



NORTH

BRIGADE

North Brigade

The First Defense

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Password In-Security

- Data Breaches - Passwords made public
- Easy to guess/brute force
- Reused Passwords
- Weak Encryption passwords
- Phishing attacks
- Social Engineering

TIME IT TAKES A HACKER TO BRUTE FORCE YOUR PASSWORD IN 2024

How did we make this? Learn at hivesystems.com/password

Number of Characters	Numbers Only	Lowercase Letters	Upper and Lowercase Letters	Numbers, Upper and Lowercase Letters	Numbers, Upper and Lowercase Letters, Symbols
4	Instantly	Instantly	3 secs	6 secs	9 secs
5	Instantly	4 secs	2 mins	6 mins	10 mins
6	Instantly	2 mins	2 hours	6 hours	12 hours
7	4 secs	50 mins	4 days	2 weeks	1 month
8	37 secs	22 hours	8 months	3 years	7 years
9	6 mins	3 weeks	33 years	161 years	479 years
10	1 hour	2 years	1k years	9k years	33k years
11	10 hours	44 years	89k years	618k years	2m years
12	4 days	1k years	4m years	38m years	164m years
13	1 month	29k years	241m years	2bn years	11bn years
14	1 year	766k years	12bn years	147bn years	805bn years
15	12 years	19m years	652bn years	9tn years	56tn years
16	119 years	517m years	33tn years	566tn years	3qd years
17	1k years	13bn years	1qd years	35qd years	276qd years
18	11k years	350bn years	91qd years	2qn years	19qn years



> Hardware: 12 x RTX 4090 | Password hash: bcrypt

Cracking Passwords with John the Ripper

```
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\wqweq> wsl
dgrbch1@DESKTOP-5HDT2P7:/mnt/c/Users/wqweq$ echo -n 'mypassword123' | openssl passwd -6
Password:
Verifying - Password:
$6$fNh5qsrjrU33YQK3$jzkyckKHnERzrb7Cq4UhFJWLv.JoRXspj3Ch9q6Sb5srK0AJ5M0NXvJK1t8B9dy00yfp9ZVN1H3jNiQupbG42V.
dgrbch1@DESKTOP-5HDT2P7:/mnt/c/Users/wqweq$ echo '$6$fNh5qsrjrU33YQK3$jzkyckKHnERzrb7Cq4UhFJWLv.JoRXspj3Ch9q6Sb5srK0AJ5M0
NXvJK1t8B9dy00yfp9ZVN1H3jNiQupbG42V.' > hash.txt
dgrbch1@DESKTOP-5HDT2P7:/mnt/c/Users/wqweq$ cat hash.txt
$6$fNh5qsrjrU33YQK3$jzkyckKHnERzrb7Cq4UhFJWLv.JoRXspj3Ch9q6Sb5srK0AJ5M0NXvJK1t8B9dy00yfp9ZVN1H3jNiQupbG42V.
dgrbch1@DESKTOP-5HDT2P7:/mnt/c/Users/wqweq$ john hash.txt --wordlist=rockyou.txt
Loaded 1 password hash (crypt, generic(crypt(3) [?/64])
Will run 16 OpenMP threads
Press 'q' or Ctrl-C to abort, almost any other key for status
0g 0:00:00:10 0% 0g/s 8286p/s 8286c/s 8286C/s 071892..040977
0g 0:00:00:11 0% 0g/s 8283p/s 8283c/s 8283C/s 10021995..062807
0g 0:00:00:18 0% 0g/s 8328p/s 8328c/s 8328C/s maghanoy..lucy27
0g 0:00:00:19 0% 0g/s 8330p/s 8330c/s 8330C/s taurus20..sweetpea6
0g 0:00:00:20 1% 0g/s 8326p/s 8326c/s 8326C/s ashton23..arche
0g 0:00:00:49 2% 0g/s 8324p/s 8324c/s 8324C/s honeyque..home25
0g 0:00:00:50 2% 0g/s 8326p/s 8326c/s 8326C/s darkangel69..dannyjo
0g 0:00:00:51 2% 0g/s 8328p/s 8328c/s 8328C/s bailey93..baculo
0g 0:00:00:52 2% 0g/s 8323p/s 8323c/s 8323C/s 940706..920702
0g 0:00:00:53 2% 0g/s 8326p/s 8326c/s 8326C/s 13741374..132115
0g 0:00:00:54 2% 0g/s 8328p/s 8328c/s 8328C/s vanmark..valtierra
```

? Payload Sets

[Start attack](#)

You can define one or more payload sets. The number of payload sets depends on the attack type defined in the Positions tab. Various payload types are available for each payload set, and each payload type can be customized in different ways.

Payload set:

Payload count: 0

Payload type:

Request count: 0

? Payload Options [Simple list]

This payload type lets you configure a simple list of strings that are used as payloads.

Paste

Load ...

Remove

Clear

Add

Add from list ... [Pro version only]



Support Login

Not secure | 10.10.213.195/support/login/

Bastion Hosting

Support Login

Username
user

Password
....

Login!

Burp Suite Community Edition v2023.1.2 - Temporary Project

Burp

Project

Intruder

Repeater

Window

Help

Dashboard

Target

Proxy

Intruder

Repeater

Sequencer

Decoder

Comparer

Logger

Extensions

Le

1 x

2 x

+

Positions

Payloads

Resource pool

Settings

?

Payload sets

You can define one or more payload sets. The number of payload sets depends on the attack type defined in the Positions tab. Various payloads can be customized in different ways.

Payload set:

2

Payload count:

100

Payload type:

Simple list

Request count:

100

?

Payload settings [Simple list]

This payload type lets you configure a simple list of strings that are used as payloads.

Paste

Load ...

Remove

Clear

Deduplicate

Add

Add from list ... [Pro version only]

bambam

UnitedKingdom123

1q2q3q

valencia

258852

10031991

wolverine

12111991

Enter a new item

?

Payload processing

You can define rules to perform various processing tasks on each payload before it is used.

Add

Edit

Remove

Up

Down

...

Rule

?

Payload encoding

This setting can be used to URL-encode selected characters within the final payload, for safe transmission within HTTP requests.

☒

URL-encode these characters:

.!@=<>?+&*%{}|^`#

Solution

- Randomly Generate passwords with Uppercase, lowercase, numbers, and symbols.
 - Hard to guess and bruteforce
- Multi-Factor Authentication
- Change passwords every 3 months that auto-update to password manager
- Password Managers Store and manage complex passwords using trusted password manager tools
- Train and Educate people on strong passwords
- Don't reuse passwords across multiple accounts



Additional Features

- Password Manager (Top Grade Encryption) - So the user doesn't forget their complicated passwords and have them all in one place
- Multi Factor authentication - Alerts the user when a sign in is attempted, and can ensure the proper user gains access to the website

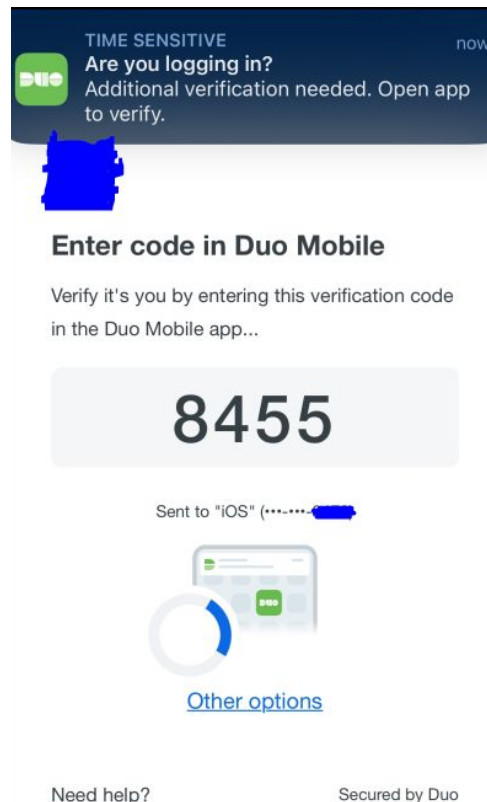
Multi Factor authentication

Is this your device?

If you're the only person who uses this device,
Duo will remember it for future logins.

Yes, this is my device

[No, other people use this device](#)



Demo (Ease of Password Manager)

Username

Christopher.Gonzalez42@login.cuny.ed

Password

Christopher.Gonzalez42@l... ..

ChristopherGonzalez42@l... ..

cgonzal Log in

Information regarding Advice and past incidents

1. **Tech.co.** "Weak and Strong Password Examples." *Tech.co*, <https://tech.co/news/weak-strong-password-examples>. Accessed 22 Nov. 2024.
2. **Stay Safe Online.** "Passwords: Securing Your Accounts." *National Cybersecurity Alliance*, <https://staysafeonline.org/online-safety-privacy-basics/passwords-securing-accounts/>. Accessed 22 Nov. 2024.
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4. **CyberNews.** "RockYou2024: Largest Password Compilation Leak." *CyberNews*, <https://cybernews.com/security/rockyou2024-largest-password-compilation-leak/>. Accessed 22 Nov. 2024.
5. **Expert Insights.** "The Most Significant Password Breaches." *Expert Insights*, <https://expertinsights.com/insights/the-most-significant-password-breaches/>. Accessed 22 Nov. 2024.
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