



PDFTron PDFSecure™ User Manual

Version 4.x

PDFtron PDFSecure™ Command-Line Application User Manual
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1. Introduction

1.1 An Introduction to PDFTron PDFSecure

PDFTron's PDFSecure is a stand-alone command-line application that provides users with an efficient means of adding, removing, or changing security settings on existing PDF documents or whole directories of documents. PDFSecure can also be used to modify document information metadata and to web-optimize files through a process known as linearization.

Like other PDFTron products, PDFSecure does not rely on any other third-party software.

PDFSecure is also available as a library component (PDFSecure SDK) that can be used as a building block for other client and server-based applications. Please see <http://www.pdftron.com/pdfsecure> for more information.

1.1.1 Key Functions

- Encrypt any PDF document using AES (Advanced Encryption Standard) encryption and Crypt filters.
- Encrypt any document using standard PDF 40 and 128 RC4 bit encryption.
- Modify security settings (for example, change passwords or security permissions).
- Completely remove security from existing documents.
- Set of modify document information metadata such as Author, Subject, Title, Keywords, etc.
- Linearize and optimize existing PDF documents for 'Fast Web View' capability and faster downloading.
- Supports all versions of PDF format (PDF 1.0 to ISO32000).
- Files with broken cross reference tables are automatically repaired.
- Configuration file for frequently used options.
- Supports automation and batch processing.

1.1.2 Common Use Case Scenarios

- Server-based, on-demand encryption and decryption of PDF documents based on specific security requirements.
- Batch processing of PDF collections that require uniform security and permission settings across many documents. PDFSecure is particularly useful in assembling product catalogues, brochures, and forms.
- Linearization of existing PDF documents for 'Fast Web View' capability.

1.1.3 Operating Systems Supported

- Windows 7, 2008, Vista, XP, 2003, 2000, NT, 98
- Mac OSX
- Linux

1.2 About This Manual

This manual is intended as a guide to the installation and use of PDFSecure.

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

3. Overview

PDFtron PDFSecure is a command-line application designed to add, remove, or change security settings on existing PDF documents or whole directories of documents. PDFSecure can also be used to modify document information metadata and to web-optimize files through a process known as linearization. This section covers the basic use of PDFSecure explaining all the available options.

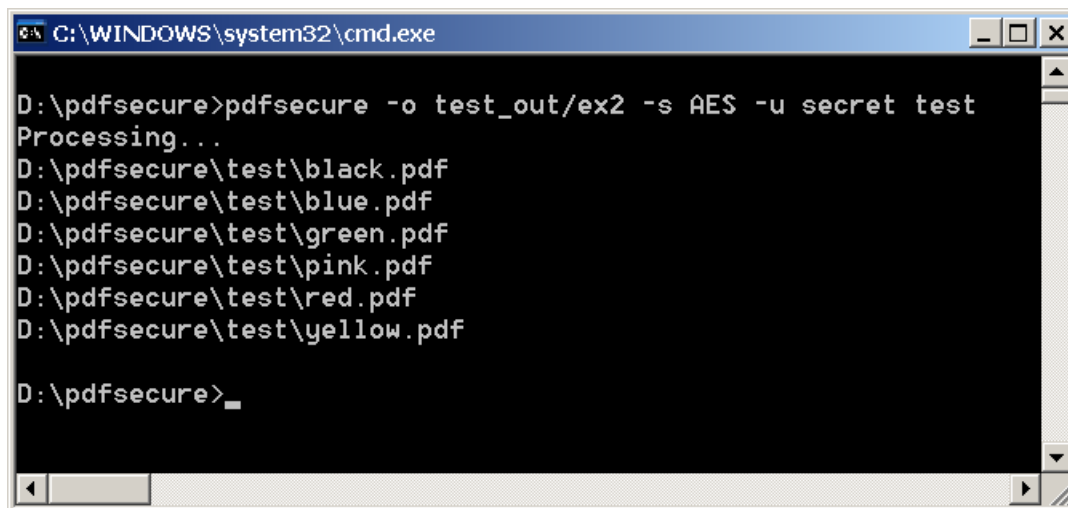


Figure 3.0 PDFSecure Command-line Application.

3.1 Basic Syntax

The basic command-line syntax is:

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

3.2 Command-Line Summary

The following command-line arguments are available for PDFSecure.

Option	Parameter	Description
-h or --help		Print a listing of available options.
-v or --version		Print the version information.
--verb	--verb 2	Set the verbosity level. Valid parameter values are 0, 1, and 2. The higher number results in more feedback. The default is 1.
-o or --output	e.g. -o "my folder" when processing multiple files or -o out.pdf, when processing a single file.	The output folder or file used to store modified files. If this option is not specified, changes will be applied to original files.
--subfolders		Process all sub-directory for every directory specified in the argument list. By default, sub-directories are not processed.
--extension	--extension ".pdf"	The default file extension used to process PDF documents. The default is ".pdf".
-l or --linearize		Linearize output files.
--noprompt	--noprompt	Disables any user input. By default, the application will ask for a valid password if the given password is not correct or for a permission to modify original files.
-p or --pass	e.g. secret or "my pass"	The password for the input file. Not required if the input document is not secured.
-s or --secure	e.g. to apply 128 bit RC4 encryption: -s 128 to apply AES encryption: -s AES to remove security: -s R	Sets the security handler for the output file(s). Valid options are: <ul style="list-style-type: none"> ■ 40 - Use 40-bit RC4 encryption. ■ 128 - Use 128-bit RC4 encryption. Supported in PDF 1.4 (Acrobat 5) and above. ■ AES - Use 128-bit AES (Advanced Encryption Standard); Supported in PDF 1.6 (Acrobat 7) and above. ■ R - Remove the encryption from the document. ■ S - Do not change the original security handler. By default, the current security handler will be preserved (S).
-u or --userpass	-u "open pass"	The new user password. This password is required to open resulting documents. Used only if output documents are encrypted.
-w or --ownerpass	-w "permission pass" --ownerpass secret	The new owner password (also known as master or permission password). This password is required to adjust permissions settings on resulting documents. Used only if output documents are encrypted.

3.3 Permission Options

If the output document is protected with an owner password (also known as master or permission password), it is possible to adjust standard PDF permissions using the following options:

Option	Parameter	Description
-d or --disable	e.g. to disable any changes to the document specify -d m e.g. to disable printing and content extraction specify -d phx dcm	This option accepts a string of permissions flags that should be disabled. The permission string may include the following flags: <ul style="list-style-type: none"> ■ a - All permissions. ■ p - Printing. ■ m - Changing the document. ■ c - Content copying or extraction. ■ o - Commenting. ■ f - Filling of form fields. ■ x - Content extraction for accessibility. ■ s - Document assembly. ■ h - High quality printing.
-e or --enable	e.g. to enable commenting: -e o	A string of permissions flags (see --disable option above) that can be enabled. If there is a conflict with one of the flags in the 'disable' option, the permission is not granted.

Permissions for the document can be set separately from access to the document which is controlled using the user password. With password security, it is possible to require different passwords to open (i.e. user password) and modify (i.e. owner password) the document. This means that you can allow one set of users to open the document, and another, possibly smaller set, to make unrestricted changes. Users without the owner password can only make the changes allowed when the document was prepared.

The following table relates permissions settings options in Adobe® Acrobat® Reader to permission flags in PDFTron PDFSecure:

(Please see next page for table)

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3.4 Document Information Options

Using PDFSecure it is possible to modify document information metadata automatically and uniformly across all generated documents using the following options:

Option	Parameter	Description
--title	--title "My Title"	Sets document's 'Title' description.
--author	--author "Joe Doe"	Sets document's 'Author' description. Author is the name of the person who created the document.
--subject	--subject "My Subject"	Sets document's 'Subject' description.
--keywords	--keywords "key1 key2 key2"	Sets document's 'Keywords' description.
--creator	--creator "PDFTron PDFNet"	Sets document's 'Creator' description. Creator is the name of the application that created the original document from which it was converted.
--producer	--producer PDFSecure	Sets document's 'Producer' description. Producer is the name of the application (for example, Distiller) that converted it to PDF.

3.5 General Usage Examples

Example 1. Securing a single PDF document using 128 bit RC4 encryption and user (open) password

Notes:

- The '-o' parameter is used to specify the output file. If the output filename was not specified, PDFSecure will prompt you for a permission to modify the original file.
- The '-s' parameter specifies that the output document should be encrypted using 128 bit RC4 encryption.
- The '-u' parameter specifies the password required to access the secured document.

```
pdfsecure -o test_out/ex1/blue_secret.pdf -s 128 -u secret test/blue.pdf
```

Example 2. Securing a folder of PDF documents using AES encryption and user (open) password

Notes:

- Because there is more than one input file, the '-o' parameter is used to specify the destination folder ('test_out/ex2') instead of a filename.
- The '-s' parameter specifies that the output document should be encrypted using AES (Advanced Encryption Standard) encryption. AES and Crypt filters are supported in PDF 1.6 (Acrobat 7) and higher.

```
pdfsecure -o test_out/ex2 -s AES -u secret test
```

Example 3. Securing a file with a user (open) and an owner (permission) password and setting permissions

Notes:

- In this example, the '-w' parameter is used to specify the owner (or permission) password and the '-d' parameter is used to disable all permissions.

```
pdfsecure -o test_out/ex3/r1.pdf -s 128 -u userpass -w ownerpass -d a
test/red.pdf
```

Example 4. Setting Permissions

Notes:

- In this example, the ‘-e’ parameter is used to selectively enable high and low resolution printing on all PDF documents located under the ‘test’ folder, while disabling all other permissions.
- The ‘--subfolders’ parameter is used to indicate that PDFSecure should recursively process all subfolders.

```
pdfsecure -o test out/ex4 -s 128 -w foo -d mcofxs -e ph --subfolders test
```

- The following example disables any modifications to the document except commenting, and enables content extraction (such as copy and paste).

```
pdfsecure -o test_out/ex4/out2.pdf -s 128 -w foo -d ms -e cox test/red.pdf
```

Example 5. Removing Security

Notes:

- The '-s' parameter specifies that encryption should be removed from all documents.
- This sample decrypts files generated in Example 4. Because these files are only protected using an owner (permission) password, PDFSecure does not require any password to remove the security.

```
pdfsecure -o test_out/ex5 -s R test test_out/ex4/out2.pdf
pdfsecure -o test_out/ex5 -s R test test_out/ex4
```

- Files that are secured in examples 1, 2 and 3 are protected with a user (or open) password and this password is required to remove the security. The password required to open input documents is specified using the '-p' parameter. If the user password is not specified, PDFSecure prompts the user for a valid password.

```
pdfsecure -o test_out/ex5/ex3r1.pdf -s R -p userpass test_out/ex3/r1.pdf
pdfsecure -o test_out/ex5 -s R -p secret test_out/ex2/test -subfolders
pdfsecure -otest out/ex5/el.pdf -sR -psecret test out/ex1/blue secret.pdf
```

Example 6. Modifying Document Information Metadata

Notes:

- Using PDFSecure it is possible to modify document information metadata (e.g. Author, Subject, Title, Keywords, etc.) on individual documents or uniformly across document collections. For example:

```
pdfsecure -o test_out/ex6 --title "My Title" --subject "My Subject" --
creator "Source App"--producer "PDFSecure" --author "Joe Doe" --keywords
"key1 key2 key3" test
```

Example 7. PDF Linearization (Fast Web View Enabling)

Notes:

- In order to provide good performance over relatively slow communication links, PDFSecure can generate PDF documents with linearized objects and hint tables that can allow a PDF viewer application to download and view one page of a PDF file at a time, rather than requiring the entire file (including fonts and images) to be downloaded before any of it can be viewed. In this example, the '-l' parameter is used to specify that all processed documents should be linearized.

```
pdfsecure -o test_out/ex7 -l test_out/ex6
```

Example 8. Combining Different Operations

Notes:

- With PDFSecure it is possible to combine different operations described above in a single command-line. For example:

```
pdfsecure -o test_out/ex8 -l --title "My Title" --subject "My Subject" --
creator "SourceApp"- producer "PDFSecure" --author "Joe Doe" --keywords
"key1 key2 key3" -s AES --u userpass -w ownerpass -d chsmx -e of test
```

The above command-line:

- Applies linearization to all output documents.
- Sets various parameters in document information dictionary.
- Secures all output documents using AES (Advanced Encryption Standard) encryption.
- Sets the user (open) password to 'userpass'.
- Sets the owner (permission) password to 'ownerpass'
- Disables high-resolution printing, content extraction, and document modification (including document assembly), but enables commenting and form filling.

PDFSecure supports processing of multiple input documents in the same run. For example, it is possible to specify multiple PDF folders and PDFSecure will automatically process all PDF documents matching a given file extension. For example, the following command-line will process all PDF documents in folders 'test1' and 'test2'

Wildcard characters can also be used to process multiple input files.

```
C:\test1 >dir
Directory of C:\test1
01/04/2007  03:35 PM    <DIR>          .
01/04/2007  03:35 PM    <DIR>          ..
05/21/2004  02:27 PM                A1.pdf
05/03/2005  09:38 AM                A2.pdf
05/20/2003  08:46 AM                B1.pdf
05/15/2003  12:50 PM                B2.pdf
```

```
c:\>pdfsecure -o c:/output folder -s 128 -u secret c:/test1/*.pdf
```

```
pdfsecure -o c:/output folder -s 128 -u secret c:/test1/A*.pdf
```

```
pdfsecure -o c:/output folder -s 128 -u secret c:/test1/*1.pdf
```

The wildcards are expanded in the same manner as operating system commands. (Please refer to your operating system user's guide if you are unfamiliar with wildcards). Enclosing an argument in double quotation marks (" ") suppresses the wildcard expansion. Within quoted arguments, you can represent quotation marks literally by preceding the double-quotation-mark character with a backslash (\). If no matches are found for the wildcard argument, the argument is passed literally.

Please note that PDF documents are generally copyrighted by the author. When changing security settings on a PDF file, you should respect the author's rights and accordingly apply security settings equivalent or compatible to those originally present in the file.

4.1 Reporting Problems

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

4.2 Contact Information

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
Press & News: press@pdftron.com