Datalogics

Datalogics PDF Forms Flattener™

User Guide

Version 4.4

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Introduction

PDF Forms Flattener is a scriptable server tool offered by Datalogics. This simple stand-alone utility works on Windows x64, Linux x64, and Linux Aarch64 platforms and allows you to flatten documents containing PDF forms, both AcroForm and XFA.

When flattening a PDF form document, the content in the form fields appears in the output file as regular text, and the interactive features of these form fields are removed. It is no longer possible to change the values in the form fields. When you run it, the program flattens the input PDF and saves it as a new output document.

PDF Forms Flattener is a fast and simple way to convert a PDF form document into a standard PDF file, making it easy to distribute.

Working with Forms Technology

AcroForm is the original PDF forms technology, and it remains the primary method for building PDF forms documents today. Many PDF users use build electronic forms and surveys, adding text fields, check boxes, radio buttons, bar codes, and other form field elements to a PDF document.

XFA, or XML Forms Architecture, is a set of proprietary XML specifications for use with web forms. XFA can be created and managed using the Adobe Experience Manager (previously known as Adobe LiveCycle Designer). XFA forms can be saved internally in PDF files. Unlike AcroForm, XFA forms can allow text to reflow, so that text fields can resize to allow more content if needed. Dynamic XFA forms can also be interactive, as the form document is built using a series of templates. The form document can respond to the information that a user enters or selects and display a different set of form fields relevant to the user's answer.

Many XFA documents remain in use, but most PDF documents use AcroForm instead. AcroForm is compatible with a much wider range of software applications, as well as with Acrobat itself.

Note: XFA was deprecated in PDF v2.0, and is not permitted for use with special ISO formats for PDF documents, including PDF/A, PDF/E, PDF/X, PDF/UA, and PDF/VT.

Installing Forms Flattener: Updating the Activation Key

PDF Forms Flattener installs from a Windows self-extracting executable. When you purchase the product, you will also receive an activation key. When you install it, you will be prompted to enter this key and a license file (*pdf_forms_flattener.lic*) is generated in the installation directory.

If you receive a new activation key, you will need to enter it again. The license will be updated, and you can continue to use the product.

Note: If you don't enter the activation key value when you first install the product, or enter it incorrectly, you will be prompted to enter the value again the next time you run PDF Forms Flattener.

Importing Data into Forms Documents

Forms Flattener can import data into a blank PDF form document (or set of form documents), save the document as a completed form, and then flatten it.

It is possible to import data into the fields on both kinds of form documents, XFA and AcroForms. For AcroForm documents, use FDF, XFDF, and XML files to provide the import data, while XFD, XDP, or XML files are used to import content into XFA forms documents.

Exporting Data from Documents

Forms Flattener can export data from XFA and AcroForms documents. For AcroForm documents, the available output types are FDF, XFDF, and XML, while XFD, XDP, or XML files are the supported types for XFA forms documents.

Generating Appearances for Annotations in a PDF Document

Every annotation included in a PDF document features an optional entry that describes what the annotation will look like when the document is rendered in a viewer. For example, a link to an external web site would probably appear in blue on a PDF page. Generally, this annotation appearance value is not provided, so if the PDF is opened in Adobe Acrobat, Acrobat will fill in the appearance, based on what the value should be. When you open a PDF document in Adobe Acrobat or Adobe Reader and this viewer fills in the appearance value, you will be prompted to save the file when you close it. If you do save the file, the annotation appearance is made a part of the updated PDF document. This is the normal annotation appearance.

You can use PDF Forms Flattener to programmatically generate appearances for annotations in a standard PDF document or set of standard PDF documents where those appearances are missing. This process runs automatically as part of the command line statement. If you use as an input file a PDF document that is not a form, PDF Forms Flattener will process it for you to provide the appearances but will not flatten the document or make any other changes.

When you run it with an input document, it determines whether it is a PDF Form. This is before it tries to import data or flatten the file.

- If the input document is not a PDF form, the PDF Forms Flattener will simply generate the missing appearances.
- If the input document is an AcroForm document, the software will generate missing appearances before flattening the output document.
- If the input document is an XFA form document, the software will read the document, flatten it, and save an output PDF file.

How to Use PDF Forms Flattener

Using the command line you can flatten one PDF document at a time. A batch script can be used to automate the process. You can use your favorite scripting language to automatically generate a series of calls to PDF Forms Flattener, each with a unique name for the input PDF document and the output file.

Command Syntax

The command syntax for Forms Flattener must include:

- `PDFFormsFlattener`   Executable file name
- `-i [--input]`   Path to the PDF form input document
- `-o [--output]`   Path to where the output file will be saved. For flattening this file must have the extension PDF. For XFA data export, this file must have extension: .xdp, .xfd, or .xml. For AcroForm data export, this file must have extension: .xfdf, .fdf, or .xml.

You can also add two optional values:

- `-d [--import]`   Path to the forms input data file. Use this value to import data into the blank fields on a PDF form document. For XFA documents this file must have extension: xdp, .xfd, or .xml. For AcroForm documents this file must have extension: .xfdf, .fdf, or .xml.

- `-f [--flatten]`   Set the flattening option. Available options:
    - true [default]: flatten the document
    - skip: skip flattening
    - asprinted: flatten the document as if it was printed

- `-c [--convert]`   Convert XFA fields to AcroForm fields.

For each command line option, you can use the short ("-i") or long ("--input") notation.

A command statement for the PDF Forms Flattener might look like this:

```
PDFFormsFlattener --input XFDDocument.pdf --output Flattened_output.pdf
--import datafile.xdp
```

You might want to draw an input file from one directory and save the output to another. In that event you need to provide the path as well as the file name:

```
PDFFormsFlattener --input C:\Datalogics\InputFiles\XFADocument.pdf --
output C:\Datalogics\FlattenedFiles\Flattened_output.pdf
```

If any of the file or path names include spaces, use quotes around the name:

```
PDFFormsFlattener --input "C:\Datalogics\Optimized
Files\XFADocument.pdf" --output
C:\Datalogics\FlattenedFiles\Flattened_output.pdf
```

The Windows installation program for Forms Flattener adds the location of the executable to the %PATH% Environment Variable, so you can run Forms Flattener from anywhere.

Error Codes

1001   Syntax error. You started PDF Forms Flattener but left out the name of your input PDF document, or the output document, or otherwise made an error in your command syntax.

1002   The input PDF document was not found.

1003   The system could not create output PDF document. Verify that you have write permissions to the folder, that the file is not already open, and that the output file path name is valid.

1004   PDF Forms Flattener dependencies were not properly loaded. Your installation may be corrupt. Please reinstall the product.

1005   There was an error importing the data file, it may be corrupt.

1006   The input PDF document uses XFA but an attempt was made to import an AcroForm data file.

1007   The input PDF document uses an AcroForm but an attempt was made to import an XFA data file.

1008   An internal error occurred while exporting data from the input document.

1009   The extension of the –output parameter is not a valid XFA export output type. The valid options are: .xfd, .xdp, .xml

1010   The extension of the –output parameter is not a valid AcroForms export output type. The valid options are: .xfdf, .fdf, .xml

1011   An internal error occurred while converting XFA to AcroForms

1012   The input document selected for AcroForm conversion is not XFA

1013   A generic processing error was encountered