

Password Cracking Report

Method Used: John the Ripper

Dictionary Used: rockyou.txt

Tool Environment: Kali Linux

User: root

Date: Sep 20, 2025

Objective

To crack the password of a protected PDF file using a dictionary attack with the rockyou.txt wordlist and john the ripper.

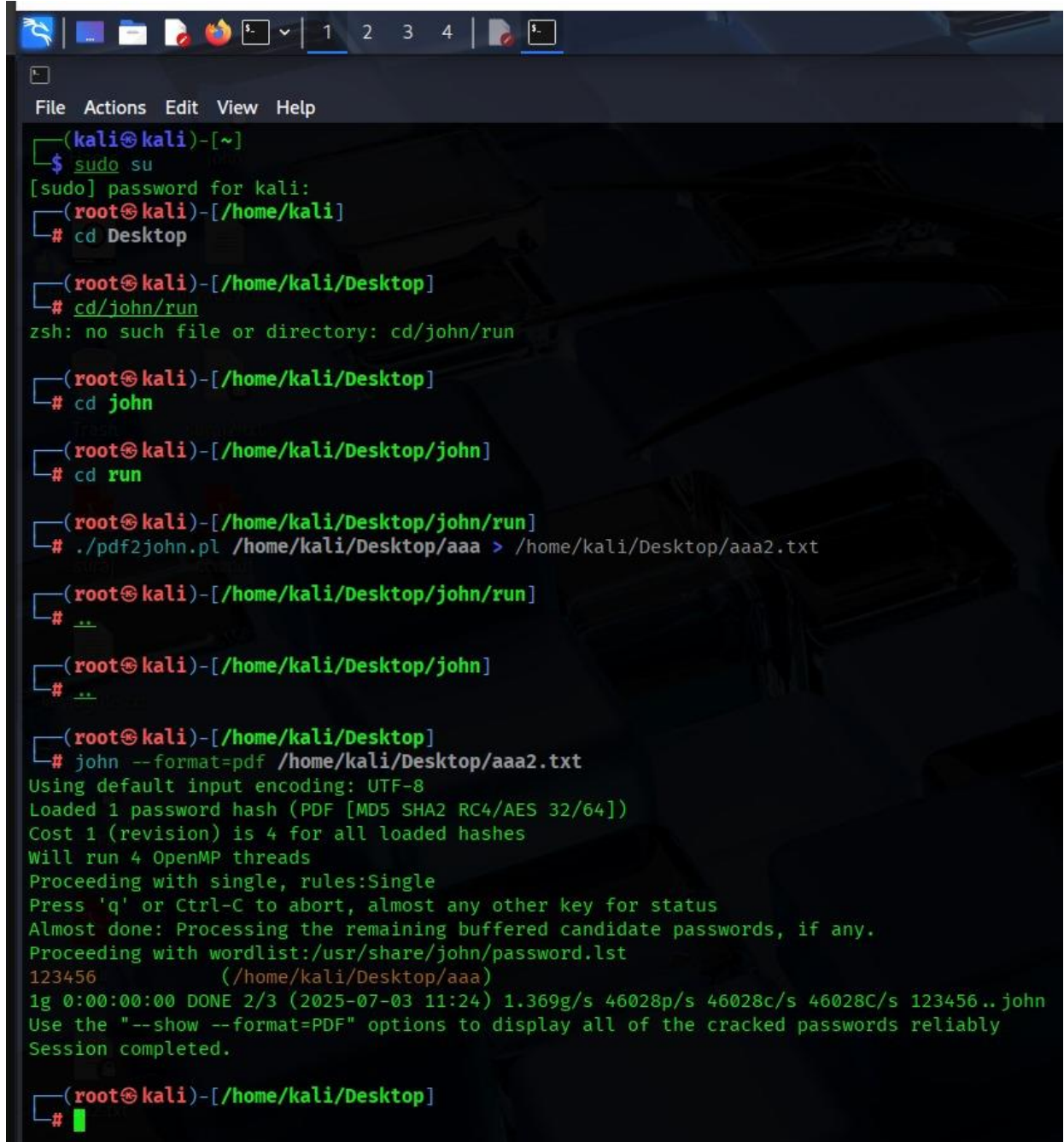
Tools & Resources

John the Ripper: A powerful password cracking tool.

rockyou.txt: A popular wordlist located at /usr/share/wordlists/rockyou.txt.

pdf2john.pl: A utility script to extract hash from PDF files.

Target File: aaa.pdf



```
(kali㉿kali)-[~]
$ sudo su
[sudo] password for kali:
(root㉿kali)-[/home/kali]
# cd Desktop

(root㉿kali)-[/home/kali/Desktop]
# cd /john/run
zsh: no such file or directory: cd/john/run

(root㉿kali)-[/home/kali/Desktop]
# cd john

(root㉿kali)-[/home/kali/Desktop/john]
# cd run

(root㉿kali)-[/home/kali/Desktop/john/run]
# ./pdf2john.pl /home/kali/Desktop/aaa > /home/kali/Desktop/aaa2.txt

(root㉿kali)-[/home/kali/Desktop/john/run]
# ..

(root㉿kali)-[/home/kali/Desktop/john]
# ..

(root㉿kali)-[/home/kali/Desktop]
# john --format=pdf /home/kali/Desktop/aaa2.txt
Using default input encoding: UTF-8
Loaded 1 password hash (PDF [MD5 SHA2 RC4/AES 32/64])
Cost 1 (revision) is 4 for all loaded hashes
Will run 4 OpenMP threads
Proceeding with single, rules:Single
Press 'q' or Ctrl-C to abort, almost any other key for status
Almost done: Processing the remaining buffered candidate passwords, if any.
Proceeding with wordlist:/usr/share/john/password.lst
123456 (/home/kali/Desktop/aaa)
1g 0:00:00:00 DONE 2/3 (2025-07-03 11:24) 1.369g/s 46028p/s 46028c/s 46028C/s 123456.. john
Use the "--show --format=PDF" options to display all of the cracked passwords reliably
Session completed.

(root㉿kali)-[/home/kali/Desktop]
# █
```

Procedure

1. Extract Hash from PDF

Used the pdf2john.pl script to extract the hash:

```
./pdf2john.pl /home/kali/Desktop/aaa > /home/kali/Desktop/aaa2.txt
```

2. Run John the Ripper Command used to crack:

```
john --format=pdf --wordlist=/usr/share/wordlists/rockyou.txt /home/kali/Desktop/aaa2.txt
```

 Output

indicates the password was successfully cracked:

123456

Result

Password Found: 123456

Hash Format Detected: PDF (MD5 SHA2 RC4/AES 32/64)

Cracking Speed: 46028 passwords/sec

Time Taken: 13 seconds

Conclusion: The password for the PDF file aaa.pdf was successfully cracked using John the Ripper with the rockyou.txt dictionary. The discovered password is 123456, which is a very weak and commonly used password, highlighting the importance of using strong, unique passwords for sensitive documents.