Fighting Cyber Crime



Cyber Crime Unit



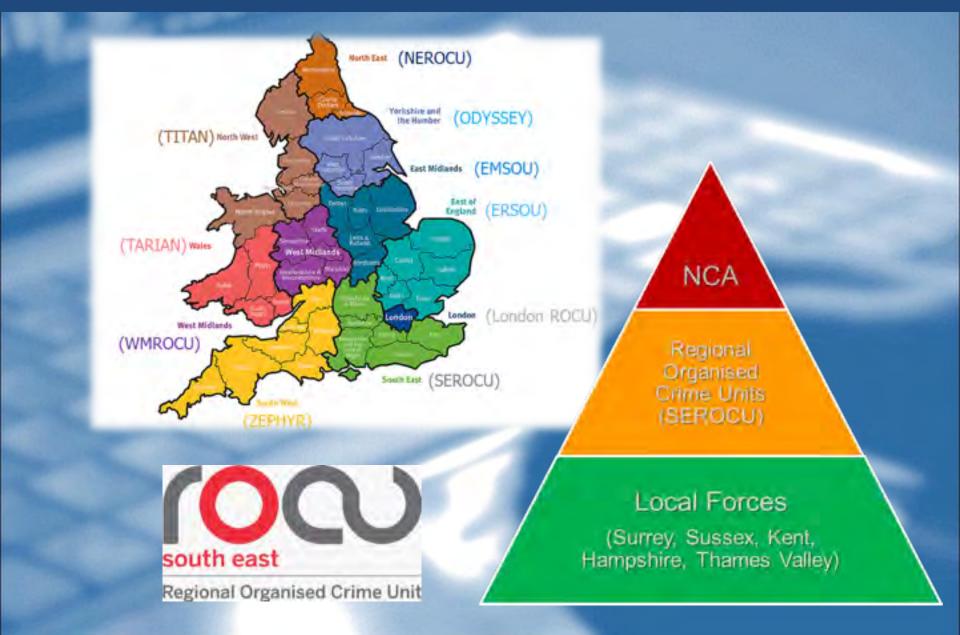
Introduction

Regional Cyber Protect Officer for SEROCU

To engage with, and develop relationships with companies and organisations within the region to promote cyber security and the role of the SEROCU CCU.



The Regional Units



Cyber Crime In Numbers

• 3.9 Million cyber crimes in 12 months (2016)

28% of businesses reported attacks to Police

• Cost to UK economy...

£27 Billion in 2011 → £49 Billion in 2014

- Average breach costs £65k to £115k (small company)
- 500 Million new viruses in 2015
- 3000 DDoS attacks per day
- 500K phishing attempts per day

Passwords



1. 123456
2. linkedin
3. password
4. 123456789
5. 12345678

Password policy (repeat passwords)Educate staff not to use same ones as personal accounts

Passwords

HOW SECURE IS MY PASSWORD?

ENTER PASSWORD

Sponsored by Dashlane: never larget another password

Sellow Obsimpnet

f Like - 11k

Sponsored by <u>Dashlane Password Manager</u> Top 10,000 passwords by <u>Mark Burnett</u> / Typefaces by <u>The League of Movable Type</u> The <u>source code</u> for this site and the official HSIMP <u>Query plugin</u> can be found on <u>GitHub</u> © Small Hadron Collider, 2016 / Version 8.0

This site is for educational use. Due to limitations of the technology involved, the results cannot always be accurate. Your password will not be sent over the internet.

Password Security

Passwords



.............................

It would take a computer about

2 QUATTUORDECILLION YEARS

to crack your password

Dashiane can help you remember all of your secure passwords - and it's free!

De

Tweet Your Result

TIP: USE A PASSWORD MANAGER TO SECURE AND EASILY REMEMBER YOUR PASSWORDS

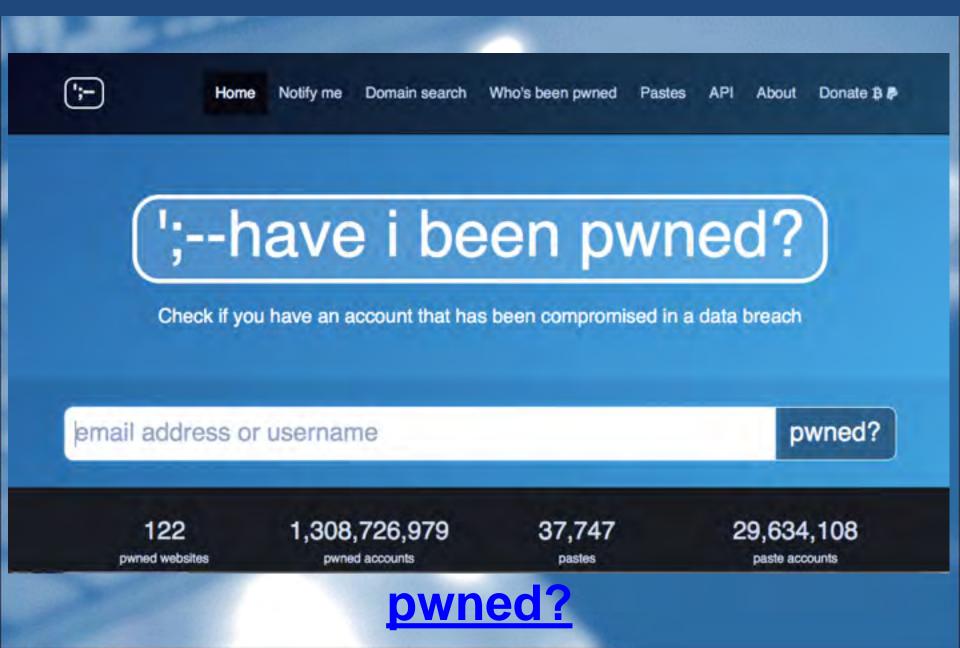
"Dashlane is life changingly great. Get it " - David Pogue (The New York Times) Get Dashlane - It's Free!

LENGTH: LONG

Your password is over soteen characters long. Never forget your long, secure password by using a password manager

consident by Crashings, while forget another payone

Have You Been Compromised?



A Socially Engineered Story



Peel's First Principle

"The basic mission for which the Police exist is to prevent crime and disorder"



It Is Preventable!!

... of cybercrime is preventable (GCHQ)

Becoming a Victim

How will you find out..?

The criminals themselves
An irate supplier/customer
The Police
Member of staff
The press
Internal computer software

7) You may never find out..

Ransomware

Currently targeting individuals
→ Moving towards businesses

- Demands from £600+
- No guarantees to get data back
- Supporting criminality
- Repeat victimisation
- Backup using an external HDD
- > Do it regularly
- Store backup securely
- Cloud storage not immune



Your documents, photos, databases and other important files have been encrypted with strongest encryption and unique key, generated for this computer. Private decryption key is stored on a secret Internet server and nobody can decrypt your files until you pay and obtain the private key. The server will eliminate the key after a time period specified in this window.

Open http://maktub5bgijsujt2.onion.link

1) Download TOR Browser from

- or http://maktubSbqijsujt2.torstorm.org
- or http://maktub5bqijsujt2.tor2web.org

in your browser. They are public gates to the secret server.

If you have problems with gates, use direct connection:

http://torproject.org

2) In the Tor Browser open the http://maktub5bqijsujt2.onion

(Note that this server is available via Tor Browser only, Retry in 1 hour if site is not reachable).

Write in the following public key in the input form on server:

First Transformed State (1997) and the state of the st

Copy Public Key to Clipboard

A Recent Investigation (Malicious Insider)

News

This will erase all your data and cannot be canceled. A wiped iPhone cannot be located

Wipe iPhone

Cancel

- Richard Neale sent a "Wipe Command" to 900+ Aviva employees devices - BYOD
- Further access and alterations made into companies systems
- Tried to hide his involvement by using VPN's but forensic investigation identified incriminating artefacts on his devices
- Cost the company £500K
- Convicted and serving 18 months

MailOnline

Computer firm boss who hacked 900 mobile phones belonging to Aviva insurance employees in an act of revenge after leaving his job on bad terms is jailed for 18 months

Richard Neale, 40, had been a director at Esselar, which he helped set up
But had bitter fall-out and left company in 2013 and then took his revenge

- Firm ran security network for Aviva and he hacked phones of employees
- Neale jailed for 18 months with prosecution saying his actions saw Esselar miss out on contracts and future business deals worth more than 6500k.

Cyber Essentials

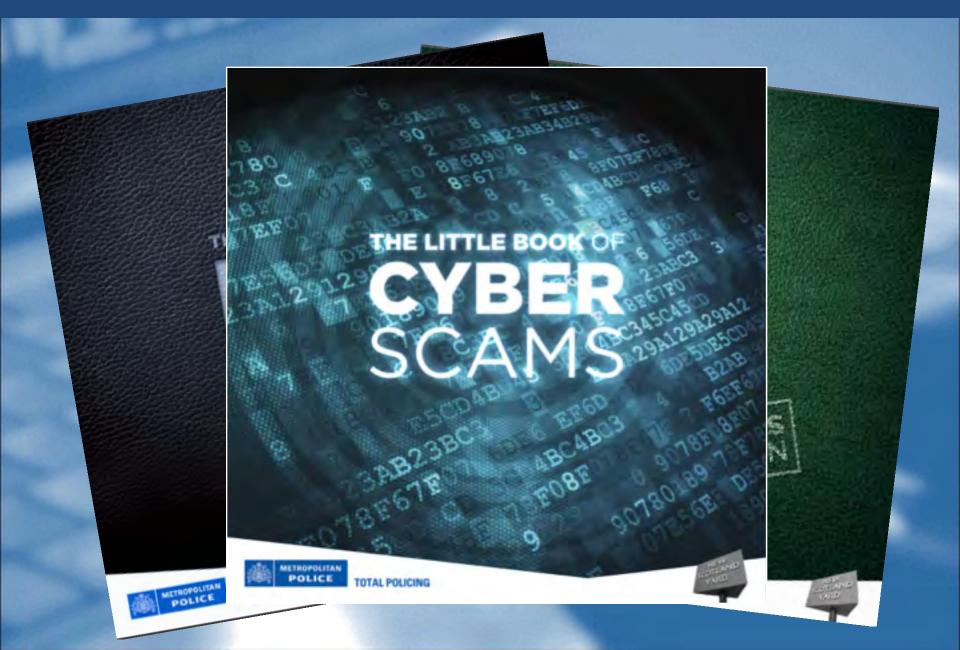
Organisation identifies the systems it believes are at risk from common Internetbased threats.



- 1. Boundary firewalls and internet gateways
- 2. Secure configuration
- 3. Access control
- 4. Malware protection
- 5. Patch management



Free Stuff



General Data Protection Regulation

Fined £400k Global Turnover £1.84b

Possible fines of 4% of global turnover or €20M

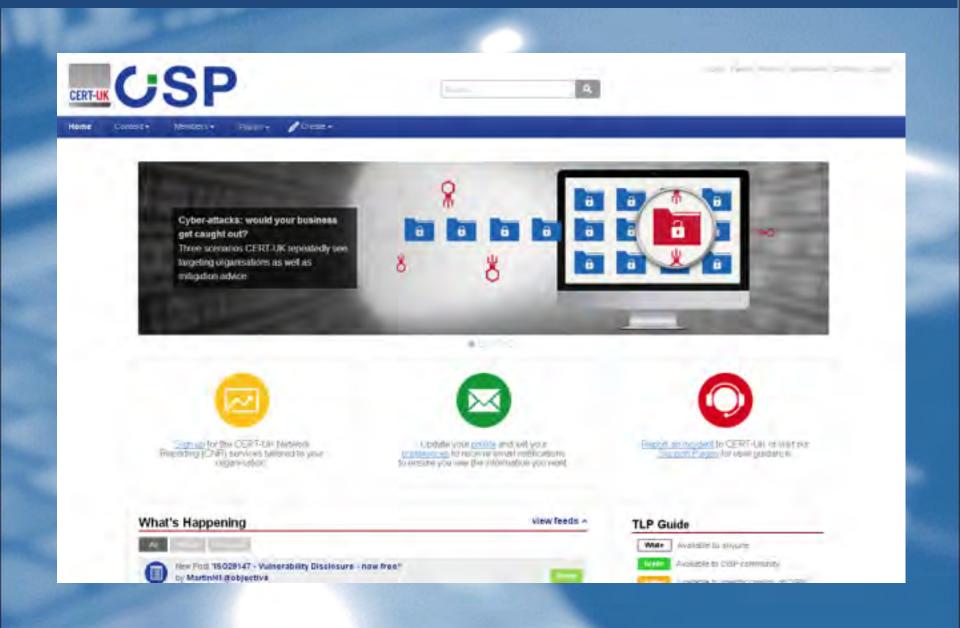
Google Inc

20 August 2015, Enforcement notices, Online technology and telecoms

Action Fraud



Cyber-security Information Sharing Partnership



Key Points

Easy take-aways..

Update your OS (Microsoft/Apple/etc)
Strong different passwords (consider 2FA)
Set AntiVirus to auto-update & scan
Disable macros in Microsoft Office
Control use of USB sockets
Administrator account control
Backup strategy
Upgrade any XP machines

9) EDUCATE YOUR STAFF!!

Thank You

DS Chris Greatorex

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