

# **Effective PDF password recovery**

# for Adobe Acrobat files

# and all you wanted to know about PDF





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## **MODERN DIGITAL WORLD**

Electronic documents usage allows lowering the paper and printers refill expenses, as well as making the information exchange process faster and more efficient. Arranging the electronic document flow may take lots of effort but in the end it proves to be very benefiting solution. Let's highlight the most noticeable advantages of electronic documents:

- The collection and processing of the information is much simpler;
- Fast documentation forwarding to any spot on the globe via email;
- The storage of electronic documents requires minimum of physical space;

- When creating new electronic documents, it is easy to implement some data from previous documentation;

- The working process becomes faster;
- The paper expenses decrease and it is better for environment.



#### ALL YOU WANTED TO KNOW ABOUT PDF FORMAT

We keep coming across the term PDF because various news editions, books, presentations, and others are often distributed in this format. But do you know what these three letters stand for?

PDF originates from **Portable Document Format.** It was developed by Adobe Systems as a software, hardware, and operating systems independent format for electronic documentation, presentations, and other data representation. PDF is mainly based on PostScript but was simplified to remove some flow control features, while graphics commands such as line to remain.

To open PDF documents Adobe Reader can be used, which is the free official software for PDF viewing, or other programs by other software developers.

PDF documents usually go with .pdf extension. On Macs this is not obligatory, but it is better to keep the extension of the file to be able to use it on any platform.

Nowadays most computers are sold with pre-installed Adobe Reader, but if for some reason you don't have the appropriate program installed, then you won't be able to open the PDF document.

A text or graphical document is initially created in some graphic or text editor and is then exported to PDF format for further usage as electronic document or to print.

A PDF file consists of eight types of objects: Boolean values, numbers, strings, names, arrays, dictionaries, streams, and the null object. As for the graphics, PDF can contain Vector graphics or Raster images. It also consists of text, interactive elements, file attachments, metadata, subsets.

A PDF format offers the possibility to encrypt the document for security, or digitally sign it for authentication.

#### How is PDF format used?

PDF formats are usually used when:

1. Creating electronic printable documents;



- 2. Transferring information;
- 3. Creating data archives. There are special applications for indexing PDF files, which allows

creating electronic libraries in PDF format;

4. Creating electronic forms, the data from which is stored in a data base.

# How to create a PDF file?

Many applications have the export to PDF option, or you can create a postscript file, which can

be then converted to PDF format using Acrobat Distiller.



#### THE POSSIBILITIES AND ADVANTAGES OF PDF FORMAT

Documents saved in PDF format have versatile functionality. These can be scans, electronic documents with multimedia and interactive content, graphics, etc.

Some web browsers, like Google Chrome, feature the support for PDF format, others allow installing special plugins for PDF display. Alternatively you can indicate which program your browser should use to open the PDF in browser's settings.

One of the advantages of PDF file format is its independence of the platform. They can be opened either on Mac, or on Windows, or Linux computer. Your business partners will be able to view and print the important documents as it was meant to be, while with Word docs it is rather desired that all parties had the same software version. Sometimes software version issues are actual for PDF too, but as the software is free, the issues are easily and quickly solved. Another advantage of PDF file format is that all viewing software is distributed at no cost. Anyone can download Adobe Reader from Internet and use it for electronic documents. Also PDF file format is considered to be one of the safest formats for sharing documentation with business partners, while for example Word documents can often carry viruses inside them.

PDF is an open-standard format and is published by the International Organization for Standardization as ISO 32000-1:2008. Also PDF/UA, the PDF/Universal Accessibility Committee, an activity of AIIM, is working on a specification for PDF accessibility based on ISO 32000, which will make electronic documentation in this format available to even more and more people all over the world.

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#### WHY PROTECT PDF?

PDF file format was designed with full documents security in mind. It is very reasonable because most of the time PDF files contain confidential and very important information.

The standard security consists of two different methods and two different passwords that can be enabled in "Security" tab of "PDF Options" dialog in Acrobat PDF. A PDF file can be protected with the "User" password - the password that opens the document, and with the "Owner" password - the one that restricts the document from being printed, copied, edited, or adding the data to it.

In different versions of Acrobat the following restrictions can be applied to a PDF file in "Security" tab:

No Printing. The opened document cannot be printed;

**No Changing the Document.** Adobe Acrobat allows limited modifications of the document's content: text modification, hyperlinks and bookmarks creation, etc. But when this option is enabled, no changes can be made to the document;

**No Content Copying or Extraction, Disable Accessibility.** Any copying of the document's content is disabled;

No Adding or Changing Comments and Form Fields. The third party can fill in the fields, but cannot edit them. Commenting is not allowed either.

Starting from version 5, Acrobat offers advanced protection methods:

**Enable Content Access for the Visually Impaired.** Adobe Acrobat/Adobe Reader feature some options for visually impaired people;

**Allow Content Copying and Extraction.** Copying to clipboard from a PDF document is allowed; **Changes Allowed.** You can choose the restrictions from the list for a specific access level:



None. No modifications allowed;

**Only Document Assembly.** Only adding new pages, the deletion of those pages, their rotation, and the creation and deletion of bookmarks and thumbnails allowed;

Only Form Field Fill-in or Signing. Only filling in the form fields and digital signing allowed;

**Comment Authoring, Form Fill-in or Signing.** Additionally to the previous permissions forms and comments creation and modification allowed;

General Editing, Comment and Form Field Authoring. Any modifications to the document are allowed;

Printing. Choose one of the document printing restrictions below:

Not Allowed. Printing of the document is not allowed;

Low Resolution. Printing of the document is allowed in low resolution only;

Fully Allowed. Printing is allowed with no restrictions at all.

PDF file protection is not only easy to implement, but is also flexible and versatile.

#### Losing a PDF password can cause a lot of trouble

So you protected your PDF document with a password some time ago, and now you need to remove PDF password from your document. Maybe you simply forgot the password... Or you are new in the office and have to work with the documentation of the preceding employee... To unlock PDF password in such sort of a situation you'll definitely need a good PDF password recovery software. Eltima Software develops a real effective Recover PDF Password software.

**NB:** Usually passwords created in English language use the following characters: 26 lowercase letters (a...z), 26 uppercase letters (A...Z), 10 digits (0...9) and 33 specific characters (!@#\$%^ etc), which makes 95 characters for various combinations. Sometimes specific characters are not used, which decreases the possible combinations. And the shorter the password the easier it is to retrieve it with the help of search PDF password applications.



Passwords created by human usually lack security. No matter how they are forced to make the passwords complicated and random, people still neglect the most simple security tips. The majority of all passwords are simple words, usually found in users' daily life: their birth year, favorite pet name, phone number, etc.

A new password is usually a modified version of previous one. And what's the most insecure people usually keep the password note very close to where it should be used.

Thus having some basic info about a user or knowing the password security requirements, it is easier to find the password. Specific search PDF password software uses the technologies that allow using this kind of information to decrypt PDF password.



#### METHODS THAT EXIST TO REMOVE PDF PASWWORD

First of all we'd like to pay your attention to the fact that the password recovery speed and efficiency highly depend on the right choice of the search PDF password method.

Several key methods of password search exist:

#### Brute-force search

Brute-force search is the most well-known break PDF password method. It simply goes through every possible character combination as a password. A one-character password takes only 26 combinations ('a' to 'z'). The two-character password will require 26\*26=676 combinations. As the length of the password increases the number of possible combinations does too. As a result such search method can take too much time to find the password.

However if you know nothing about the password you are searching for, this method is the most relevant.

#### **Dictionary search**

The password search will be based on the dictionary in this case. A good password search dictionary is not just a dictionary, e.g. it can contain the word "qwerty" unlike common dictionaries, but it should surely be used when searching for a password. Dictionary search is usually the fastest method, however the password will be found only if it is present in the dictionary. Since Dictionary search takes not long, it is always recommended to try it prior to using Brute-force search.

You can also search for password by its length. If you can remember the approximate length of the password and what characters it may contain you can set the minimum and maximum length of the password, which decreases the number of combinations for PDF password recovery application to dig through.

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**Template** - if you remember the password partially you can set the template for it with the mask symbols for those parts you can't remember, thus there will be less passwords variations to verify.

### Make the right decision!

#### What to do next?

After you considered all above information about PDF passwords and PDF password recovery, you may decide on acquiring the PDF password recovery tool. Having such a solution at hand you will always be happy with the results it provides.

What to pay attention at when choosing the software that can remove PDF password

The are numerous free programs on the Internet that claim they can decrypt PDF, but after you download them and try to search for PDF password you may be quite disappointed, while the precious time is already gone.

We don't recommend buying a paid software without trying its free demo first either. Free demo version of unlock PDF password application should fully demonstrate what this program is capable of and whether it is easy to use and understand. Of course demo version of the program implies certain limitations, but they still shouldn't prevent you from evaluating its capabilities.

When choosing the program, pay attention to its functionality. Make sure that your operating system, the PDF version of the document you have, the possible languages and encodings used for this password are all supported. Don't forget that when buying a program from a respected company you also receive the technical support from them, which is crucial when you have some issues or questions concerning the program usage.



### "ELTIMA SOFTWARE" RECOMMENDS AN EFFICIENT RECOVER PDF PASSWORD APP

Among other quality software Eltima develops and distributes Recover PDF Password - an essential remove PDF password tool: <u>http://www.eltima.com/products/pdf-password-recovery/</u>. Recover PDF Password supports all versions of Adobe Acrobat up to v.9 and recovers the Unicode passwords. Unlock PDF password easily no matter what language or keyboard layout it was created in. Recover PDF Password is optimized for multi-core computers for faster and more efficient performance.

Recover PDF Password by Eltima Software	
	assword by Eltima Software
Select your PDF file: C:\Users\Daruntim\Desktop\Keyword Resea	rch.pdf 💣 🕡 Help! 🗸
Brute-force search Dictionary search History	
Recovery method       Min       1       Max       8       Image: Second constraints         Image: Second constraints       By template (eq template: 'pass???d' symbol: '?')       Template:       Symbol: '?')         Image: Symbol constraints       Symbol: '?')       Symbol: '?')         Image: Symbol constraints       Symbol: '?')         Image: Symbol constraints       Symbol constraints         Image: Symbol constraints       Symbol constraints<	Recover the following Veser Password grants basic access to the PDF Owner Password grants access and full control over PDF
Charset options          Charset options         Include lowercase Latin letters (abcdefgjklmnopqrstuvwxyz)         Include uppercase Latin letters (ABCDEFGJKLMNOPQRSTUVWXYZ)         Include special symbols (!@#\$%^*()_+-=<>,./?[]{~:;" ")	<ul> <li>Include digits (0123456789)</li> <li>Include space</li> <li>User-defined symbols</li> </ul>
Decry	ot File Start recovery

Let's have a look at main features of Recover PDF Password - a useful PDF password recovery tool. If your document was protected with "Owner" password only (that is the password that protects the document from printing, editing, and copying), then you can decrypt PDF right away skipping the password search. This way you'll get totally unprotected document in a couple of clicks only!



**NB.** To find out what password your PDF document was protected with, use "File info" option. It will provide you with the detailed information about your document.

If the PDF document is protected with "User" password that restricts the file from being opened at all, then to restore it you can choose one of the following methods Recover PDF Password offers:

Brute-force search Dictionary search History					
Recovery method					
By template (eq template: 'pass???d' symbol: '?')					
Template: Symbol: ?					
$\bigcirc$ Exhaustive search $({\sf may}\ {\sf take}\ {\sf considerably}\ {\sf long}\ {\sf period}\ {\sf of}\ {\sf time})$					

- Search for PDF password by its length. When choosing this method you have to indicate an approximate minimum and maximum length of the sought password and Recover PDF Password will search through all possible variations in this range.

- Search for PDF password by template. This search method will be handy if you can remember some characters in the password. This will reduce the number of possible variations to look through.

- Exhaustive search. Use this method when you remember nothing about the password. Recover PDF Password will search through any possible variation. You will definitely unlock PDF password, but this method takes a lot of time. Recover PDF Password will try to reduce the search time though, as it is optimized for work on multicore computers, which leads to faster password search.



rute-force search	Dictionary s	earch	History			
Select the dictionary file C:\Program Files\Eltima Software\Rec						
Select the type of search (simple search of words through the did		Simple method 🗸				
		lic Simple method Complex method Hybrid method				

- Dictionary search is the most time-saving and popular method, because most of the passwords are usually words, word combinations, or modifications that can be found in a dictionary of Recover PDF Password.

Recover PDF Password is available for Mac OS X as well as for Windows OS. Recover PDF Password offers the following useful features:

- Recovers all passwords entered in any language. You don't have to have Adobe Acrobat installed on your computer.

- Supports all versions of Adobe Acrobat including version 9.

- Keeps the password recovery history with a convenient view.

- Allows viewing the detailed file info including file name, PDF version, enciphering.

- Removes digital signature from a PDF file.

- Offers drag-and-drop for PDF files.

- The interface is easy to use and understand.

Demo version of the product is available free of charge and fully demonstrates its capabilities.



The demo version implies some limitations, which can be removed after registering the

program. The limitations of Mac version are:

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	5 🕡 .		6				
Open PDF Hist	ory File info		Start recovery				
Recover owner password 🛛 🗹 Recover user password							
Brute-force search Dictionary search							
O By password length min 1 max 4							
🔵 By template ( eg	template: "pass???d" sy	mbol: "?" )					
Template	e1		Symbol:				
Exhaustive sear	• Exhaustive search ( may take considerably long period of time )						
Use the following characters:							
✓ Include lowerca	✓ Include lowercase latin letters (abcdefghijklmnopqrstuvwxyz)						
✓ Include upperca	use latin letters (ABCDEFO	GHIJKLMNOPQRSTUVWX	YZ)				
☑ Include digits (0	✓ Include digits (0123456789)						
✓ Include special symbols (!@#\$%^&*()_+-=<>?~`,.;:/\\"[]'{})							
√ Include space and tab symbols							
☑ Include additional characters:							

- The recovered password will only have 3 first symbols visible, the rest will be masked with "\*".

- File decryption is available if owner or user password was restored or user password is absent. However only first page will be decrypted and watermark will be applied to it.

If you are using the demo for Windows OS, the following limitations imply:

- A PDF file password can be recovered if it is not longer than four symbols when performing brute-force search. When dictionary search is used password of any length can be recovered, but only first and last character will be shown.

- File decryption is available if owner or user password was restored or user password is absent. However only first page will be decrypted and watermark will be applied to it.



Recover PDF Password for Windows supports Windows XP 32-bit, Windows 2000, Windows XP 64-bit, Windows 2003 32-bit, Windows 2003 64-bit, Windows 2008 32-bit, Windows 2008 64-bit, Windows Vista 32-bit, Windows Vista 64-bit, Windows 7 32-bit, Windows 7 64-bit. It features multilingual interface: English, German, French, Spanish, Russian, and Romanian. http://www.eltima.com/products/pdf-password-recovery/

Recover PDF Password for Mac works on Mac OS X 10.4, Mac OS X 10.5, Mac OS X 10.6. It features a comprehensive English interface: <u>http://mac.eltima.com/pdf-password-recovery.html</u>.



### "ELTIMA SOFTWARE" - THE RECOVER PDF PASSWORD DEVELOPER

American company Eltima Software was founded in 2000. Mostly engaged in development of Multimedia and Flash solutions, serial and USB virtualization technologies, System utilities for Windows and Mac OS, Eltima Software gained popularity as a developer of a quality and reliable software. Our products obtained the recognition of multiple users, among which are international corporations and professional developers as well as end-users.

Mostly popular is Multimedia and Flash products branch, which offers software for professional designers, developers and webmasters (such as Flash Decompiler Trillix, Flash Optimizer, Flash'In'App), and useful utilities for home users (such as Elmedia Player, Folx, SyncMate, SWF & FLV Toolbox, Recover PDF Password, SWF Video Converter, Show.kit).

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