Release Notes
3-Heights™ and Classic PDF Tools

Version 4.5
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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 our website. There is no charge for downloading evaluation versions (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 System Requirements

All of the tools are available for:

- Windows XP
- Windows Vista
- Windows 7
- Windows 8
- Windows Server 2003
- Windows Server 2003 R2
- Windows Server 2008
- Windows Server 2008 R2
- Windows Server 2012
- Windows Server 2012 R2

Windows 9.x and NT 4 and Windows 2000 are 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.

Most of the tools, however, are also available for the following platforms, and will run also on newer versions of the same OS family:

- IBM AIX 5.1
- Sun Solaris / SPARC 5.8
- HP-UX 11i incl. IA64
- SunSolaris / Intel 5.10
- Linux 2.4 (RedHat)
- Mac OS X 10.4 x86 / x64
- Linux 2.6 (SuSE)

Other platforms are available on request. Please refer to the individual product pages 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++:

<table>
<thead>
<tr>
<th>Platform</th>
<th>C/C++</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows</td>
<td>MSVC 10.0</td>
</tr>
<tr>
<td>MAC OS/X 10.5 x86</td>
<td>gcc 4.0.1</td>
</tr>
<tr>
<td>Intel/x86 Linux</td>
<td>gcc 4.1.2</td>
</tr>
<tr>
<td>Intel/x64 Linux RedHat</td>
<td>gcc 3.4.6</td>
</tr>
<tr>
<td>Intel/x64 Linux SUSE</td>
<td>gcc 4.5.0</td>
</tr>
<tr>
<td>FreeBSD</td>
<td>gcc 3.4.2</td>
</tr>
<tr>
<td>Sun Solaris 2.8/SPARC</td>
<td>gcc 3.4.6</td>
</tr>
<tr>
<td>Sun Solaris 2.8/Intel</td>
<td>gcc 3.4.3</td>
</tr>
<tr>
<td>IBM AIX 5.1</td>
<td>gcc 4.2.4</td>
</tr>
<tr>
<td>HP UX 11.i (11.23)</td>
<td>gcc 4.1.2</td>
</tr>
<tr>
<td>HP UX 11.23 IA64</td>
<td>gcc 4.6.0</td>
</tr>
</tbody>
</table>

For Java, version 1.5 is required as minimum runtime version.
2 New and Enhanced Products

There are no new products with this release. However, there are new products under development.

2.1 3-Heights™ TIFF Suite

The MRC compression algorithm for continuous tone images has been significantly enhanced. It now supports

- An automatic level computation for the binarization step.
- An optional detection of photographic pictures and separation into distinct layers.

2.2 3-Heights™ PDF Optimizer

The PDF Optimizer has significantly been enhanced. The major improvements are:

- MRC compression is now available as an optimization step.
- Improved flattening functionality for AcroForms.
- Improved font program merging capabilities.
- Reworked optimization of images:
  - Invisible (clipped) parts of images can now be removed.
  - The optimizer automatically chooses the best compression type among a given list of compression types. This list can now be specified for three different classes of images: continuous tone (RGB and CMYK) images, indexed (paletted) images, and bi-tonal images.
  - Sophisticated MRC (mixed raster content) optimization is now supported as a compression type for continuous tone images. This includes detection of photographic areas and separation into layers.
### 2.3 3-Heights™ PDF Security Tool, 3-Heights™ PDF to PDF/A Converter and 3-Heights™ Document Converter

The signature creation and stamping function of various tools has been improved:

- Support for time-stamp servers requiring "https".
- Support for "QuoVadis sealsign" web service for signature creation.
- Apply stamps to the background of a page.

### 2.4 3-Heights™ PDF and TIFF Producer

The installer API now supports an update mode which replaces the driver and monitor DLLs without affecting the printer objects, printer settings and monitor configurations.

### 2.5 3-Heights™ PDF Printer

The printer tool now supports the first page of a PDF document as a watermark image. Furthermore it can set and list media types.
3 New Features to all Products

The following enhancements affect all components and solutions unless otherwise noted.

3.1 Enhancements to all 3-Heights™ Products

- Most command line tools now support Unicode characters for parameters and switches.
- The Windows services now support Unicode characters for parameters and switches in their configuration files.
- The Windows services now support new switches 'wfs' and 'wfi': only process files or ignore files with the given extensions.
- New OCR Plug-in for the ABBYY FineReader 11 engine.
- Improved MRC algorithm: photographic images now can optionally be isolated and stored into separate layers.
- The logo icons and bitmaps have been updated.
- Support for the 'DamagedRowsBeforeError' parameter in the CCITTFaxDecode filter.
- CFF fonts are now converted to its CID form if required. Affected products: PDF to PDF/A Converter, PDF Optimizer.
- The on-the-fly repair of embedded TrueType fonts has been improved.
- Improved processing of non-conformant XMP metadata.
- XMP Media Management history entry is now updated if already present. And in case of PDF/A created if not already present.

3.2 Enhancements to all Classic Products

- Increase maximum number of dictionary entries in PDF objects to 262144. Propagate an error when this limit is exceeded.
- Improved robustness to repair certain corruptions in PDF forms.
- Improved PDF corruption detection and error handling.
New Features to Specific Products

3.3 3-Heights™ AFP to TIFF Conversion Utility
- No functional changes.

3.4 3-Heights™ CrypTokI Certificate Utility
- New switch 'cps': Set provider property bag string.

3.5 3-Heights™ Document Assembler
- The user interface received minor improvements.

3.6 3-Heights™ Document Converter
- UNICODE support for configuration files to allow for non-ANSI characters in file paths etc.
- Improved support for converting XFA forms via Adobe Reader.
- Extended email date formatting (time zone display).
- New office add-ins to support the latest versions of MS Outlook and MS Word, packaged with a separate installation kit.
- See 2.2 for further enhancements.

3.7 3-Heights™ Font to PDF Utility
- No functional changes.

3.8 3-Heights™ Image Compare Utility
- New switch 'p': print maximal differences in parts per thousand.
- Create more detailed comparison messages.

3.9 3-Heights™ Image to PDF Converter
- New switch 'rw': return error code 5 if decode errors occur.
- New service switches 'wfs' and 'wfi': only process files or ignore files with the given extensions.
3.10 3-Heights™ JPM to PDF Converter

- No functional changes.

3.11 3-Heights™ OCR Enterprise Add-on


3.12 3-Heights™ PDF Analysis & Repair

- New service switches 'wfs' and 'wfi': only process files or ignore files with the given extensions.

3.13 3-Heights™ PDF Annotation API

- No functional changes.

3.14 3-Heights™ PDF Compare Utility

- More object types are now supported.

3.15 3-Heights™ PDF Creator Library

- No functional changes.

3.16 3-Heights™ PDF Extract

- New property 'Compliance' in 'Document' interface.
- The shell tool 'pdtxt' now doubles the "'" character when it is a part of an output string.

3.17 3-Heights™ PDF Merge Split

- New switch 'id': Set entry in the document information dictionary.
- New switch 'oad': Set open action for each output document.
- New switch 'pm': Set page mode for each output document.

3.18 3-Heights™ PDF Optimization

- See 2.1 for functional enhancements.
- New switch 'mdc': Don't isolate pictures in MRC process.
• New switch 'mm': Compression type for MRC mask.
• New switch 'ml': Compression type for MRC layers.
• New switch 'mlr': DPI for MRC layers after resampling.
• New switch 'mlq': Compression quality for MRC layers for lossy compression types.
• New switch 'mp': Compression type for MRC foreground layers (isolated pictures).
• New switch 'isc': Enable conservative image processing strategy.
• Modified switches 'fb', 'fi', 'fm', 'fc': Compression types for bitonal, indexed, monochrome and continuous tone (monochrome, color) images.
• New compression type 9: MRC compression.
• New properties 'BitonalCompressions', 'IndexedCompressions', 'ContinuousCompressions': Compression types for bitonal, indexed and continuous tone (monochrome, color) images.
• New property 'ImageStratConserv': Enable conservative image processing strategy.
• New property 'ClipImages': Enable clipping of images.
• New properties 'MrcMaskCompression', 'MrcLayerCompression', 'MrcPictCompression', 'MrcLayerQuality', 'MrcLayerResolution': Compression, quality and resolution of MRC layers.
• New service switches 'wfs' and 'wfi': only process files or ignore files with the given extensions.

3.19 3-Heights™ PDF Page Split Tool
• Performance improvements when working with large documents.
• Always create regular and not named destinations for links in between separately copied parts of a document.
• Improved copying of logical structure.
• Create missing appearances when flattening annotations.
3.20 3-Heights™ PDF Printer

- New switch 'lm': List media types.
- New properties 'MediaTypeCount', 'MediaType2', 'MediaTypeName', 'MediaTypeName2': List media types.
- New service switches 'wfs' and 'wfi': only process files or ignore files with the given extensions.
- Enhanced switch 'wp': Now supports the first page of a PDF document as a watermark image.
- Enhanced method 'AddWatermarkImage': see switch 'wp'.
- Enhanced switch 's': The algorithm for the automatic selection (-2) of the paper size has been improved.
- Enhanced property 'PaperSize': see switch 's'.

3.21 3-Heights™ PDF Producer

- PDF Producer
  - No functional changes.
- TIFF Producer
  - No functional changes.
- Application Runner:
  - No functional changes.
- Installer:
  - New command 'update': updates the driver and monitor files without changing the printers, printer settings, ports and port configurations.

3.22 3-Heights™ PDF Security

- See 2.2 for functional enhancements.
- New service switches 'wfs' and 'wfi': only process files or ignore files with the given extensions.
3.23 3-Heights™ PDF Studio Utility

- Integer objects that represent file offsets can now be displayed as well.

3.24 3-Heights™ PDF Thumbnail Utility

- No functional changes.

3.25 3-Heights™ PDF to EMF Converter

- Text coordinates have been reduced in accuracy in order to prevent number overflows in EMF processing software.

3.26 3-Heights™ PDF to Image Converter

- New service switches 'wfs' and 'wfi': only process files or ignore files with the given extensions.
- Do not render optional content groups that are print watermarks.
- Use banding to print image of transparency groups.
- Support high resolution printing of large transparent objects.

3.27 3-Heights™ PDF to Image Converter R2

- New switch 'ri': ignore rotate entry in page dictionary.
- New property 'HasColor': returns true if a given page has colored content.
- The R2 variant of the tool is now available as a Windows service.
- New service switches 'wfs' and 'wfi': only process files or ignore files with the given extensions.
- Do not render optional content groups that are print watermarks.

3.28 3-Heights™ PDF to PDF/A Converter

- See 2.2 for functional enhancements.
- New service switches 'wfs' and 'wfi': only process files or ignore files with the given extensions.
- Improved conversion of corrupt text.
- Support conversion of inconsistent Type0 fonts.
3.29 3-Heights™ PDF Uncompress Utility

- No functional changes.

3.30 3-Heights™ PDF Validator

- The repairing of damaged files has been improved.
- New service switches 'wfs' and 'wfi': only process files or ignore files with the given extensions.
- Added validation of CIDSet and CharSet for PDF/A-1.
- Extended validation to objects that are not used, but referenced from cross reference table.

3.31 3-Heights™ PDF Viewer

- Viewer Shell & Viewer OCX:
  - New event 'OnCursorModeChanged': is called when the cursor mode has changed.
- Java Document Viewer:
  - Improved accuracy of search highlight.
- PDF Viewer WPF:
  - No functional changes.

3.32 3-Heights™ Text to PDF Converter

- No functional changes.

3.33 3-Heights™ TIFF Tool Suite

- tiffcompress:
  - New switch 'cm': MRC compression.
  - New switch 'sc': Create foreground layers (isolate pictures).
  - Modified switch 'cr' and 'qr': RGB & YCbCr compression and quality.
  - Deprecated switch 'cy' and 'qy'.
  - Improved MRC algorithm.
• tiffo:cr:
  • Multi-page support for the XML output.
  • Dedicated barcode elements in the XML output instead of text elements with font name “Barcode”.

3.34 3-Heights™ XMP Generator
• No functional changes.

3.35 Classic Command Line Suite
• pdform:
  • improved robustness when encountering corrupted form structures
  • support for formatting number fields

3.36 Classic PDF Prep Tool Suite
• Support for number formatting in form fields.
• More robust handling of PDF forms to repair certain anomalies.
4 About PDF Tools AG

PDF Tools AG (www.pdf-tools.com) 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.