



**NORTH WEST
REGIONAL
ORGANISED
CRIME UNIT**

Cyber Readiness for schools

Louisa Murphy

CISMP, TAQA, PGCE, BA(Hons)

Regional Cyber Protect Officer

Louisa.Murphy@nwrocu.police.uk



OFFICIAL

UK Law Enforcement Structure



**NORTH WEST
REGIONAL
ORGANISED
CRIME UNIT**



**NORTH WEST
REGIONAL
ORGANISED
CRIME UNIT**



Action Fraud

National Fraud & Cyber Crime Reporting Centre

 actionfraud.police.uk 



**NORTH WEST
REGIONAL
ORGANISED
CRIME UNIT**

2020 Winners

THE NATIONAL CYBER AWARDS

'The Cyber Policing Team of the Year'



UK Cyber Policing



PREPARE

Ensure the necessary capabilities exist to tackle and respond to cyber crime.

PROTECT

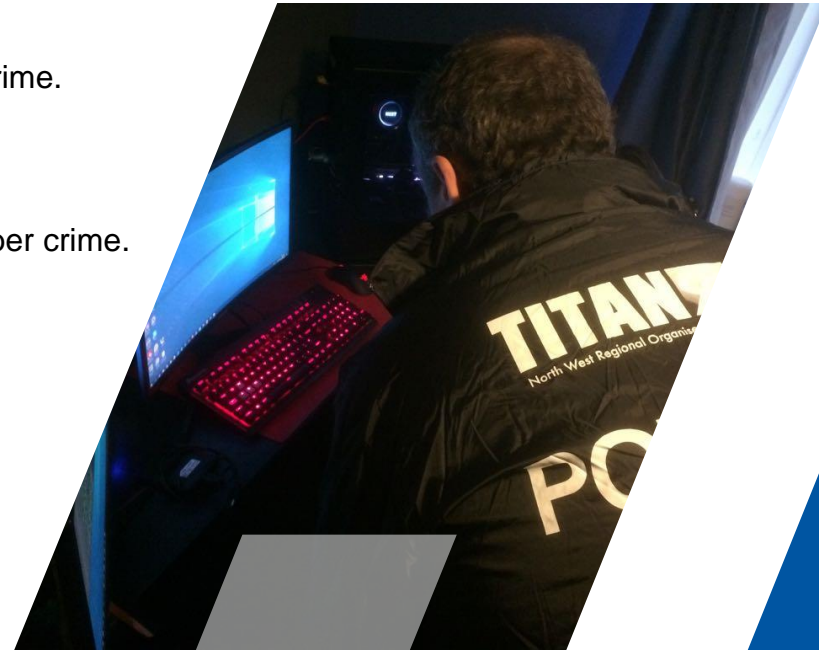
Reduce the vulnerability amongst our communities from the threat of cyber crime.

PREVENT

Prevent people from becoming involved in cyber crime.

PURSUE

Relentless disruption and prosecution of those committing cyber crime.



What is Cyber Crime?



Cyber-Dependant

Cyber-Enabled



Ransomware



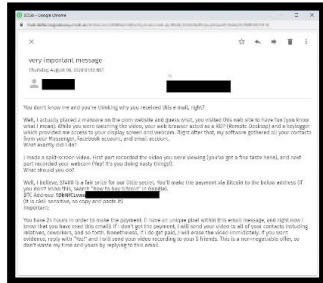
Business Email Compromise



Insider Threat



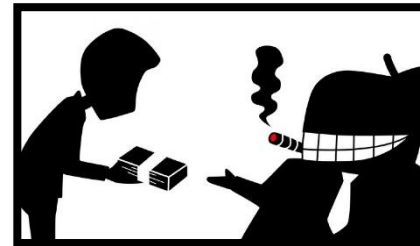
Drug Supply



Sextortion Phishing Email



Compromise



Blackmail



Harassment

Threat Actors



- *Script Kiddies*
- Hackavist Groups
- OCGs
- Advanced Persistent Threat (often state sponsored)
- State Actors



Main Cyber Crime Trends



- Social Media account compromise for purposes of fraud
- Ransomware infections, often delivered via RDP
- Sextortion phishing
- SIM swapping

Social Media Account Compromise

OFFICIAL



**NORTH WEST
REGIONAL
ORGANISED
CRIME UNIT**

- 5150 reports to Action Fraud in 2019/20
- Facebook most popular platform to takeover, followed by Instagram and Snapchat.
- Majority of reports from females ages 20 – 29 years old



Social Media Account Compromise

OFFICIAL



**NORTH WEST
REGIONAL
ORGANISED
CRIME UNIT**

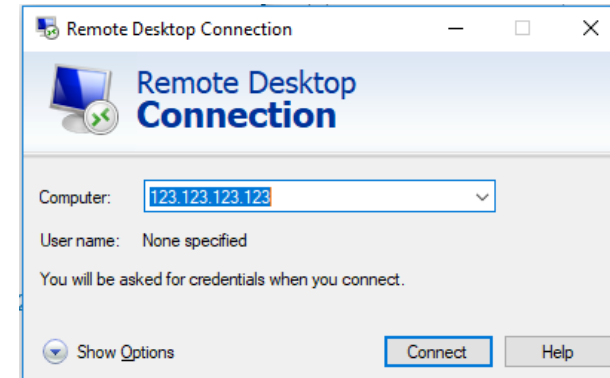
Various distinct suspect motivations:

- Personal amusement and challenge
- Financial gain and fraud
- Revenge
- Domestic Abuse (Coercive Controlling Behaviour)
- ID theft
- Facilitating sextortion (typically occurring on Snapchat)
- To promote extremist material
- To facilitate money muling

Ransomware Infections

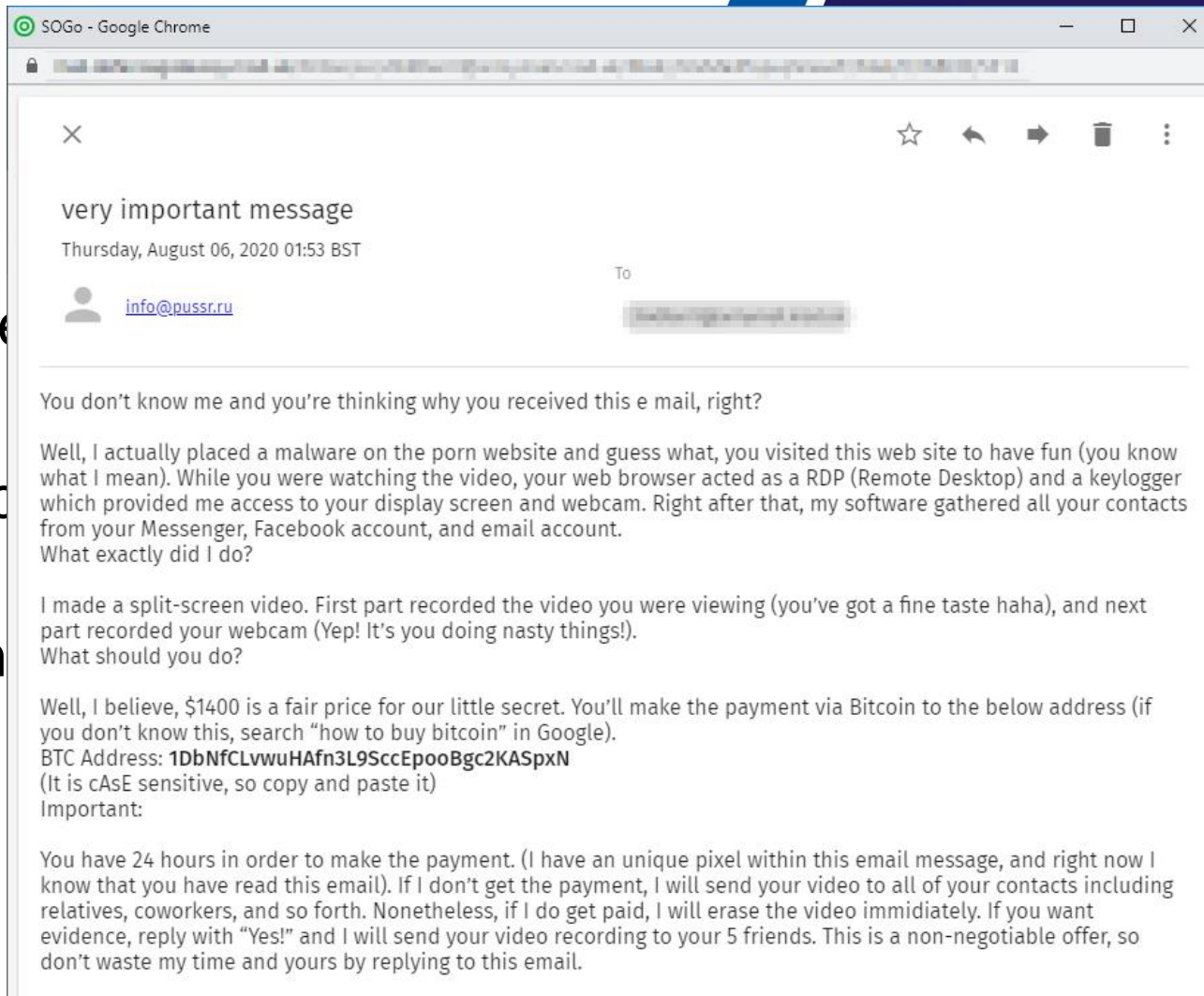


- Targeting businesses that are wholly reliant on networked infrastructure and have sufficient assets to pay ransoms
- Ransoms have been as large as £4.2 million
- Attackers now steal data before dropping ransomware and hold this to ransom as well



Sextortion

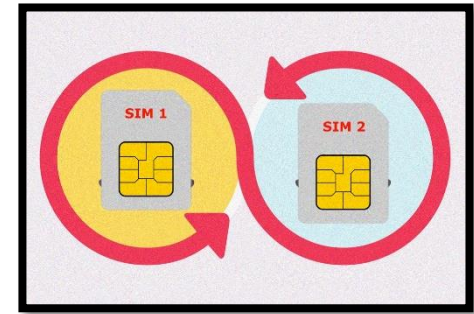
- 200 reports per week
- Ransoms between \$1000-\$10000
- Contain pseudo-technical details
- Vary from webcam blackmail to phishing emails



Sim Swapping



- Usually High Value targets
- Social Engineered for detailed information
- Convince phone company port the phone number onto a new phone/SIM
- Upsurge in cases, mostly for purposes of bypassing 2FA
- Or gain info to request OTT(P)



Password Spraying



Most used in total	Names	Premier League football teams	Musicians	Fictional characters
123456 (23.2m)	ashley (432,276)	liverpool (280,723)	blink182 (285,706)	superman (333,139)
123456789 (7.7m)	michael (425,291)	chelsea (216,677)	50cent (191,153)	naruto (242,749)
qwerty (3.8m)	daniel (368,227)	arsenal (179,095)	eminem (167,983)	tigger (237,290)
password (3.6m)	jessica (324,125)	manutd (59,440)	metallica (140,841)	pokemon (226,947)
111111 (3.1m)	charlie (308,939)	everton (46,619)	slipknot (140,833)	batman (203,116)

Credential stuffing



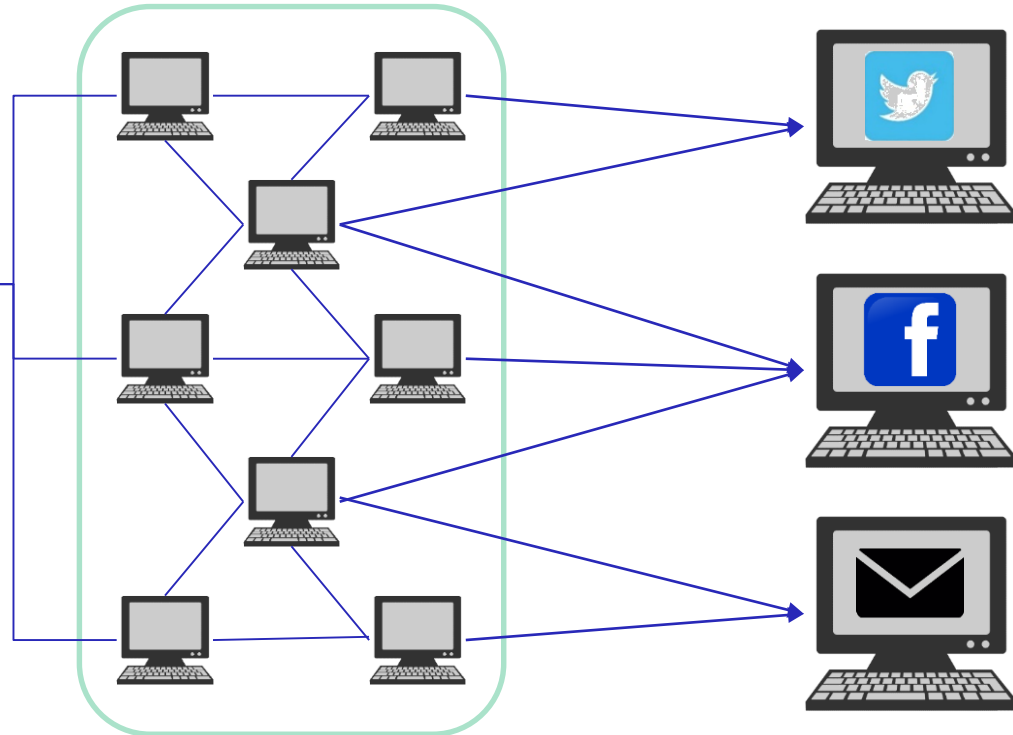
**NORTH WEST
REGIONAL
ORGANISED
CRIME UNIT**

Check if your Email & Password
have been leaked:
haveibeenpwned.com



Email	Password	Twitter	Facebook	Email
VickyS97	Password1	✓	X	✓
NCage44	abc123	✓	✓	✓
TCook14	ManUtd66	✓	X	X
JEward47	Maroon5	X	X	✓

Botnet





FREE STUFF for Schools

It's the simple things that make the difference

Planning & Exercising

OFFICIAL



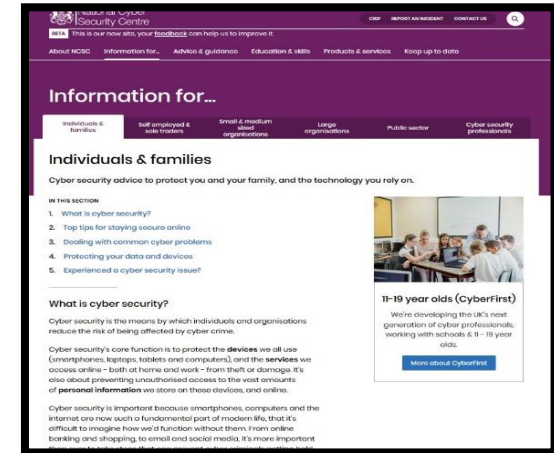
**NORTH WEST
REGIONAL
ORGANISED
CRIME UNIT**



Decisions & Disruptions Lego Based Cyber Exercise



Exercise in a box



www.ncsc.gov.uk

Does your school have a Cyber Incident Response Plans?

National Cyber Security Centre

About NCSC Information for... Advice & guidance Education & skills Pro


Home > Cyber Security for Schools

Education & skills

Schools Higher education Professional skills & training Working with NCSC

Cyber Security for Schools

Practical resources to help schools improve their cyber security.



ON THIS PAGE

1. [Governing boards and senior leaders](#)
2. [School staff](#)
3. [School IT: admin teams, procurers & providers](#)
4. [Other useful resources & advice](#)
5. [Reporting a school cyber incident](#)

Cyber security should be high on the agenda for any school with a reliance on IT and online systems.

We have produced a number of downloadable resources for everyone working with schools, aimed at:

Governing boards and senior leaders

Cyber security in schools: questions for governors and L...
Questions for the governing body and trustees to ask each...

INFORMATION

Board Toolkit
Resources designed to encourage essential cyber security...

GUIDANCE

NCSC Cyber Security for Schools

OFFICIAL



**NORTH WEST
REGIONAL
ORGANISED
CRIME UNIT**

1. Cyber security in schools: questions for governors and trustees
2. School Staff – resources for Schools
3. School IT: admin teams, procurers & providers
4. Other useful resources & advice
5. Reporting a school cyber incident

<https://www.ncsc.gov.uk/section/education-skills/cyber-security-schools>

National Cyber Security Centre **NEN** The Education Network

Cyber security in schools:
Practical tips for everyone working in education



Advice to keep you and your family safe online (and your workplace)

OFFICIAL



**NORTH WEST
REGIONAL
ORGANISED
CRIME UNIT**



Create a separate password for your email account



Create a strong password using three random words



Save your passwords in your browser



Turn on two factor authentication for important accounts



Update your devices regularly (ideally set them to automatically update)



Back up important data

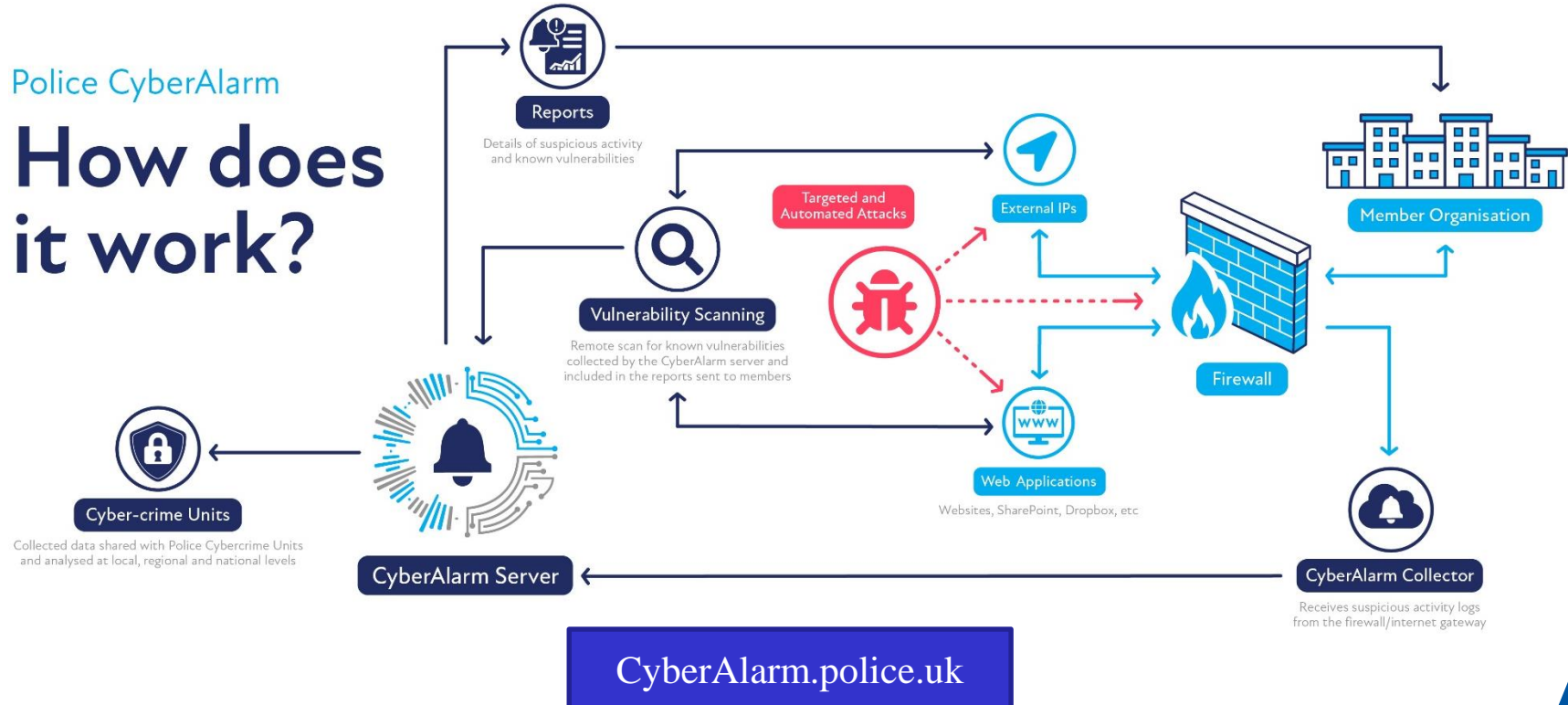
Police CyberAlarm



**NORTH WEST
REGIONAL
ORGANISED
CRIME UNIT**

Police CyberAlarm

How does it work?



Reporting

OFFICIAL



Cyber Crime or Fraud

If you have been scammed, defrauded or experienced crime (computer based crime) report it immediately to Action Fraud.

Action Fraud

National Fraud & Cyber Crime Reporting Centre

■■■■ actionfraud.police.uk ■■■■

0300 123 2040

Phishing or Vishing

Phishing

If you receive an email you are unsure about, forward it to the NCSC Suspicious Email Reporting Service (SERS)

report@phishing.gov.uk

Vishing

If you receive a suspicious text, forward it to **7726** (spells SPAM)

Useful Contacts

Louisa Murphy

Regional Cyber PROTECT Officer

0151 777 4393

Louisa.Murphy@nwrocu.police.uk

Keith Terrill

Regional Cyber PROTECT Officer

0151 777 8273

Keith.Terrill@nwrocu.police.uk

OFFICIAL



**NORTH WEST
REGIONAL
ORGANISED
CRIME UNIT**

NWROCU PROTECT Inbox

Titan.Cyber.Protect@nwrocu.police.uk

ActionFraud

National Fraud & Cyber Crime Reporting Centre

❑❑❑ **actionfraud.police.uk** ❑❑❑

0300 123 2040