

User Manual



# 3-Heights™ Document Converter Client

Version 4.12.26.2



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# 1 Introduction

The 3-Heights™ Document Converter Client accesses the Document Converter service which must be installed on an available server. This user manual guides through the installation of a Document Converter Client and provides information about the usage and configuration of its features.

The Client documentation applies to a client of an Enterprise service as well as of a Small-Medium Enterprise service.

For guidance through the service itself or service related issues consider the corresponding Document Converter-[Enterprise](#) or [SME](#) manual.

## 1.1 Operating Systems

The 3-Heights™ Document Converter is available for the following operating systems:

- Windows 7, 8, 8.1, 10 – 64 bit

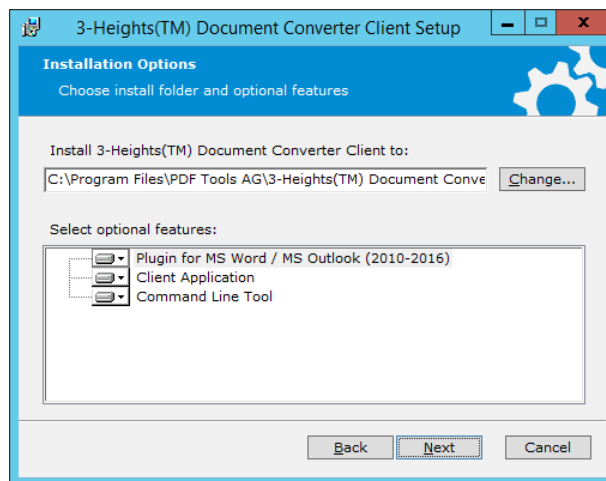
## 2 Installation

This chapter guides you through the installation of the 3-Heights™ Document Converter Client. For information about the Document Converter Service installation, see the corresponding chapter in the Document Converter [Enterprise](#) or [SME](#) manual.

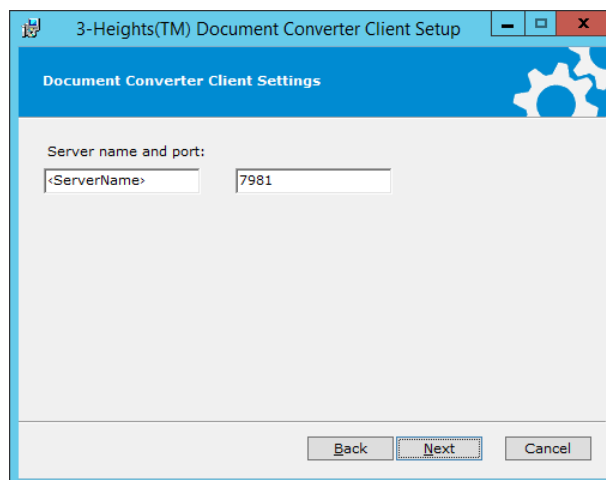
### 2.1 Client Installation

The installation on a client computer is done using the DocumentConverterClient- $\langle$ Version $\rangle$ -Windows.msi installer.

1. Run the DocumentConverterClient- $\langle$ Version $\rangle$ -Windows.msi.
2. After going through the initial setup page, accept the terms in the “License Agreement”.
3. Continue with the “Installation Options” via the “Next” button.
  - a. If desired change the destination folder.
  - b. Select the features to be installed.
  - c. Click on “Next”.



4. Configure the server name and port number according to the Document Converter Service settings.



5. Trigger the installation on the following page by clicking on the “Install” button.
6. After the Document Converter is successfully installed, press on the “Finish” button to close the installation Wizard.

## 2.2 Updating an Existing Installation

To update a 3-Heights™ Document Converter Client version

1. Execute the MSI of the newest release and follow the steps as described in the section [Client Installation](#). If this yields an error, an uninstallation must be performed before installing the newest Document Converter Client release. The uninstallation can be done with help of the old MSI or via “Programs and Features”.

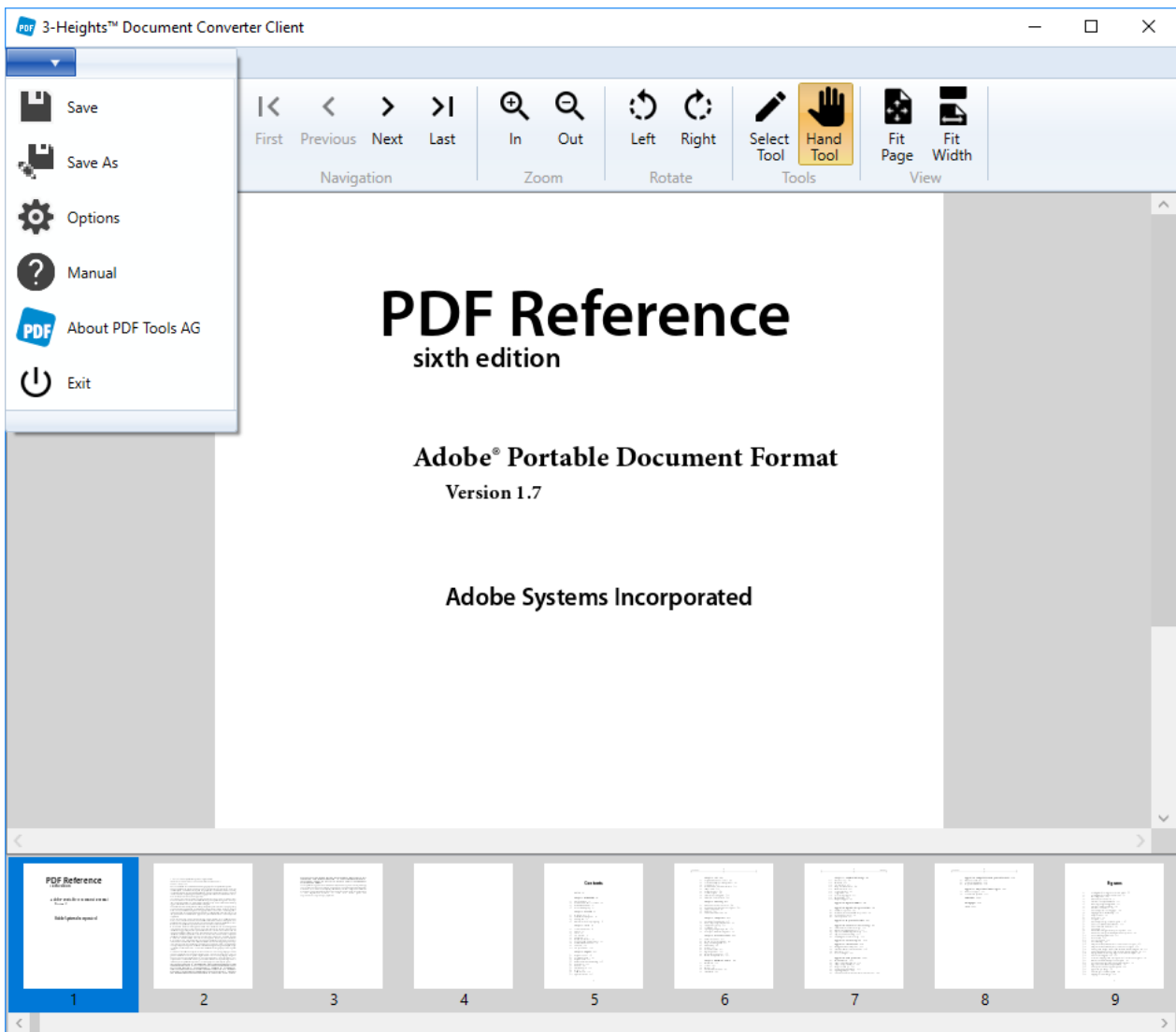
**Note:** The uninstallation does not remove the configuration data contained in \*.config, \*.xml and \*.ini files. These files remain in the installation directory, and will not be changed when performing the installation of the new version into the same installation directory.

## 3 User guide

This section gives an overview of the usage and configuration for the 3-Heights™ Document Converter Client standard features.

### 3.1 Client Application

The 3-Heights™ Document Converter Client offers a Graphical User Interface application which will send input document(s) to the 3-Heights™ Document Converter service, either through the configured network port or using the Webservice interface. The output document can then be stored and/or displayed in the Client Application.



#### 3.1.1 Features

**Viewer Features** The built-in PDF viewer provides these features:

**Navigation** Using the arrow key, the navigation buttons or by selecting a page in the Thumbnails preview, a user can easily navigate through a document.



**Zoom** The viewer offers zoom in and out as well as **FitPage** and **FitWidth** modes, where the page size is automatically adjusted.

**Selection** Text can be selected and copied to the clipboard.

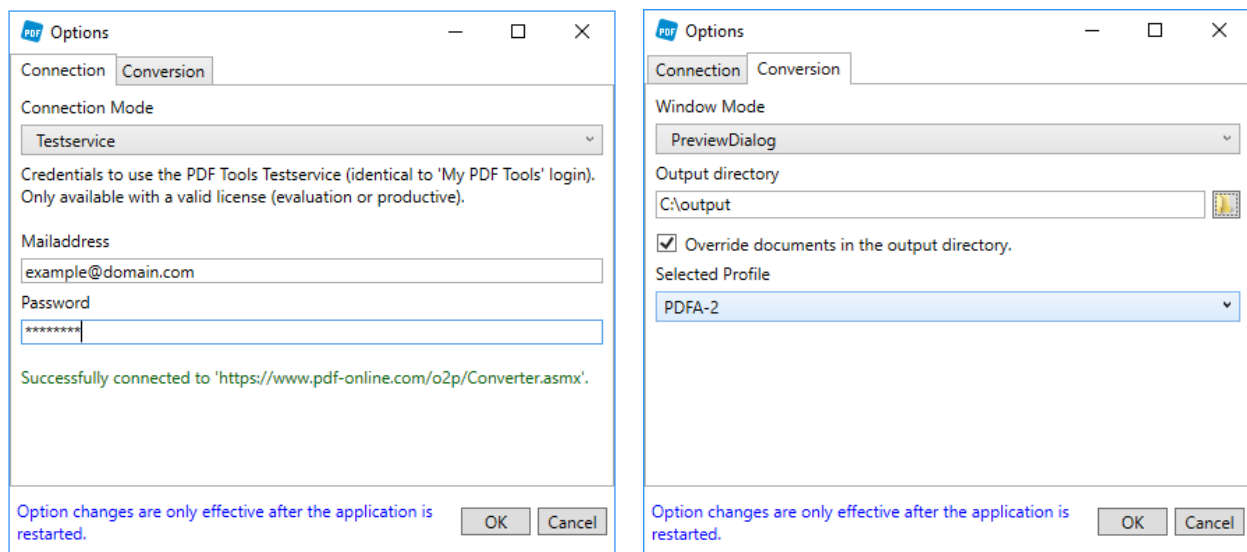
**Manipulation Features** The Thumbnail Page Preview offers these manipulation features:

**Page Order** One or several pages can be rearranged using Drag&Drop.

**Rotation** One or several pages can be selected and rotated either clockwise or counter-clockwise.

**Delete Page** One or several pages can be removed from the document.

## 3.1.2 Options



The **Options** window allows to configure the connection to the 3-Heights™ Document Converter service (**Connection** tab) and set the conversion options (**Conversion** tab). In the **Connection** tab, the connection status is displayed. Documents can only be converted if the client can successfully connect to a Document Converter service.

### Connection Mode

**Key:** Connection Mode

**Network** Connect to your local server where the Document Converter Service is running using the network **hostname** of the server and the configured **port**. Ensure that no firewall blocks TCP traffic between the client and the server.

**Webservice** Connect to your server where the Document Converter Webservice is running.

**Testservice** Connect to the PDF Tools Testservice. The credentials to use the PDF Tools Testservice are identical to the 'My PDF Tools' account information which you received after the registration process on [www.pdf-tools.com](http://www.pdf-tools.com). To access the Testservice, a valid license (evaluation or productive) needs to be available in your account.

### Window Mode

**Key:** Window Mode

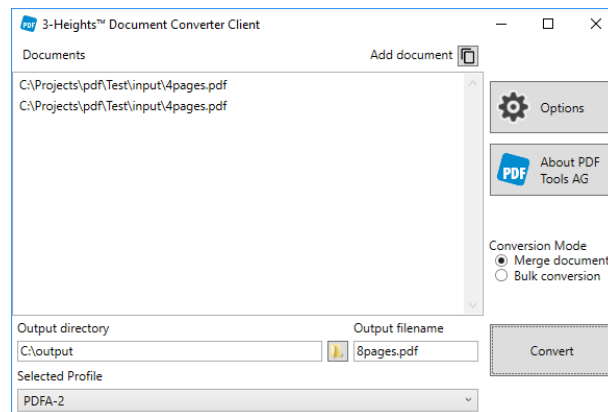
To change the Window Mode or other options, open the Client from the Windows Start Menu without initializing any conversion.

**NoDialog** Documents will be saved in the configured [Output directory](#) without any dialog window. If a file with the same name already exists in the directory, the current time is added to the filename.

**OutputDialog** Only a Windows Save Dialog window is shown so that the user can decide where to save to output document.

**PreviewDialog** A document preview is shown after the conversion so that the output document can be reviewed and manipulations are possible.

**CollectDialog** Documents can be assembled and then be sent to the conversion service. This allows to easily merge documents or bulk process files.



## Output directory

**Key:** Output directory

Select the default output directory for converted documents.

## Override

**Key:** Override

If this option is selected, existing documents in the output directory will be overridden. Otherwise, the output document name will be adjusted (e.g. appended with the current time) to ensure unique file names.

## Selected Profile

**Key:** Selected Profile

The profile for the conversion can be selected. Changes are only effective after a restart. Profiles and their options sets (as described in [Section 4.1](#)) can be edited and added in the configuration file `DocConvDialog.xml`

Predefined Profiles:

**PDF/A-2** Convert documents to PDF/A-2 for archiving and long term preservation.

**PDF/A-3** Convert documents to PDF/A-3 for archiving and long term preservation (with support for embedded files).

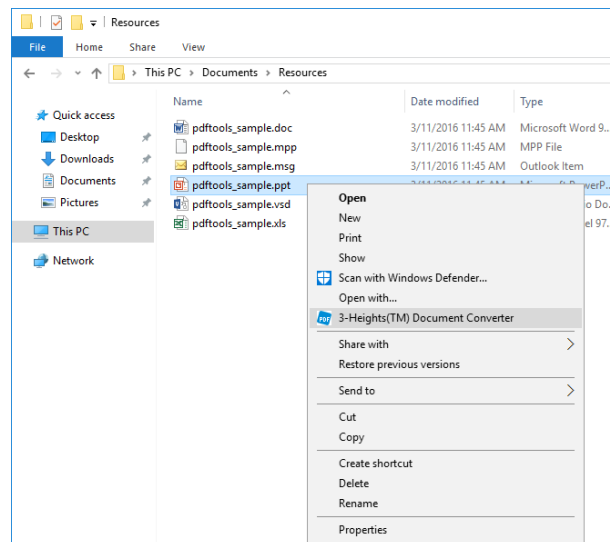
**PDF** Convert documents to PDF.

**OCR** Convert documents to PDF/A-2 and perform text recognition (OCR), recommended for scanned documents.  
Needs a configured OCR service to work.

### 3.1.3 Explorer Shell Extension

Another way to use the Shell Pop-up is by the Explorer Shell Extension.

Right-click on a document, the pop-up menu will show the “3 Heights(TM) Document Converter” entry.



The menu entry will be shown when one or multiple documents are selected, and the selection contains documents having a known file extension. It will also be shown for folders that contain corresponding files.

When activating the menu, it runs the Shell Pop-up.

### Configuration

The pop-up menu will be shown by the explorer for files with certain name extensions.

The list of relevant file extensions is configured via the `O2PCM.ini` (or `O2PCM64.ini`) file that is located in the installation directory of the Document Converter Client.

**Note:** The `EXPLORER.EXE` file needs to be restarted to reflect changes in the `O2PCM.ini` file.

### 3.1.4 Office Add-In

The Office Add-Ins are a simple way for converting documents directly from an Office Application. They are available for these Office products:

- Microsoft Word
- Microsoft Excel
- Microsoft Outlook

## 4 Interface Reference

### 4.1 Job Options

#### 4.1.1 ALIVECHECK

**Key:** ALIVECHECK

Setting this option tells the converter that the current conversion job is merely for verifying proper functioning. This has two effects:

1. The conversion does not contribute to the overall page count.
2. The output has an evaluation watermark.

**Note:** If OCR is performed, pages **do** count towards the monthly FineReader engine licensed limit.

#### 4.1.2 CERTNAME

**Key:** CERTNAME

The certificate name to be used for signing the converted PDF. A certificate with the specified name must be installed in the certificate store, and be available to the Document Converter.

The **Name** corresponds to the common name (CN) of the subject. In the Windows' certificate store this corresponds to "Issued to".

To sign the output PDF with only a time stamp, use the **TS:** prefix for the name value. If a visible signature is created (see [SIGRECT](#)), the name is displayed without the prefix.

#### 4.1.3 COLLCOMP

**Key:** COLLCOMP Default: true  
Default: true

Collect documents from composite items (such as e-mail) into a single output document.

#### 4.1.4 CONVERTALWAYS

**Key:** CONVERTALWAYS Default: true  
Default: true

Force PDF/A conversion. Only applicable when PDF to PDF/A conversion is performed.

## 4.1.5 EMBEDSOURCE

**Key:** EMBEDSOURCE

When converting to PDF, embed the source document as a file attachment into the resulting PDF document.

Specify the description text for the embedded file as value for this option. If an empty value or "true" is specified, "Original document" will be used.

(Not available with PDF/A-1 or A-2).

## 4.1.6 ERRSUMMARY

**Key:** ERRSUMMARY Default: false  
Default: false

**true** Set this option to collect all error messages and return them at the end of the conversion process. In particular this is useful when converting compound documents.

## 4.1.7 ERRPAGE

**Key:** ERRPAGE Default: false  
Default: false

**true** Appends a page to the converted document containing an error summary.

## 4.1.8 FlattenSignatures

**Key:** FlattenSignatures Default: false  
Default: false

Keep signature appearance when removing digital signatures during conversion.

## 4.1.9 FlattenFormFields

**Key:** FlattenFormFields Default: false  
Default: false

Flatten form fields during conversion.

## 4.1.10 FORMAT

**Key:** FORMAT

Values **pdf** or **tiff**. Specifies the conversion output format.

### 4.1.11 HTMLPRINTRESOLUTION

**Key:** HTMLPRINTRESOLUTION Default: 1.0  
Default: 1.0

Specify a factor, relative to a screen resolution, for converting web pages.

### 4.1.12 LINEARIZE

**Key:** LINEARIZE

When **true**, optimize PDF output for fast web viewing.

### 4.1.13 MAILHEADER

**Key:** MAILHEADER

**false** Do not include headers in conversion.

**true** Add full mail headers to converted message.

**attach** Extract original headers and attach as text file.

The layout and styles used to produce the intermediate HTML representation of the mail message can be configured via a style sheet file and a header template file.

### 4.1.14 OCR

**Key:** OCR

Enable OCR recognition (values **true** and **false**).

**Note:** The ABBYY FineReader OCR engine must be installed and licensed separately to make this feature available.

**Note:** Use of [OCR.ENGINE](#) or [OCR.LANGUAGE](#) automatically turns this setting on.

### 4.1.15 OCR.BITONAL

**Key:** OCR.BITONAL Default: false  
Default: false

Pass color images converted to bitonal (black/white) image for OCR recognition.

This reduces the resources and time required for OCR recognition at the possible cost of somewhat reduced accuracy.

## 4.1.16 OCR.EMBEDBARCODES

**Key:** `OCR.EMBEDBARCODES` Default: `false`  
Default: `false`

Embed barcode information into the document XMP metadata.

## 4.1.17 OCR.ENGINE

**Key:** `OCR.ENGINE`

Name of the OCR engine to be used for OCR processing (default: `service`).

## 4.1.18 OCR.LANGUAGE

**Key:** `OCR.LANGUAGE`

Set the language to improve OCR recognition accuracy (values according to the engine; ABBYY expects English spelling, e.g. `German`, `English`).

## 4.1.19 OCR.PARAMETERS

**Key:** `OCR.PARAMETERS`

Set OCR engine parameters.

For detailed information, see OCR engine documentation <https://www.pdf-tools.com/public/downloads/manuals/ocre.pdf>.

## 4.1.20 OCR.REEMBEDIMAGE

**Key:** `OCR.REEMBEDIMAGE` Default: `false`  
Default: `false`

Re-embed images that have been processed (de-skewed) during OCR recognition.

## 4.1.21 OCR.ROTATEPAGE

**Key:** `OCR.ROTATEPAGE` Default: `false`  
Default: `false`

If `true`, automatically rotate pages during OCR processing to have horizontal reading direction.

This setting only has an effect, if the underlying OCR engine is able and configured to detect the text orientation.

Please refer to the OCR Engine documentation (FineReader Engine 10: `DetectOrientation=true`).

## 4.1.22 OCR.TAGGING

**Key:** OCR.TAGGING Default: **false**  
Default: false

Enable text tagging by OCR engine (if supported).

## 4.1.23 PASSTHROUGH

**Key:** PASSTHROUGH

Pass source document without conversion to output (ZIPPED or PDF attachment). When converting to PDF, make sure to have at least one document converted.

**attachments (all mail attachments)**

**.xml .txt hidden none** List of Extensions.

**!.doc.eml.msg.zip** Negative list of documents with these extensions.

## 4.1.24 PDFA

**Key:** PDFA

Values **true** or **false**. When **true** is set, the resulting PDF will conform to the PDF/A standard.

## 4.1.25 PDFA.ERROR

**Key:** PDFA.ERROR

Values **true** or **false**. When **true** is set, return detailed error information from PDF/A conversion.

## 4.1.26 PDFA.LOGDETAILS

**Key:** PDFA.LOGDETAILS

Values **true** or **false**. When **true** is set, include detail information in error text.

Default: [PDFA.ERROR](#) setting.

## 4.1.27 PDFA.LOGSUMMARY

**Key:** PDFA.LOGSUMMARY

Values **true** or **false**. When **true** is set, include summary information in error text.

Default: [PDFA.ERROR](#) setting



## 4.1.28 PDFA.OCRMODE

**Key:** PDFA.OCRMODE

Set one of the OCR modes applicable in the context of PDF/A conversion.

- 1 OCR images without OCR text (default)
- 2 Remove old OCR text (and perform OCR).
- 3 Remove old OCR text (but do not OCR).
- 4 OCR if the document contains no text.

## 4.1.29 PDFA.SUBSET

**Key:** PDFA.SUBSET Default: true  
Default: true

Do subset those fonts that are being embedded during PDF/A conversion.

Setting this option to **false** may produce potentially much larger PDF/A output files; however, these files may be easier to enhance or modify later on.

**Warning:** All fonts used in documents converted with this setting must be installed on the server to obtain correct output!

## 4.1.30 PDFA.WARNCOLL

**Key:** PDFA.WARNCOLL Default: true  
Default: true

Warn if an input PDF contains embedded files that need to be removed for PDF/A-1 compliance.

## 4.1.31 PDFA.WARNDOWNGRADE

**Key:** PDFA.WARNDOWNGRADE Default: false  
Default: false

Returns the warning O2P\_W\_DOWNGRADE in case the compliance is downgraded during PDF/A conversion.

## 4.1.32 PDFA.WARNFONTSUBST

**Key:** PDFA.WARNFONTSUBST Default: false  
Default: false

**true** Warn if a Font is substituted.

### 4.1.33 PDF.A.WARNVISDIFF

**Key:** PDF.A.WARNVISDIFF Default: true  
Default: true

**false** Suppress the warning normally raised in case PDF/A conversion possibly results in visual changes.

### 4.1.34 PDF.A.XMPWARNINGS

**Key:** PDF.A.XMPWARNINGS

Values **true** or **false**. When **true** is set, raise a conversion error if the XMP Metadata was changed in order to achieve PDF/A compliance.

### 4.1.35 PDF.A.CONVERTEMBPDF

**Key:** PDF.A.CONVERTEMBPDF

Values **true** or **false**.

When **true** is set, embedded PDF files will also be converted to PDF/A.

When **true** is set, embedded PDF files remain as-is.

If the option is not specified, the converter assumes **true** with PDF/A-2 and **false** with PDF/A-3.

### 4.1.36 PDF.COMPLIANCE

**Key:** PDF.COMPLIANCE Default: 1AB  
Default: 1AB

Required (minimum) compliance level (for PDF/A conversion).

A compliance is defined by values: **1A**, **1B**, **2A**, **2B**, **2U**, **3A**, **3U**, **3B**.

Additionally a fallback value can be defined. So if you prefer **1A**, but will also accept **1B** in cases where **1A** is not possible, you can define **1AB**.

**1A** Raise an error if tagging information is missing.

**1B** Produce PDF/A-1b output, even if structure tags are available.

**1AB** Try to create PDF/A-1a; degrade to PDF/A-1b if tagging information is missing.

**2A** Produce PDF/A-2a (or fail).

**2UB** Produce PDF/A-2u or – if text encoding information is missing – PDF/A-2b.

**2AUB** Produce the “best possible” PDF/A-2 output

### 4.1.37 PDF.DATE

**Key:** PDF.DATE

The calendar date and time to be used for the output PDF. This will set the `CreationDate` entry in the document's Info object.

Values specified for this key must be formatted as this: `20071031141000` (October 31, 2007, 2:10 p.m. local time), or `20071031141000+ '02:00'` (same date, explicit UTC offset +2 hours)

### 4.1.38 PDF .Embed

**Key:** `PDF.Embed` Default: `false`  
Default: `false`

When converting multiple documents, embed any but the first document into the resulting PDF document as document level attachments.

Default: `false`, i.e. merge the pages of all documents.

### 4.1.39 PDF .Info

**Key:** `PDF.Info`

Document level attributes like Author, Title, etc.

E.g. `Author:Document Converter|Keywords:pdf-tools.com`

### 4.1.40 PDF .OWNERPASS

**Key:** `PDF.OWNERPASS`

The owner password for creating a password protected output PDF (The password required to modify the document security settings).

**Note:** Do not use this for PDF/A compliant output.

### 4.1.41 PDF .PERMISSION

**Key:** `PDF.PERMISSION`

An integer number representing the permission flag value controlling which features are allowed in a password protected PDF.

### 4.1.42 PDF .Producer

**Key:** `PDF.Producer`

This option takes a string as value and sets it as the producer entry in the metadata of the converted document.

## 4.1.43 PDF.USERPASS

**Key:** PDF.USERPASS

The user password for creating a password protected output PDF. (The password is required to open the document).

**Note:** Do not use this for PDF/A compliant output.

## 4.1.44 PDFOPTIMIZE

**Key:** PDFOPTIMIZE Type: Enterprise

Perform a predefined command on the output PDF prior to the PDF/A conversion (or just signing) stage.

## 4.1.45 SIGEMBEDOCSP

**Key:** SIGEMBEDOCSP Default: true  
Default: true

Embed revocation information such as online certificate status response (OCSP - RFC 2560) and certificate revocation lists (CRL - RFC 3280).

Revocation information is either an OCSP response or a CRL, which is provided by a validation service at the time of signing and acts as proof that at the time of signing the certificate is valid. This is useful because even when the certificate expires or is revoked at a later time, the signature in the signed document remains valid.

Embedding revocation information is optional but suggested when applying advanced or qualified electronic signatures.

The downsides of embedding revocation information are the increase of the file size (normally by around 20k) and that it requires a connection to a validation service, which delays the process of signing (normally by around 2 seconds).

Embedding revocation information requires an online connection to the CA that issues them. The firewall must be configured accordingly. In case a web proxy is used, it must be ensured the following MIME types are supported when using OCSP (not required for CRL):

application/ocsp-request  
application/ocsp-response

## 4.1.46 SIGFIELDS

**Key:** SIGFIELDS Default: false  
Default: false

If **true**, replace signature placeholders by signature fields that can later be signed (e.g. with Adobe Acrobat), see the [Placeholder image](#).

## 4.1.47 SIGISSUER

**Key:** SIGISSUER

Certificate issuer: This value is optional; it is only needed if multiple certificates with the same name exist.

**Issuer** corresponds to the common name (CN) of the issuer. In the Windows' certificate store this corresponds to "Issued by".

## 4.1.48 SIGPAGE

**Key:** SIGPAGE   Default: -1  
Default:           -1

The page number on which to place the signature (default: -1 for last page).

## 4.1.49 SIGPROFILE

**Key:** SIGPROFILE

Name of a signature configuration file having INI file Syntax with sections [**Session**] and [**Properties**]. The name path can be relative to the installation folder and may have the **.ini** extension omitted.

[**Session**]   Section keys are: **Provider**, **Name**, **Reason**, **Text1**, **Text2**, **TimeStampUrl**, **TimeStampCredentials**, **ProxyURL**, **ProxyCredentials**, **EmbedRevocationInfo**, **SignerFingerPrint**, **SerialNumber**, **ContactInfo**, **Email**, **Location**, **ImageFileName**.

[**Properties**]   Section keys are specific for the particular provider value. Please refer to the appropriate documentation.

## 4.1.50 SIGPROVIDER

**Key:** SIGPROVIDER

Signature provider string: to use a PKCS#11 provider, specify the path to the PKCS11 interface DLL, followed by a semicolon, then the slot number, then another semicolon, and then the user PIN.

Additional information about PKCS#11 and HSMs is available in the [Tech-Note for HSM](#).

## 4.1.51 SIGPROXYCRED

**Key:** SIGPROXYCRED

Proxy credentials (**user:password**).

## 4.1.52 SIGPROXYURL

**Key:** SIGPROXYURL

Proxy URL (for accessing time stamp and OCSP server).

### 4.1.53 SIGREASON

**Key:** SIGREASON

The signature reason.

### 4.1.54 SIGRECT

**Key:** SIGRECT

The signature rectangle (4 space separated float values: left bottom right top).

For invisible signatures, specify a rectangle with zero width and height.

### 4.1.55 SIGSTORE

**Key:** SIGSTORE

Certificate store (**MY**, **ROOT**, **CA**, ...).

### 4.1.56 SIGSTORELOCATION

**Key:** SIGSTORELOCATION

Certificate store location (**0** local system; **1** current user).

### 4.1.57 SIGTSCRED

**Key:** SIGTSCRED

Time stamp server credentials if required (**user:password**).

### 4.1.58 SIGTSURL

**Key:** SIGTSURL

The URL of the trusted time stamp authority (TSA) from which a time stamp shall be acquired. E.g. **tsu.my-time-server.org**.

This setting is suggested to be used when applying a Qualified Electronic Signature. Applying a Time-Stamp requires an online connection to a time server; the firewall must be configured accordingly. In case a web proxy is used, it must be ensured the following MIME types are supported:

application/timestamp-query

application/timestamp-reply

## 4.1.59 WARNSIGNATURES

**Key:** WARNSIGNATURES Default: false  
Default: false

**true** Warn if an input PDF files is digitally signed.

## 4.1.60 STAMP

**Key:** STAMP

Name of an XML stamp file.

**Note:** A suitable domain account must be specified for the watched folder service in the "login" tab to ensure that files on a network share can be accessed. The watched folder service will move the control file to the succeeded folder (or deleted it) on job completion. The documents referenced in the control file are left untouched.

## 4.1.61 TEXTBODY

**Key:** TEXTBODY Default: false  
Default: false

**true** Include the text body in the conversion of mail messages also, if HTML or RTF body is present too.

## 4.1.62 THUMBS

**Key:** THUMBS

Values **true** or **false**; using the option **THUMBS=true** will create thumbnails for all pages. Existing thumbnails will be replaced. **THUMBS=false** will have no effect on thumbnails; existing thumbnails in input documents will not be altered.

## 4.1.63 TIFF.BPI

**Key:** TIFF.BPI

Specify the Bits per pixel of a TIFF output.

## 4.1.64 TIFF.COMPR

**Key:** TIFF.COMPR

Set the TIFF compression type. Possible values are **raw**, **JPEG**, **flate**, **LZW**, **Group3**, **Group3\_2D** and **Group4**.

## 4.1.65 TIFF.COMPR.BITON

**Key:** `TIFF.COMPR.BITON` Default: `Group4`  
Default: `Group4`

Set the TIFF compression type for bitonal images (black and white). Possible values are `raw`, `flate`, `LZW`, `Group3`, `Group3_2D`, `Group4` and `PackBits`.

## 4.1.66 TIFF.COMPR.CONTINUOUS

**Key:** `TIFF.COMPR.CONTINUOUS` Default: `TIFFJPEG`  
Default: `TIFFJPEG`

Set the TIFF compression type for continuous color images. Possible values are `raw`, `JPEG`, `flate`, `LZW` and `TIFFJPEG`.

## 4.1.67 TIFF.COMPR.INDEXED

**Key:** `TIFF.COMPR.INDEXED` Default: `LZW`  
Default: `LZW`

Set the TIFF compression type for color indexed images. Possible values are `flate`, `LZW` and `raw`.

## 4.1.68 TIFF.COMPR.MRC

**Key:** `TIFF.COMPR.MRC`

`true` Activate MRC.

## 4.1.69 TIFF.COMPR.PDF

**Key:** `TIFF.COMPR.PDF`

Set the TIFF compression type for PDF to TIFF. Possible values are `raw`, `JPEG`, `flate`, `LZW`, `Group4`, `PackBits` and `TIFFJPEG`

## 4.1.70 TIFF.DITHERINGMODE

**Key:** `TIFF.DITHERINGMODE` Default: `1`  
Default: `1`

The dither mode to be applied during PDF to TIFF conversion with bi-level compression.

- 1** (Floyd Steinberg) for JBIG2
- 4** (Group3 optimized) for Group3
- 5** (Group4 optimized) for Group4



## 4.1.71 TIFF.DPI

**Key:** `TIFF.DPI`

Set the target resolution in dots per inch. Applies to PDF to TIFF and Excel to TIFF.

## 4.1.72 TIFF.RENDERINGMODE

**Key:** `TIFF.RENDERINGMODE` Default: `1`  
Default: `1`

The rendering mode to be applied for PDF to TIFF conversion.

- `1` (accurate) for color conversions
- `0` (fast) for black and white (Group3, Group4, JBIG2 compression)

## 4.1.73 TIFF.ROTATE

**Key:** `TIFF.ROTATE` Default: `Auto`  
Default: `Auto`

Image rotation policy for PDF to TIFF conversion. Possible values are `Auto`, `None`, `Landscape` and `Portrait`.

## 4.1.74 TIFF.UNPACK

**Key:** `TIFF.UNPACK`

`true` Unpack samples to 8 bits per sample.

## 4.1.75 TIFF.XDPI, TIFF.YDPI

**Key:** `TIFF.XDPI` Default: `150`  
Default: `150`  
**Key:** `TIFF.YDPI` Default: `150`  
Default: `150`

The horizontal and vertical resolution in dots per inch. To set the same resolution for both, you can use the option name [TIFF.DPI](#).

## 4.1.76 ZIPPED

**Key:** `ZIPPED`

Values `true` or `false`. When `true`, documents of a job are returned as multiple entries in a ZIP file rather than concatenated into a single TIFF or PDF file.

### 4.1.77 ZUGFeRD-invoice.xml:ADD

**Key:** ZUGFeRD-invoice.xml:ADD

**A** Add ZUGFeRD-invoice.xml files as attachment.

### 4.1.78 factur-x.xml:ADD

**Key:** factur-x.xml:ADD

**A** Add factur-x.xml files as attachment.

### 4.1.79 Special Key

**Key:** #

This is a special key controlling the way how documents are passed by the O2PProxyAPI .DLL to the server.

By default, documents are passed "by value", i.e. their content is sent via the API. When **specifying this key at the very beginning of the options string**, document files are not copied, but their file system path is sent.

Obviously, this will only work when the file system path has a meaning on the server side, and the server has access privileges to read the documents and also create the resulting PDF.

The advantage of using this key is that the copying overhead is eliminated.

## 4.2 Document Options

Options related to the processing of a particular document.

It is possible to restrain options to the scope of a particular application or document by prefixing the option key with the application name or the document name, separated by a colon. This is useful when multiple documents are passed.

#### Example:

```
HTML:Outline=TITLE;URL:Outline=FILENAME;Outlook:Outline=%Subject%
```

**Note:** Document options can also be used at the job level. If a certain option value is evaluated, the settings specified at the document level have priority over settings specified at the job level.

### 4.2.1 ADD

**Key:** ADD

Specify that the document be embedded as a document level attachment into the resulting PDF document (value **A**).

Optionally, the document can also be converted to PDF and merged with the output document (value **B**).

The setting of this option can be restricted to mail attachments. In this case, use the option key **ATTACHMENTS:ADD**.

## 4.2.2 ATT.Name

**Key:** `ATT.Name`

Specify the name to be used as the attachment name.

Using this document option implies `ADD=A`, unless `ADD=B` is specified explicitly.

The name `ZUGFeRD-invoice.xml` has a special meaning (also when specified via `ORIGINALNAME`). If an XML file with this name is passed, the converter service will propagate ZUGFeRD metadata from the XML document to the XMP metadata and embed the XML itself as an embedding (according to the ZUGFeRD specification).

## 4.2.3 ATT.Description

**Key:** `ATT.Description`

Specify a description string for the document to attach.

## 4.2.4 CMRQUAL

**Key:** `CMRQUAL` Default: `95`  
Default: `95`

Compression quality (`1, ..., 100`) to be applied for lossy (re-)compression during PDF to PDF/A conversion and image to PDF compression.

## 4.2.5 CODEPAGE

**Key:** `CODEPAGE` Default: `CP_ACP`  
Default: `CP_ACP`

Set the code page for converting ASCII text files using MS Word. Default is `CP_ACP` (currently set default Windows ANSI code page).

To disable code page mapping and pass ASCII text files "as is" to MS Word, specify a value of `false`.

## 4.2.6 COLLCOMP

**Key:** `COLLCOMP`

If set to `true`, the elements of a composite document are merged (collected) into a single output document (default `false` when `ZIPPED=true` is specified for the job's output).

Composite documents are Mail messages containing attachments, ZIP and RAR files.

## 4.2.7 FAILFILES

**Key:** FAILFILES

Cause the conversion of files having an extension listed in the FAILFILES setting to fail.

The special value `.unknown` can be specified to match any file extension that is not assigned to a known document type. Use this setting if you want to prevent the conversion of specific document types. This is more specific than just disabling the use of the corresponding application (e.g. Excel), as some other application (e.g. OpenOffice) may still attempt to perform the conversion.

## 4.2.8 FORCEAPP

**Key:** FORCEAPP

Use the specified value in place of the file name extension for controlling which application is selected to open the document.

If the value is omitted (or empty), the original file's extension will be used to select the controlling application; if that application cannot open the file, no other attempt to open the document with other applications will be made.

**Example:** Select the application registered for PPT (i.e. PowerPoint), and name the file `f.pptx` to open it.

```
ORIGINALNAME=f.pptx;FORCEAPP=PPT
```

**Note:** For certain file types and applications, it is important that the correct file extension is provided. Visio for example will not open any document with an inappropriate extension.

## 4.2.9 HTZDOCS

**Key:** HTZDOCS Default: `.HTM.HTML.MHT.XML`  
Default: `.HTM.HTML.MHT.XML`

The list of file extensions for selecting the root document(s) in `.HTMZIP` files.

## 4.2.10 Include Visio Properties

**Key:** IncludeStructureTags  
**Key:** IncludeDocumentProperties  
**Key:** IncludeBackground

Create structure tags, include document properties or include the background layer when saving the document as PDF.

## 4.2.11 MAILPARTS

**Key:** MAILPARTS Default: AB  
Default: AB

Select attachments and/or body of the mail message for conversion.

- A** Attachments only.
- B** Body only.
- L** All.

Use this option to determine which parts of a mail message shall be converted. Supported for Outlook MSG files and Internet Mail Messages.

## 4.2.12 ORIGINALNAME

**Key:** ORIGINALNAME

Specifies the original name of the document being passed.

The file name extension determines by which application(s) the file will be processed. Microsoft Visio for example will not even try to open a file if it does not have one of its known extensions.

The specified value is also the one that will be used when an outline (bookmark) title shall be set according to the document's file name.

## 4.2.13 AlternateText

**Key:** AlternateText

Specifies the alternate text for images converted to PDF. Use this for a target conformance level of A (e.g. PDF/A-2a).

Note: avoid specifying an alternate text for images that represent scanned text that will be OCR processed.

## 4.2.14 LanguageTag

**Key:** LanguageTag

Specifies the language identifier for images converted to PDF. Use this for a target conformance level of A (e.g. PDF/A-2a). If not specified, EN-US is used.

## 4.2.15 Outline

**Key:** Outline

Specifies that outlines (bookmarks) shall be created for the document and any documents contained within it.

If any contained documents are processed to have outlines, these outlines will only be copied if the parent document also has an outline to which these can be attached.

The following special values are supported to be replaced by document related information:

**FILENAME** Is replaced by the file name (without extension) of the current document.

**FILENAMEEX** Is replaced by the file name and extension of the current document.

**%Subject%** Applicable for an Outlook mail or PDF document: supplies the subject field of the mail message.

Actually, it is possible to use other valid mail message properties, e.g. SenderName. %Subject% can be embedded in a plain text string.

**TITLE** Title entry of an HTML page on a web server.

**(empty)** An empty value has a special meaning: for an aggregate document, the outlines of the contained documents will be “lifted” a level and appear in the place of this document.

## 4.2.16 OutputType

**Key:** OutputType

Set the “OutputType” print option (PowerPoint). Default inherited from the service configuration.

## 4.2.17 PRINTCOLOR

**Key:** PRINTCOLOR Default: false  
Default: false

Applicable when **FORMAT=tiff**; the default is **false** (convert to gray). Can also be specified as a document option.

## 4.2.18 PRINTDM

**Key:** PRINTDM

Values **A-1b**, **A-2u**, **1.7**, **1.6**, **1.5**, **1.4** (applicable for PDF conversions), or the name of a device mode file located in the installation folder.

Using this option setting will prepare the device mode settings of the printer to be used by office applications during the conversion of a document.

## 4.2.19 PW

**Key:** PW

Password to open a password protected document (Word, Excel, PDF, ZIP, RAR).

**Note:** AES-256 decryption for ZIP files is only available through the “7z” provider.

## 4.2.20 SAVEASPDF

**Key:** SAVEASPDF

**true** Use the Office "Save As PDF" feature rather than the 3-Heights™ PDF Producer.

## 4.2.21 RemoveVBA

**Key:** RemoveVBA Default: true  
Default: true

**true** Preprocess Office Documents to remove VBA code prior to any further processing.

Documents with the file name extensions DOC, DOT, XLS and XLT are processed in-place. In most cases, this is not a problem, as these files are temporary copies. When passing documents to the converter via file name reference, it is the application's responsibility to either disable VBA removal or provide a copy of the original document, if that shall not be modified (or is read-only).

Documents with the file name extensions PPTM, XLSM, XLSB, DOCX, DOCM, DOTM, XLTM and XLSX are pre-processed not only for VBA code removal, but also for fixing issues with predefined names in Excel sheets. The original file is not modified.

**false** Disable preprocessing as described above.

Preprocessing can be disabled selectively by prefixing the option key with the file name extension (e.g. "PPTM:RemoveVBA=false").

## 4.2.22 TIFF.COMPR.BITONAL

**Key:** TIFF.COMPR.BITONAL Default: Group4  
Default: Group4

Compression method for bitonal images.

**Values** Group4, Flate, LZW, Group3, Group3\_2D, JBIG2

## 4.2.23 TIFF.COMPR.CONTINUOUS

**Key:** TIFF.COMPR.CONTINUOUS Default: JPEG  
Default: JPEG

**Values** JPEG, Flate, LZW, JPEG2000

## 4.2.24 TIFF.COMPR.INDEXED

**Key:** TIFF.COMPR.INDEXED

Default Flate for PDF/A output, LZW otherwise.

## 4.2.25 TIFF.COMPR.MRC

**Key:** `TIFF.COMPR.MRC` Default: `false`  
Default: `false`

Set `true` to enable mixed raster content compression.

## 4.2.26 TIFF.UNPACK

**Key:** `TIFF.UNPACK` Default: `false`  
Default: `false`

Set `true` to convert indexed images to continuous, permitting downsampling.



# 5 Version History

## 5.1 Changes in Version 4.12

No functional changes.

## 5.2 Changes in Version 4.11

- **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.

## 5.3 Changes in Version 4.10

- **Improved** robustness against corrupt input PDF documents.
- **Improved** annotation appearance generation for polyline, squiggly, and stamp annotations.
- **Removed** the font ZapfDingbats.ttf from the product kit as it is not required anymore.
- **Changed** option Window Mode: New value CollectDialog to merge documents during conversion or bulk process files.
- **New** option Override to override documents in the output folder.
- **Improved** error handling and conversion result reporting.

## 5.4 Changes in Version 4.9

- **Improved** support for and robustness against corrupt input PDF documents.
- **Improved** repair of embedded font programs that are corrupt.
- **New** support for OpenType font collections in installed font collection.
- **Improved** metadata generation for standard PDF properties.

## 5.5 Changes in Version 4.8

- **Changed** option TRANSFORM: Add additional parameters as command line arguments to the transform process call.
- **Changed** option FitToPage for Excel: Fit the width of the document or fit width and height of the document.
- **New** option ShowComments: Show or hide comments from Word documents in the output document.
- **New** feature: Basic support for PDF collections, the first document will be converted.
- **New** feature: Validate Office documents (format 97-2003) using the Microsoft Office Binary File Format Validator.
- **New**: Support Windows Server 2016 (RDP security).
- **Changed** option MAILHEADER: New value attach, the mail header will be embedded (PDF output) or added as text document (ZIP output).
- **Improved** creation of annotation appearances to use less memory and processing time.
- **Added** repair functionality for TrueType font programs whose glyphs are not ordered correctly.

## 6 Licensing, Copyright, and Contact

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