
Aquaforest PDF Toolkit Reference Guide



Version 1.01
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1 Product Overview and Installation

Aquaforest PDF Toolkit is a .NET SDK and a set of command line utilities for creating, processing and manipulating PDF files.

The toolkit includes the following capabilities:

- Splitting and merging PDF files
- Extracting Text from PDFs
- Stamping PDF files with text, image or Bates stamps
- Applying Security and other settings to PDFs
- Converting Images to PDFs
- Overlay PDFs
- Programmatically creating PDFs

1.1 System Requirements

Supported Operating Systems	Windows 2003 (32 bit) Windows 2003 (64 bit) Windows 2008 (32 bit) Windows 2008 (64 bit) Windows XP (32 bit) Windows Vista (32 bit) Windows 7 (32 bit) Windows 7 (64 bit)
Disk Space	100 MB
.Net Framework	3.5

1.2 Product Installation

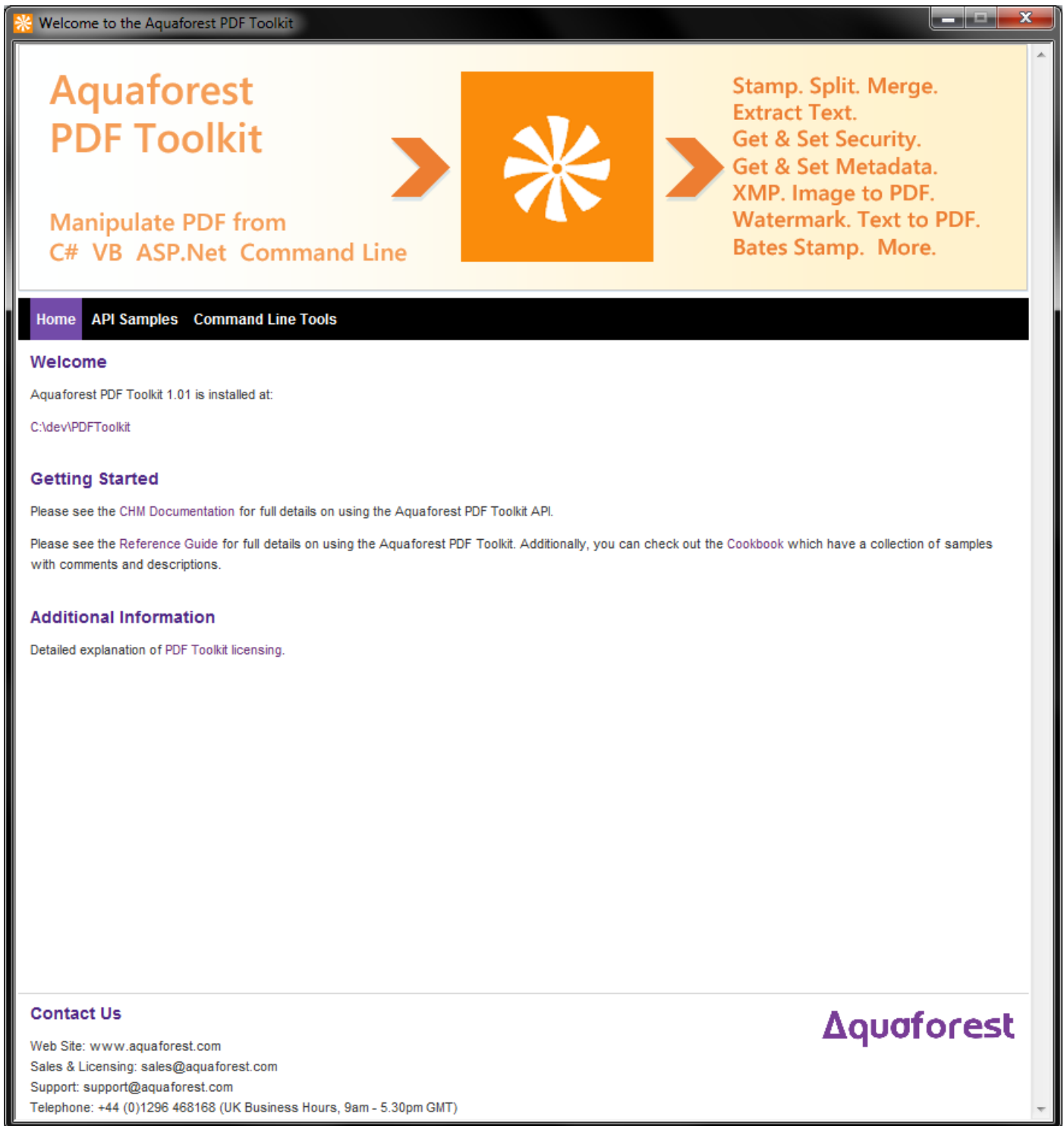
The product is installed using the PDFToolkit.msi install package that can be downloaded from:
<http://www.aquaforest.com/en/pdf toolkit.asp>

1.3 Product Start Screen

The product start page contains some basic information and short cuts to different resources available in the PDF Toolkit, it has three tabs which are shown below:

1.3.1 Home Tab

The home tab contains links to the reference guide, release notes, chm documentation and the cookbook.



1.3.2 API Samples

The API Samples tab contains links and explanation of all the sample projects that are shipped out with the PDF Toolkit. Refer to the cookbook found in the “docs” folder in the installation directory for detailed explanation of each sample.

Welcome to the Aquaforest PDF Toolkit

Aquaforest PDF Toolkit

Manipulate PDF from
C# VB ASP.Net Command Line

Stamp. Split. Merge.
Extract Text.
Get & Set Security.
Get & Set Metadata.
XMP. Image to PDF.
Watermark. Text to PDF.
Bates Stamp. More.

Home API Samples Command Line Tools

API Samples

Below is a list of samples provided with the PDF Toolkit. For additional details of the samples listed below refer to the [Cookbook](#).

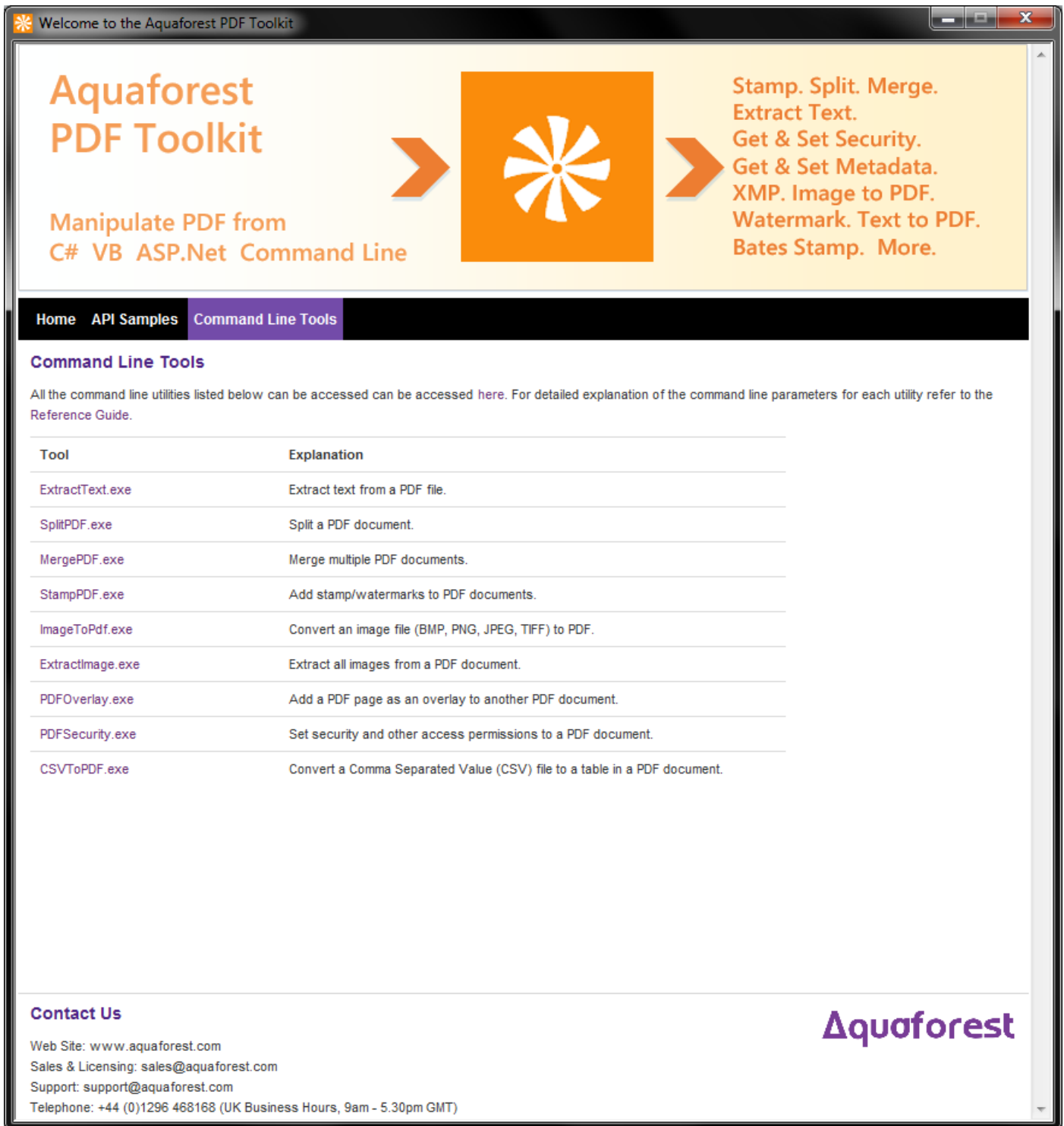
Sample	Explanation
Samples.sln	This is the Visual Studio 2008 Samples solution that contains all the examples listed below except 'PDF Toolkit and Aquaforest's OCR SDK'.
Extract Text from PDF	This example demonstrates the simple steps required to extract text from a PDF file.
PDF Toolkit and Aquaforest's OCR SDK	This example demonstrates how the PDF Toolkit can be used in conjunction with the OCR SDK for manipulating PDF documents.
Split PDF	This example shows the different methods of splitting a PDF document.
Merge PDF	This example demonstrates merging of multiple PDF documents.
Create a PDF document	This example demonstrates how to create a PDF document from scratch and add some text and metadata to it.
Apply stamps	This example shows how to add various types of stamp/watermarks to PDF documents.
Convert an image file to PDF	This example demonstrates how to convert an image file (BMP, PNG, JPEG, TIFF) to PDF.
Extract images from PDF	This example demonstrates how to extract all images from a PDF document.
Overlay a PDF	This example demonstrates how to add a PDF page as an overlay to another PDF document.
Set PDF security	This example demonstrates how to set security and other access permissions to a PDF document.
Get/Set XMP metadata	This example demonstrates how to get and set XMP metadata.
Converting a CSV file to PDF	This example demonstrates how to convert a Comma Separated Value (CSV) file to a table in a PDF document.

Contact Us

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1.3.3 Command Line Tools

This tab provide links and brief explanations of the command line tools shipped out with PDF Toolkit, for more details on the CLI Tools available check [section 3](#).



The screenshot shows a web browser window titled "Welcome to the Aquaforest PDF Toolkit". The main content area features the Aquaforest logo (a stylized sunburst) in the center. To the left of the logo, it says "Aquaforest PDF Toolkit" and "Manipulate PDF from C# VB ASP.Net Command Line". To the right, it lists various tools: "Stamp. Split. Merge. Extract Text. Get & Set Security. Get & Set Metadata. XMP. Image to PDF. Watermark. Text to PDF. Bates Stamp. More." Below this is a navigation bar with "Home", "API Samples", and "Command Line Tools" (the latter is highlighted). The "Command Line Tools" section has a heading "Command Line Tools" and a paragraph: "All the command line utilities listed below can be accessed [here](#). For detailed explanation of the command line parameters for each utility refer to the [Reference Guide](#)." Below this is a table with two columns: "Tool" and "Explanation".

Tool	Explanation
ExtractText.exe	Extract text from a PDF file.
SplitPDF.exe	Split a PDF document.
MergePDF.exe	Merge multiple PDF documents.
StampPDF.exe	Add stamp/watermarks to PDF documents.
ImageToPdf.exe	Convert an image file (BMP, PNG, JPEG, TIFF) to PDF.
ExtractImage.exe	Extract all images from a PDF document.
PDFOverlay.exe	Add a PDF page as an overlay to another PDF document.
PDFSecurity.exe	Set security and other access permissions to a PDF document.
CSVToPDF.exe	Convert a Comma Separated Value (CSV) file to a table in a PDF document.

At the bottom left, there is a "Contact Us" section with the following information: Web Site: www.aquaforest.com, Sales & Licensing: sales@aquaforest.com, Support: support@aquaforest.com, Telephone: +44 (0)1296 468168 (UK Business Hours, 9am - 5.30pm GMT). At the bottom right, the Aquaforest logo is displayed.

2 PDF SDK API

2.1 API Documentation and Cookbook

The API documentation is available as a chm help file in the "docs" folder of the root installation directory. It contains the full description of all the classes, methods and properties.

The cook book contains c# code samples of how to perform most of operations in the PDF Toolkit. It can also be found in the "docs" folder of the root directory.

2.2 Deploying Toolkit Applications

2.2.1 References

To use the API a reference to Aquaforest.PDF must be included in your application

2.2.2 Deploying C# and VB.NET Applications

Any deployment method should ensure that the target system meets the requirements (see section 1.1) and .NET Version 3.5 framework if necessary in addition to the full contents of the SDK bin folder.

3 Command Line Toolset

3.1 CSV to PDF

Parameter	Notes
/source	Source file or folder
/sourcetype	One of : file, folder, tree
/target	The target folder
/output	The output filename mask (e.g. %FILENAME.PDF)
/FontName (optional)	A PDFType1Font Name, default value = Arial
/FontSize (optional)	The font size of the final PDF file, default value = 20
/CellMargin (optional)	This is the margin between the table cells
/RowHeight (optional)	The height of each row
/LeftMargin (optional)	The space between the left side of the page and the table.
/RightMargin (optional)	The space between the right side of the page and the table.
/TopMargin (optional)	The space between the top of the page and the table.
/BottomMargin (optional)	The space between the bottom of the page and the table.
/OnErrorContinue	Tells the program to continue after an error occurs.

3.1.1 Convert a folder tree from a CSV to PDF

```
CSVToPDF.exe /Source="..\samples\documents\source" /Target="..\samples\documents\output"  
/Cellmargin=10 /LeftMargin=30 /SourceType=tree
```

3.1.2 Convert a single file from a CSV to PDF

```
CSVToPDF.exe /Source="..\samples\documents\source\csv_input.csv"  
/Target="..\samples\documents\output" /Cellmargin=10 /LeftMargin=30 /SourceType=file
```


3.2 Extract Text from PDF

Parameter	Notes
/source	Source file or folder
/sourcetype	One of : file, folder, tree
/target	The Target folder
/output	The output filename mask (e.g. %FILENAME.PDF)
/PageNumber(optional)	If you want to extract text just from a single page.
/Password(optional)	If the document is password protected
/OnErrorContinue(optional)	Tells the program to continue after an error occurs.

Examples

3.2.1 Extracting Text from Password Protected PDF Documents in a folder tree and writing them to text documents

```
ExtractText.exe /Source="..\samples\documents\source" /Target="..\samples\documents\output"  
/SourceType=tree /PageNumber=1 /Password=password
```

3.2.2 Extracting Text from the first page of a PDF Documents in a folder tree and writing them to text documents

```
ExtractText.exe /Source="..\samples\documents\source" /Target="..\samples\documents\output"  
/SourceType=tree /PageNumber=1
```

3.2.3 Extracting Text from the first page of single a PDF file and writing them to text documents

```
ExtractText.exe /Source="..\samples\documents\source\cookbook.pdf"  
/Target="..\samples\documents\output" /SourceType=file /PageNumber=1
```

3.3 Convert Image to PDF

Parameter	Notes
/Operation	ConvertImageToPDF, MergeFolderOfImagesToPDF
/source	Source file or folder
/sourcetype	One of : file, folder, tree
/target	The Target folder
/output	The output filename mask (e.g. %FILENAME.PDF)
/OnErrorContinue	Tells the program to continue after an error occurs.

Examples

3.3.1 Converting a Folder tree of image files to PDF

```
ImageToPdf.exe /Source="..\samples\documents\source" /Target="..\samples\documents\output"  
/Operation=ConvertImageToPDF /SourceType=tree
```

3.3.2 Converting an image file to a pdf file

```
ImageToPdf.exe /Source="..\samples\documents\source \image.tif"  
/Target="..\samples\documents\output" /Operation=ConvertImageToPDF /SourceType=file
```

3.3.3 Merging a Folder tree of image files to PDF, it merges each folder of image files in the tree to a corresponding PDF file.

```
ImageToPdf.exe /Source="..\samples\documents\source" /Target="..\samples\documents\output"  
/Operation=MergeFolderOfImagesToPDF /SourceType=tree
```

3.3.4 Converting a Folder of image files to PDF, it converts only the top level folder.

```
ImageToPdf.exe /Source="..\samples\documents\source" /Target="..\samples\documents\output"  
/Operation=MergeFolderOfImagesToPDF /SourceType=folder
```

3.4 Merge PDF

Parameter	Notes
/Operation	ConvertImageToPDF, MergeFolderOfImagesToPDF
/source	Source file or folder
/sourcetype	One of: folder, tree
/target	The Target folder
/output	The output filename mask (e.g. %FILENAME.PDF)
/OnErrorContinue	Tells the program to continue after an error occurs.

Examples

3.4.1 Merging a top level folder of PDF files to one PDF file

```
MergePDF.exe /source="..\samples\documents\source\tree"  
/Target="..\samples\documents\output" /SourceType=folder
```

3.4.2 Merging each folder of PDF files in a folder tree to a corresponding PDF file

```
MergePDF.exe /source="..\samples\documents\source\tree"  
/Target="..\samples\documents\output" /SourceType=tree
```

3.5 Overlay PDF

Parameter	Notes
/source	Source file or folder
/sourcetype	One of : file, folder, tree
/target	The Target folder
/output	The output filename mask (e.g. %FILENAME.PDF)
/Overlay	The path to the overlay PDF file.
/Password	If the document is password protected
/OnErrorContinue	Tells the program to continue after an error occurs.

3.6 Examples

3.6.1 Overlay all the PDF files in a folder tree with another PDF file

```
PDFOverlay.exe /source="..\samples\documents\source" /Target="..\samples\documents\output"  
/Overlay="..\samples\documents\source\overlay.pdf" /sourcetype=tree
```

3.6.2 Overlay all the PDF files in a top level folder with another PDF file

```
PDFOverlay.exe /source="..\samples\documents\source" /Target="..\samples\documents\output"  
/Overlay="..\samples\documents\source\overlay.pdf" /sourcetype=folder
```

3.6.3 Overlay a PDF file with another PDF file

```
PDFOverlay.exe /source="..\samples\documents\source\image_pdf.pdf"  
/Target="..\samples\documents\output" /Overlay="..\samples\documents\source\overlay.pdf"  
/sourcetype=file
```

3.7 PDF Security

Parameter	Notes
/source	Source file or folder
/sourcetype	One of : file, folder, tree
/target	The Target folder
/output	The output filename mask (eg %FILENAME.PDF)
/UserPassword	The new User Password
/OwnerPassword	The new Owner Password
/FormerPassword	The old password if the document was password protected.
/Permission	AllowPrinting,AllowModifyContents,AllowModifyAnnotations,AllowFillInForm,AllowExtractForAccessibility,AllowExtractContents,AllowDegradedPrinting,AllowAssembly
/OnErrorContinue	Tells the program to continue after an error occurs.

Examples

3.7.1 Applying an owner and user password to all the files in a folder tree, it also adds 3 document restrictions

```
PDFSecurity.exe /Source="..\samples\documents\source" /SourceType=tree  
/Target="..\samples\documents\output" /OwnerPassword=password /UserPassword=password  
/FormerPassword=dauda /Permissions=AllowPrinting,AllowAssembly,AllowModifyContents
```

3.7.2 Applying Security to all the files in a top-level folder

```
PDFSecurity.exe /Source="..\samples\documents\source" /SourceType=folder  
/Target="..\samples\documents\output" /OwnerPassword=password /UserPassword=password  
/FormerPassword=dauda /Permissions=AllowPrinting,AllowAssembly,AllowModifyContents
```

3.7.3 Removing the password protection of a PDF file

```
PDFSecurity.exe /Source="..\samples\documents\source\secured.pdf " /SourceType=file  
/Target="..\samples\documents\output" /FormerPassword=password  
/Permissions=AllowPrinting,AllowAssembly,AllowModifyContents
```

3.8 Split PDF

Parameter	Notes
/Operation	PageRange, Bookmark, NormalSplit
/source	Source file or folder
/sourcetype	One of : folder, tree
/target	The Target folder
/Prefix	The prefix filename mask (eg %FILENAME)
/SplitNumber	The number of pages in each output file, default is 1.
/StartPage	The page to start splitting at.
/EndPage	The page to end splitting at.
/Password	If the document is password protected
/PageRange	1: Specifies a single page 1-3: Specifies a range of pages 10-20even: Specifies even pages within the range 10-20odd: Specifies odd pages within the range 20-lastpage: 'lastpage' can be used to represent the last page in the document
/RepeatRange	This works only with page ranges. For example if 2-4 is specified for page ranges, and 4 is specified as the repeating range, then the range is re-applied every 4 pages. Hence the file is split such that the first output file contains pages 2-4 from the original document; the second contains pages 6-8 and so on.
/OnErrorContinue	Tells the program to continue after an error occurs.

Examples

3.8.1 Split all the files in a folder tree by Bookmarks

```
SplitPDF.exe /Source="..\samples\documents\source" /SourceType=tree  
/Target="..\samples\documents\output" /Prefix=%filename /Operation= Bookmark
```

3.8.2 Split all the files in a top level folder into 3 page PDF files.

```
SplitPDF.exe /Source="..\samples\documents\source" /SourceType=folder  
/Target="..\samples\documents\output" /Prefix=%filename /Operation=NormalSplit  
/SplitNumber=3
```

3.8.3 Splitting the even pages between page 1 and 20 of a PDF file

```
SplitPDF.exe /Source="..\samples\documents\source\cookbook.pdf" /SourceType=file  
/Target="..\samples\documents\output" /PageRange=1-20even /Prefix=%filename  
/Operation=PageRange
```

3.8.4 Splitting the 10th page to the last page of a PDF document

```
SplitPDF.exe /Source="..\samples\documents\source\cookbook.pdf" /SourceType=file  
/Target="..\samples\documents\output" /PageRange=10-lastpage /Prefix=%filename  
/Operation=PageRange
```

3.9 Stamp PDF

Parameter	Notes
/Operation	<p>StampTextAsString: When this operation is selected the text passed as the StampObject will be stamped on the PDF document as a text.</p> <p>StampPDFText: When this operation is selected the text passed as the StampObject will be stamped on the PDF document as an image.</p> <p>StampPageNumber: When this operation is selected, every page in the PDF file will be stamped with a page number, starting from the start number. E.g. if StartNumber = 6 the first page number will start from 6.</p> <p>StampPageNumberBates: When this operation is selected, every page in the PDF file will be stamped with a bates number, starting from the start number. E.g. if StartNumber = 6 the first page number will start from 000006.</p> <p>StampVariable: This option allows a user to specify a variable like date, filename or time. The variable specified by the StampObject will be stamped on the document. Check the table below for different Stamp variables provided.</p> <p>StampPDFImage: When this operation is selected the text passed as the StampObject is the address of the image to be stamped on the PDF document.</p>

/source	Source file or folder
/sourcetype	One of : folder, tree
/target	The Target folder
/output	The output filename mask (e.g. %FILENAME.PDF)
/FontName	A PDFType1Font Name. default value = Arial
/FontSize	The font size of the final PDF file. default value = 20
/Xaxis	The X coordinates of the top-left corner where the stamp should begin.
/Yaxis	The Y coordinates of the top-left corner where the stamp should begin.
/Password	If the document is password protected
/PageNumber	The page number the stamp should, if you do not provide every page will be stamped.
/StampObject	<ul style="list-style-type: none"> • Path to image if you are using the StampPDFImage operation. • Stamp text if you are using the StampText operation. • Stamp variable if you are using the StampVariable operation.
/StartNumber	For bates stamps and page number stamp, specifies the first page number that should be stamped.
/StartPage	Specifies the page that the bates stamp should start
/StampColor	The color of a stamp text or stamp variable operation.
/Opacity	The Opacity of a stamp text or stamp variable operation.
/BateLength	Specifies the length of the bates stamp
/BatePrefix	Specifies the prefix of the bates stamp
/BateSuffix	Specifies the suffix of the bates stamp
/OnErrorContinue	Tells the program to continue after an error occurs.

Examples

3.9.1 Using the StampVariable to stamp the current month on each page of all the PDF files in a folder tree


```
StampPDF.exe /Operation=StampVariable /FontName="Times new roman" /FontSize=20
/Xaxis=100 /Yaxis=100 /Source="..\samples\documents\source"
/Target="..\samples\documents\output" /StampObject="%B" /StampColor=Red /Opacity=80
/SourceType=tree
```

3.9.2 Stamping Bates Numbers on PDF files in a top level folder with suffix and prefix

```
StampPDF.exe /Operation=StampPageNumberBates /FontName="Times new roman" /FontSize=20
/Xaxis=40 /Yaxis=40 /Source="..\samples\documents\source"
/Target="..\samples\documents\output" /StampColor=Red /Opacity=80 /SourceType=folder
/StartPage=1 /StartNumber=6 /BateLength=8 /BatePrefix=aquaforest /BateSuffix=pdfsdk
```

3.9.3 Stamping Page Numbers on PDF files in a top level folder

```
StampPDF.exe /Operation=StampPageNumber /FontName="Times new roman" /FontSize=20
/Xaxis=40 /Yaxis=40 /Source="..\samples\documents\source"
/Target="..\samples\documents\output" /StampColor=Red /Opacity=80 /SourceType=folder
/StartPage=2 /StartNumber=6
```

3.9.4 Stamping Text as a string on a PDF file

```
StampPDF.exe /Operation=StampTextAsString /FontName="Times new roman" /FontSize=20
/Xaxis=40 /Yaxis=40 /Source="..\samples\documents\source\cookbook.pdf"
/Target="..\samples\documents\output" /StampColor=Red /Opacity=80 /SourceType=file
/StampObject="Aquaforest Stamping"
```

3.9.5 Stamping Text as an image on a PDF file

```
StampPDF.exe /Operation=StampPDFText /FontName="Times new roman" /FontSize=20
/Xaxis=40 /Yaxis=40 /Source="..\samples\documents\source\cookbook.pdf"
/Target="..\samples\documents\output" /StampColor=Red /Opacity=80 /SourceType=file
/StampObject=Aquaforest
```

3.9.6 Stamping images on all the PDF files in a folder tree

```
StampPDF.exe /Operation=StampPDFImage /FontName="Times new roman" /FontSize=20
/Xaxis=40 /Yaxis=100 /Source="..\samples\documents\source"
/Target="..\samples\documents\output" /StampColor=Red /Opacity=80 /SourceType=tree
/StampObject="..\samples\documents\source\stampFile.png"
```

3.9.7 Stamp Variables

The table below shows the different Stamp variables supported by Aquaforest PDF SDK

Variable	Stamp
%a	Short Day (Mon)
%A	Long Day (Monday)
%b	Short Month (Jan)
%B	Long Month (January)
%c	Date and time (30 October 2013 17:21)
%C	Date and Time With seconds (30 October 2013 17:21:50)
%d	Month and Year (October 2013)
%D	Day and Month (30 October)
%e	Short Year (13)
%E	Long Year (2013)
%f	Short Time of Day (17:21)
%F	Time of Day With Seconds (17:21:20)
%G	Full Date and time (Wed, 30 October 2013 17:21:50 GMT)
%Y	File Name

4 Acknowledgements

This product makes use of a number of Open Source components which are included in binary form. The appropriate acknowledgements and copyright notices are given below.

IKVM.NET

Copyright (C) 2002, 2003, 2004 Jeroen Frijters

Apache PDFBox

Copyright 2011 The Apache Software Foundation/ This product includes software developed at The Apache Software Foundation (<http://www.apache.org/>). Based on source code originally developed in the PDFBox, JempBox and FontBox projects. Copyright (c) 2002-2007, www.pdfbox.org Copyright (c) 2006-2007, www.jempbox.org. Based on source code originally developed in the PaDaF project. Copyright (c) 2010 Atos Worldline SAS