

Cyber Security

Vic Buss

The Internet Technology explained: What is the dark web? - BBC News



Passwords



Top 30 Most Used Passwords in the World

1	123456	11	abc123	21	princess
2	password	12	1234	22	letmein
3	123456789	13	password1	23	654321
4	12345	14	iloveyou	24	monkey
5	12345678	15	1q2w3e4r	25	27653
6	qwerty	16	000000	26	1qaz2wsx
7	1234567	17	qwerty123	27	123321
8	111111	18	zaq12wsx	28	qwertyuiop
9	1234567890	19	dragon	29	superman
10	123123	20	sunshine	30	asdfghjkl

How are they used to commit crime ??

- Multi National Company listed worth £25 billion on the stock exchange.
- The e mail account for the accounts department was **Pa55word123.**
- The email address was **rubbercorporationsinc.com**
- The account was hacked and a number of emails were taken from the server.
- The hackers created and bought the domain name **rubbercorporationinc.com.**
- They copied the emails with the name of the company and put their details as the contact for this large company.

How are they used to commit crime ??

- Armed with this they sent one of their customers an invoice for \$1.2 million and added a new bank account stating that the account details had changed.
- This came from the new e mail address.
- The bill was paid and into the new fraudulent bank account
!!!
- This happened six times for various amount upwards of \$1 million before the end of month figures were looked at and it was discovered.
- The money paid into the fraud account was transferred straight out of the account to an account in a Arab country and onto the Indian continent.
- This was all conducted on the normal internet not the dark web.

How Passwords work

- When you create a password for the first time, the computer security application takes that password and runs it through what is called hashing algorithm.
- Your actual password is not stored.
- Demo. [PHP password hash tool - generate password hashes online](#)
- So your hash is your password. It is important that you have a good password
- What hackers do is take a very large dictionary of passwords and hash each of them.
- You then need a very fast computer and you can run an attack on a site and gain access. Which is how they get into your accounts and take them over.

The best makeup of a password

- Do not use numbers they are easy to hack.
- Mix upper and lowercase letter.
- Use punctuation.
- Your or you families names.
- Four Random words (they may not be random to you but they will be to a computer.
- Such as
- Penny:Milano,Barnet'Macavity
- These mean lots to me but not to a computer or a hacker.

Dos and don'ts

- The strongest password you should have is your e mail account.
- This is where all of your reset passwords are sent to.
- Do not have the same password for all of you sites.
- Do not keep a word document with your passwords on (computer can be hacked)
- Write them down and keep them in safe place (you cant hack a notebook)
- Do check if you password is secure.
- [Password Check | Kaspersky](#)
- [Have I Been Pwned: Check if your email has been compromised in a data breach](#)

Internet Protocol Addresses

- The IP address is vital because it tells everything else on the internet where you are, and allows you to communicate.
- But it also has some issues, particularly in terms of your privacy.
- Your IP address could remain the same for a very long time, too, and in some cases it may never change.
- That allows websites to record your IP when you first visit, recognize it when you return, and build up a record of what you're doing over time, even if you don't register or sign in.
- It is also a calling card for a hacker if a virus had been left on your computer.

IP Addresses

- When you look into at website to buy something or book a holiday on line you reveal your IP address.
- I have left my router on and my IP address has been the same for two weeks.
- Last week I bought a pair of walking boots from decathlon.
- I then browsed their website without logging in or committing to buy a paddleboard.


BT 09:27 77%
decathlon.co.uk

MENU **DECATHLON** 🔍 0

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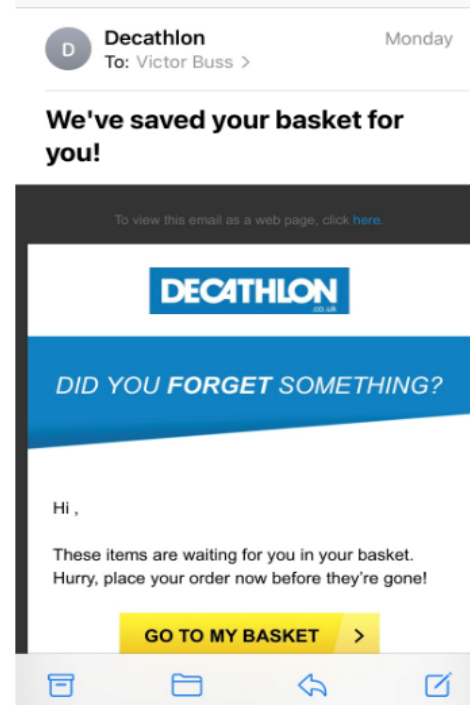
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IP Addresses

- I received an e mail shortly after.



IP Addresses

- I didn't ask them to they remembered (or their computer did) my IP address linked it to my email address and sent me the link.
- This is big business.
- Companies remember your IP address and market stuff to you.
- When is the last time you looked at something on the internet and when you have gone back the price has gone up??
- This is also achieved by leaving cookies on you computer.
- That is another lesson.

IP Addresses



- To keep safe.
- Use a VPN [Technology explained: What is a VPN service? - BBC News](#)
- A cheaper option is to buy a plug timer.
- Set it to go off on once or twice a day.
- This will change your IP address.
- Do not forget that you should clear your browsing history after every session on the internet this will clear cookies from your system.