



PDFTron PDF2XPS™ User Manual

Version 1.x

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PDFTron PDF2XPS™ Command-Line Application User Manual
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1.1.2 Common Use Case Scenarios

- Developers may want to use PDF2XPS to quickly add XPS support to any application or workflow that currently supports PDF.
- Server-based, on-demand conversion of PDF documents to XPS files.
- Batch processing of large PDF collections with the same conversion options.
- Extending existing applications to take advantage of the new XPS Print API and XPS print path available in Windows 7 and Vista.

1.1.3 Operating Systems Supported

- Windows 7, 2008, Vista, XP, 2003, 2000, NT
- Mac OSX
- Linux

1.1.4 System Requirements

- At least 10 MB of free disk space.
- Memory requirement is dependent on source document being converted.

1.2 PDF To XPS SDK (Software Development Kit)

For developers who are looking for a software development component to integrate into their applications, PDFTron offers a PDF to XPS conversion API as part of PDFNet SDK.

PDFNet SDK is a comprehensive, high-quality PDF developer toolkit for working with PDF files at all levels. Using the PDFNet PDF library, developers can flexibly implement and create powerful PDF solutions and applications that can generate, manipulate, view, render and print PDF documents without any third-party software dependencies.

PDFNet SDK is available as a .NET component and as a cross-platform Java and C/C++ PDF library available on a wide range of platforms (i.e. Windows, Linux, Mac OS X, Solaris, etc).

For more details, please visit PDFTron's website at <http://www.pdftron.com> or contact a PDFTron representative via info@pdftron.com.

1.3 About This Manual

This manual is intended as a guide to the installation and use of PDF2XPS Command Line Utility. It is intended for users who are familiar with PDF and XPS documents, graphic image file creation, graphic file manipulation and general computer processes.

- [Section 1](#) introduces PDF2XPS and describes the manual.
- [Section 2](#) explains how to install and uninstall PDF2XPS.
- [Section 3](#) covers basic use of PDF2XPS.
- [Section 4](#) covers general PDF2XPS related questions
- [Section 5](#) is where you will find all the support information you may require, such as how to report a problem with the software.

2. Installing and Uninstalling PDF2XPS

2.1 PDF2XPS Installation

PDF2XPS Command-line Application is supplied as a download from a distributor or directly from www.pdftron.com. The release is packaged as a .zip file (PDF2XPS.zip). To install the software, simply unzip the archive in the desired location and make sure to preserve the directory/folder structure during this process. To register the software, copy the license file provided to you into the "PDF2XPS" folder.

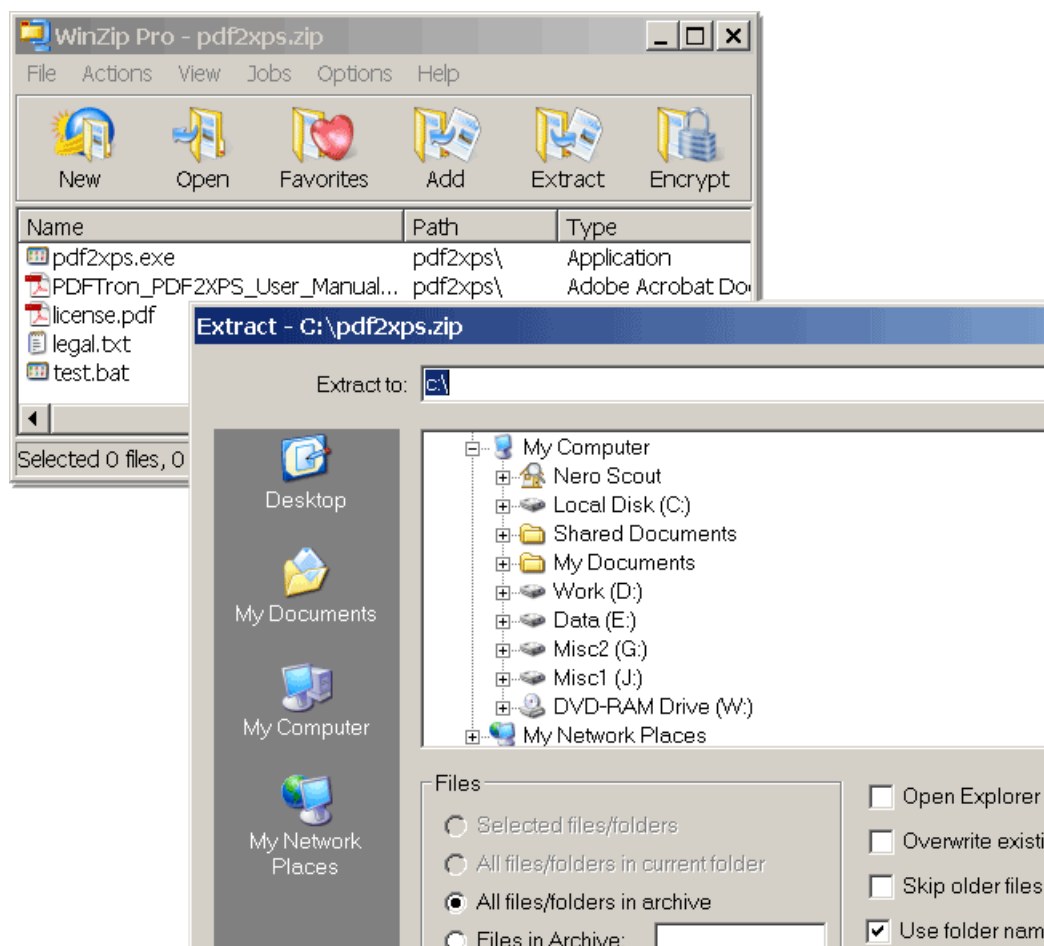


Figure 2.1 – Extracting PDF2XPS Archive using WinZip

2.2 Demo Version Installation

If you wish to evaluate the product, you can download the demo version of the product without any serial number or license key.

To do this, go to PDFTron's **Downloads** page at www.pdftron.com/downloads.html. Click on the appropriate product name/version. This will bring you to the link to the page to download the demo. Download the zip file (PDF2XPS.zip) and extract the archive in the desired location, while making sure to preserve the directory (folder) structure when extracting the archive. Download the zip file *pdf2xps.zip*. Extract the archive in the desired location (making sure to preserve the folder structure). This will provide you a working copy of the application along with various examples. The limitation of the evaluation version is that all output pages will have demo stamp.

Simply delete the

3. Overview

PDFTron PDF2XPS is a command-line application designed to convert PDF documents to XPS files while presenting several options to control resolution and quality. This section covers the basic usage of PDF2XPS explaining all of the available options.

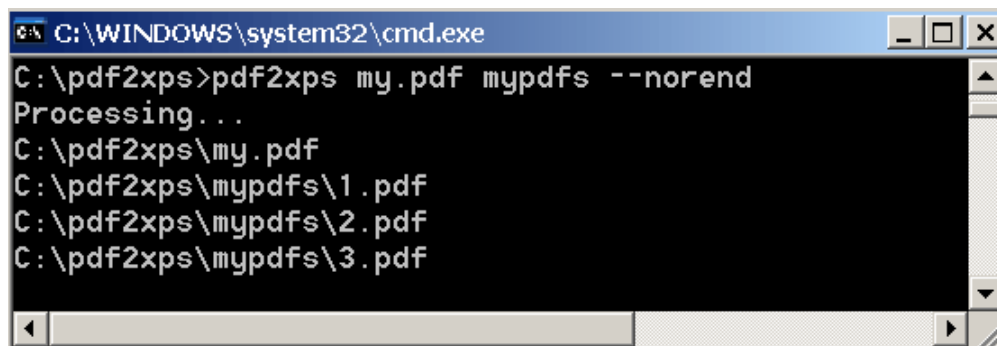


Figure 3.0 PDF2XPS Command-line Application.

3.1 Basic Syntax

The basic command-line syntax is:

```
pdf2xps [options] file1 file2 folder1 file3 ...
```

The following is a list of available command-line options for PDF2XPS:

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3.3 Basic Usage

3.3.1 How do I save converted files in a given folder?

By default, PDF2XPS saves converted files in the current working folder. To specify another output location, use the '-o' (or '--output') parameter. For example:

```
pdf2xps -o "c:\My Output" 1.pdf 2.pdf 3.pdf
```

Note: If the specified path does not exist, PDF2XPS will attempt to create the necessary folders.

3.3.2 How can I control the output name for converted files?

PDF2XPS will, by default, create a single file with the name of the input PDF file. The output filename can be changed using the '--prefix' option. For example, the following command-line generates an output document named outdoc.xps:

```
pdf2xps --prefix outdoc mydoc.pdf
```

3.3.3 How do I specify which pages to convert?

By default, PDF2XPS will convert all PDF pages into an output XPS file. You can specify a subset of pages to convert using the '-a' or '--pages' options. For example:

```
pdf2xps -a 1,3,10 in.pdf
```

will convert only pages 1, 3, and 10. Please note that PDF2XPS assumes that all pages are numbered sequentially starting from page 1.

To specify a range of pages, use dash character between numbers. For example:

```
pdf2xps -a 1,10-20,50- in.pdf
```

will convert the first page, pages in the range from 10 to 20 and all pages starting with page 50 to the last page in the document.

All even pages can be selected using the 'e' (or 'even') string. For example, the following line converts all even pages:

```
pdf2xps --pages even in.pdf
```

Similarly odd pages can be selected using the 'o' (or 'odd') string. The following line renders all odd pages in the document and every page in the range from 100 to the last page:

```
pdf2xps --pages odd,100- in.pdf
```

3.3.4 How do I batch convert files?

PDF2XPS supports batch conversion of many PDF files in a single pass. To convert all PDF files in a given folder(s) you can use the following syntax:

```
pdf2xps myfolder1
```

The '--subfolders' option can be used to recursively process all subfolders. For example, the following line will convert all documents in 'myfolder1' and 'myfolder2' as well as all subfolders:

```
pdf2xps --subfolders myfolder1 myfolder2
```

By default, PDF2XPS will convert all files with the extension '.pdf'. To select different files based on the extension use the '--extension' parameter. For example, to convert all PDF documents with a custom extension '.blob', you could use the following line:

```
pdf2xps --extension .blob --subfolders myfolder1
```

The use of wild characters is also allowed. For example, to convert all PDF files starting with 'x' in the current folder use:

```
pdf2xps x*.pdf
```

3.3.5 How do I convert to OpenXPS?

By default, PDF2XPS will convert PDF files to the XPS format. You can specify the output format to be OpenXPS using the --openxps option. The following command-line would generate the OpenXPS File 1.xps:

```
pdf2xps --openxps 1.pdf
```

3.3.6 How do I convert a password protected PDF?

PDF2XPS will, without user intervention, convert documents secured with a master/owner password. If the document is secured using a user (or 'file open') password, PDF2XPS will prompt you to enter the password.

For unattended conversion, the password can also be specified directly on the command-line using the '-p' (or --password) option. For example:

```
pdf2xps -p secret secured.pdf
```

The above command line will convert PDF to XPS and will use the provided password ('secret') to open the secured document (i.e. 'secured.pdf').

Note: PDF2XPS supports all standard security options available in PDF, including 40 and 128 bit RC4 encryption, Crypt filters, and AES (Advanced Encryption Standard) encryption.

3.3.7 What quality can I expect from the output document?

Since PDF2XPS always attempts to maintain the original document appearance, the vast majority of output files will successfully preserve the appearance and quality of the original PDF documents. Occasionally, there will be PDF elements that have no equivalent in XPS. In these cases PDF2XPS will by default render the necessary elements at 92 dpi or at the resolution given by the --dpi parameter. For example:

```
pdf2xps --dpi 200 doc.pdf
```

would render those elements at 200 dots per inch.

In other select cases, to generate the exact appearance of the original PDF document, an entire page may need to be rendered. In these cases rendering can be disabled using the '--norender' option as in the following example:

```
pdf2xps --norender doc.pdf
```

This option will preserve resolution independent properties of input PDF documents (including fonts, paths, and shadings) as well as text selection and extraction capability in XPS processing software.

3.4 General Usage Examples

Example 1. The simplest command line: Convert PDF to XPS.

Notes:

- Converts 'my.pdf' to 'my.xps' located in the current working folder.

```
pdf2xps my.pdf
```

Example 2. Convert PDF to Open XPS.

Notes:

- The '-o' (or --output) parameter is used to specify the output folder. If this option was not specified, all images would be stored in the current working folder.
- The --openxps parameter specifies that the output should be an Open XPS file.
- The '--verb' option instructs PDF2XPS to output more feedback in the console window.

```
pdf2xps --openxps --verb 2 -o ex1 my.pdf
```

Example 3. Preserve maximum editability of source PDF document.

Notes:

- The --norender parameter is used to prevent selective rasterization of PDF pages that may not accurately map to XPS due to use of specific blend modes or other PDF features without a direct XPS equivalent. Individual graphical elements on the page (such as certain types of shadings may still be rasterized).
- The '-p' (or --pass) parameter is used to specify the password (i.e. 'my pass') required to open the encrypted document.

```
pdf2xps --norender -o --pass "my pass" outdir my.pdf
```

Example 4. Batch convert PDF to XPS.

Notes:

- The -a (or '--pages') option instructs PDF2XPS to convert only the first two pages in all PDF documents stored under 'dir1' and 'dir2' folders.
- The '--subfolders' option is used to recursively process all PDF documents stored in subfolders of dir1 and dir2.

```
pdf2xps -a 1-2 --subfolders dir1 dir2
```

```

12 0 obj
<<
  /F2 1 Tf stream
  /Length 13
  /Filter /G
  /Size 268
endobj
%%PDF-1.4
trailer<<
  /Filter /Fl
  /Size 268
endobj

```

```

12 0 obj
<<
  /F2 1 Tf stream
  /Length 13
  /Filter /G
  /Size 268
endobj
%%PDF-1.4
trailer<<
  /Filter /Fl
  /Size 268
endobj

```

```

12 0 obj
<<
  /F2 1 Tf stream
  /Length 13
  /Filter /FlateDecode
  /Size 268
>>
endobj

```

```

12 0 obj
<<
  /F2 1 Tf stream
  /Length 13
  /Filter /FlateDecode
  /Size 268
>>
endobj

```

```

12 0 obj
<<
  /F2 1 Tf stream
  /Length 13
  /Filter /FlateDecode
  /Size 268
>>
endobj

```

```

12 0 obj
<<
  /F2 1 Tf stream
  /Length 13
  /Filter /FlateDecode
  /Size 268
>>
endobj

```

```

12 0 obj
<<
  /F2 1 Tf stream
  /Length 13
  /Filter /FlateDecode
  /Size 268
>>
endobj

```

```

12 0 obj
<<
  /F2 1 Tf stream
  /Length 13
  /Filter /FlateDecode
  /Size 268
>>
endobj

```

```

12 0 obj
<<
  /F2 1 Tf stream
  /Length 13
  /Filter /FlateDecode
  /Size 268
>>
endobj

```

```

12 0 obj
<<
  /F2 1 Tf stream
  /Length 13
  /Filter /FlateDecode
  /Size 268
>>
endobj

```

```

12 0 obj
<<
  /F2 1 Tf stream
  /Length 13
  /Filter /FlateDecode
  /Size 268
>>
endobj

```

```

12 0 obj
<<
  /F2 1 Tf stream
  /Length 13
  /Filter /FlateDecode
  /Size 268
>>
endobj

```

```

12 0 obj
<<
  /F2 1 Tf stream
  /Length 13
  /Filter /FlateDecode
  /Size 268
>>
endobj

```

```

12 0 obj
<<
  /F2 1 Tf stream
  /Length 13
  /Filter /FlateDecode
  /Size 268
>>
endobj

```


3.6 Exit Codes

To provide additional feedback, PDF2XPS returns exit codes after completing processing. The exit codes can be used to provide user feedback, for logging etc. This is particularly important for applications running in an unattended environment.

The following table lists possible exit codes and their description:

Exit Code	Description
0	All files converted successfully.
1	Unspecified error.
2	Document is secured. Need a valid password to open the document.
3	Bad license key
4	Failed to create the output directory
5	Bad input filename or path

All codes other than '0' indicate that there was an error during the conversion process.

The following illustrates a sample Windows batch script that processes exit codes:

```
@echo off
rem convert all PDF files in 'data' folder

pdf2xps ./data
if errorlevel 1 goto othererror
if errorlevel 5 goto inputerr
if errorlevel 0 goto exit

:inputerr
echo No input files specified.
goto exit

:othererror
echo An error encountered during processing.
goto exit

:exit
```

4. Frequently Asked Questions

4.1 General FAQ

4.1.1 What is XPS?

"XPS" stands for "XML Paper Specification" and is a new document format as well as the native print spooler format in Microsoft®'s Windows Vista® and Windows® 7. The XPS document format consists of XML markup that defines the layout of a document and the visual appearance of each page along with rendering rules for distributing, archiving, rendering, processing and printing the documents. Just like PDF, the XPS document format enables users to view, print, and archive any type of documents without the original program that created them and without loss of fidelity.

To find out more about XPS, please visit Microsoft®'s website at:

<http://www.microsoft.com/whdc/xps/default.mspx>

4.1.2 Is PDF2XPS available as an SDK for integration with third party applications?

For developers who are looking for a software development component to integrate into their applications, PDFTron offers a PDF to XPS conversion API as part of PDFNet SDK.

PDFNet SDK is a comprehensive, high-quality PDF developer toolkit for working with PDF files at all levels. Using the PDFNet PDF library, developers can flexibly implement and create powerful PDF solutions and applications that can generate, manipulate, view, render and print PDF documents without any third-party software dependencies.

PDFNet SDK is available as a .NET component and as a cross-platform Java and C/C++ PDF library available on a wide range of platforms (i.e. Windows, Linux, Mac OS X, Solaris, etc).

For more details, please visit PDFTron's website at <http://www.pdftron.com> or contact a PDFTron representative via info@pdftron.com.

4.1.3 Does PDF2XPS have any dependencies on third party components/software?

PDF2XPS is a completely stand alone application and does not include any dependencies on third-party components or software.

4.2 Common Troubleshooting Issues

4.2.1 Why is a white space separating neighboring pictures?

In some cases, XPS viewers that support anti-aliased rendering produce line/space artifacts at neighboring picture elements (e.g. for image tiles or polygons sharing common edges). These artifacts are not a byproduct of PDF2XPS conversion, but are produced due to anti-aliased rendering in the XPS viewer. The same issue applies to the input PDF document however the current PDF viewers are typically better at handling this type of issues. The aliasing artifacts should not be visible during printing or high-resolution output.

4.2.2 Why are some pages rasterized?

Occasionally, there will be PDF elements that have no equivalent in XPS. In these cases PDF2XPS will by default render the necessary elements at 92 dpi or at the resolution given by the '—dpi' parameter. In other select cases, to generate the exact appearance of the original PDF document, an entire page may need to be rendered. In these cases rendering can be disabled using the '--norender' option. Disabling rendering will preserve resolution independent properties of input PDF documents (including fonts, paths, and shadings) as well as text selection and extraction capability in XPS processing software.

4.2.3 Why are some fonts in PDF not rendered consistently?

PDF format, unlike XPS, does not require mandatory font embedding. As a result PDF consumers, such as PDF2XPS and your favorite PDF viewer, need to find substitute fonts for missing fonts on the client system. Unfortunately, this means that there is no guarantee that file will render accurately on different systems or even in different PDF viewers. Default font substitution can be overridden using PDFNet SDK which offers additional options that are not available in the PDF2XPS Command-Line Utility. To avoid font substitution errors, simply make sure to create PDF documents with all fonts embedded.

5. Support

5.1 Reporting Problems

If you encounter a problem or question regarding PDFTron PDF2XPS, which is not addressed on PDFTron's website, please submit a problem report to PDFTron's Support group at <http://www.pdftron.com/reportproblem.html>.

When submitting a problem you will be asked to provide the following information:

- Contact details
- Product and Version of the product
- Detailed description of problem
- Problem file(s)
- Whether you have an AMS (Annual Maintenance Subscription)
- Any other information that may be related

5.2 Contact Information

To contact PDFTron directly, please use the contact information below:

Tel: 1-604-730-8989

Fax: 1-604-676-2477

Web site: www.pdftron.com

Email Contacts:

General Business Inquiries: info@pdftron.com

Sales & Licensing: sales@pdftron.com

Product Support: support@pdftron.com

Professional Services: services@pdftron.com

Website related questions: webmaster@pdftron.com

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