Server

- **New** support for reading and writing PDF 2.0 documents.
- **New** support for the creation of output files larger than 10GB (not PDF/A-1).
- **Improved** search in installed font collection to also find fonts by other names than TrueType or PostScript names.
- **Improved** font subsetting of CFF and OpenType fonts.

Component ScanServer .Root

- **New** attribute `lock-files` on `<InputFolder>` element to configure whether input files are locked during processing.
 - **Changed** the default value from `"true"` to `"false"`.

Component Tiff.ExtractOcrData

- **Changed** OCR XML format (version 3)

4.29 3-Heights™ Signature Creation and Verification Service

No functional changes.

4.30 3-Heights™ Text to PDF Converter

- **New** support to create a PDF/A level A (PDF/A-1a, PDF/A-2a, PDF/A-3a) file without document title and language.

4.31 3-Heights™ TIFF Toolbox Shell

- **New** support for reading and writing PDF 2.0 documents.
- **Changed** OCR XML format (version 3)

4.32 3-Heights™ TIFF Toolbox API

- **New** support for reading and writing PDF 2.0 documents.

4.33 3-Heights™ XMP Generator

No functional changes.

5 Licensing, Copyright, and Contact

PDF Tools AG is a world leader in PDF (Portable Document Format) software, delivering reliable PDF products to international customers in all market segments.

PDF Tools AG provides server-based software products designed specifically for developers, integrators, consultants, customizing specialists and IT-departments. Thousands of companies worldwide use our products directly and hundreds of thousands of users benefit from the technology indirectly via a global network of OEM partners. The tools can be easily embedded into application programs and are available for a multitude of operating system platforms.

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