



THE
**CYBER
RESILIENCE
CENTRE**
FOR THE **WEST MIDLANDS**

**Banbury Businesses and the
Cyber Resilience Centre Network
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Detective Superintendent – West Midlands Cyber Resilience Centre





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Cyber attackers don't target small businesses as they have no spare money – **wrong**

Cyber attackers only want money - **wrong**

32% SME's have suffered cyber attacks in the last year

Average costs in an attack to businesses is ~ £15,300

Most businesses attacked lose data, customer/client details forever

The Threat

Digital Economy worth £400m per day

80% of cyber attacks start in supply chain

£130 Billion lost to consumers annually

Government have graded cyber attacks as a Tier one national security threat

Law enforcement is working in partnership



MailOnline

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Naked photos from thousands of plastic surgery patients including dozens of celebrities and 1,500 Britons are published on the dark web after Latvian clinic was hacked

- Hacking group known as **Tsar Team** broke into servers of Grozio Chirurgija clinic
- They stole more than 25,000 private photos and personal information of clients
- The clinic's patients include people from Germany, Denmark, Norway and the UK
- Victims were told to pay as much as €2,000 to guarantee material is kept private
- Do you know a victim of this hacking? Email gareth.davies@mailonline.co.uk



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Businesses say they don't really work on line.....

Do you have a desk top computer? Do you have any business records/files on it?

Do you use a laptop for your business – maybe to send out bills or emails?

Do you use a mobile phone for your business? Are there apps on it such as billing, account managing?

How do you do your banking? On line? How do you do your tax return? On line?

Where do you store your data on performance such as daily or weekly targets?

Where do you have contact lists, including bank details for customers/clients/sub-contractors?

Do you store images or photo's, designs or specifications? If so, where?

Do you have a website for your business? Or Facebook, Instagram, Twitter, TikTok, LinkedIn?



**It's ok... I've got business
insurance...**

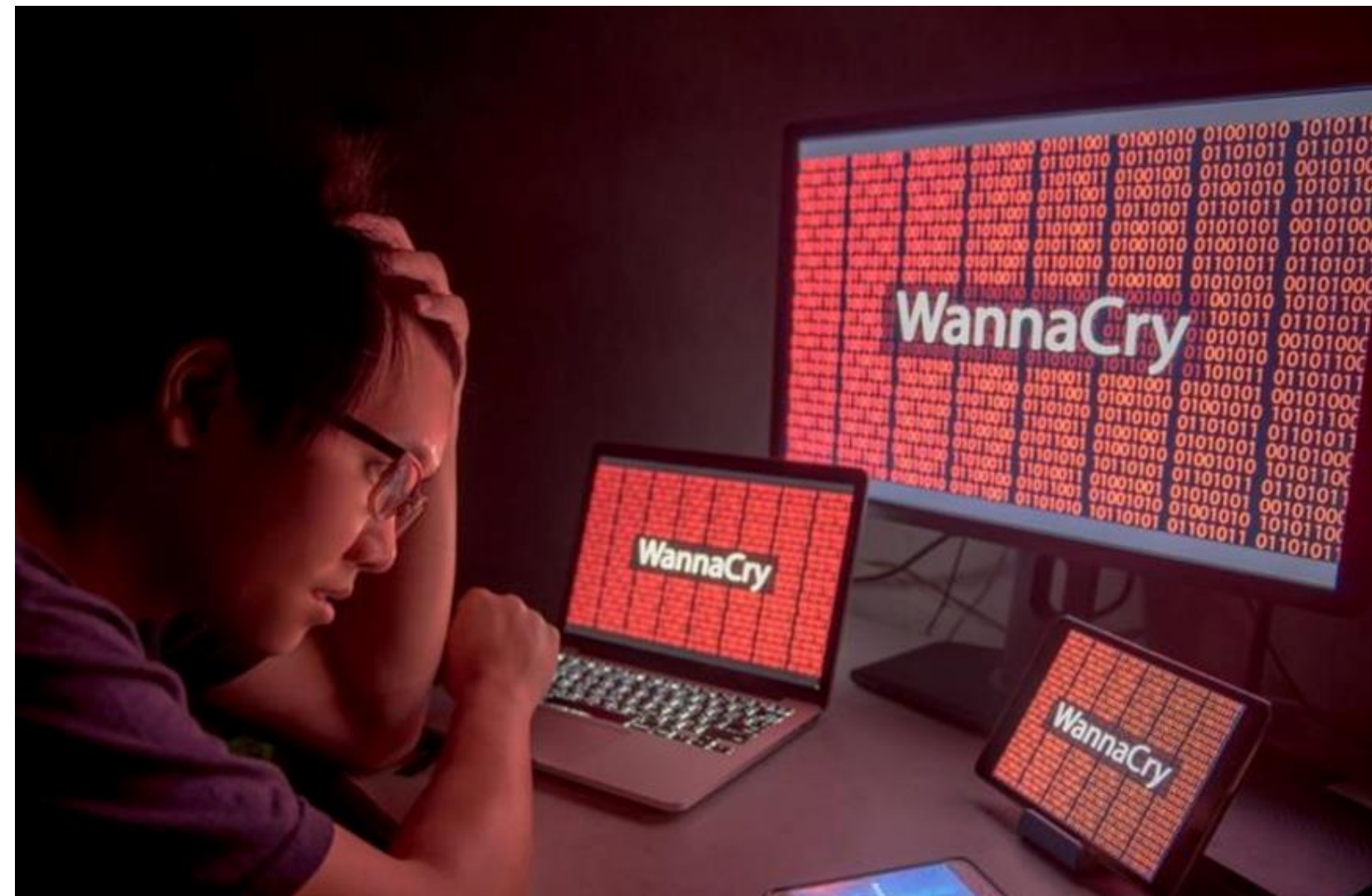


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It's ok... I've got cyber insurance...



The impact of a WannaCry Attack



12 May 2017

53% UK NHS trusts were affected

1200 pieces of diagnostic equipment were infected

19000 cancelled appointments including

£92 million cost



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Business Threat

32% of businesses and 24% of charities had suffered a cyber attack in the last 12 months.
Average cost about **£15,300**

Of those businesses and charities, a quarter experience them **at least once a week**. The most common by far being phishing attacks **~80%**, followed by impersonation.

Covid pushed more business work on line. How many people's home devices have safety measures or software updating on a regular basis?

If you pay ransomware you are more likely to suffer a cyber attack again in the future.



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The scale of the threat?

Who commits Cyber attacks?

- Bitter ex employees
- Teenagers with nothing better to do
- Disenfranchised “keyboard warriors”
- Fraudsters
- International fraudsters
- Anarchists
- State actors - Ukraine



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Questions to ask a business:

How would you rate your business out of 10?

1. Who do you talk with about cyber security? – *Your IT provider only*
2. What business continuity plans do you have? – *Fire, flooding and theft plans.*
3. What policies do you have in place to protect your business?
Remote working and BYOD
4. What safety mechanisms do you use to protect your business? (ie password changes, encryption, MFA, etc..)
5. What due diligence do you carry out on your website, internet presence, Facebook, Twitter, etc..?
6. What understanding do your staff have of cyber safety?

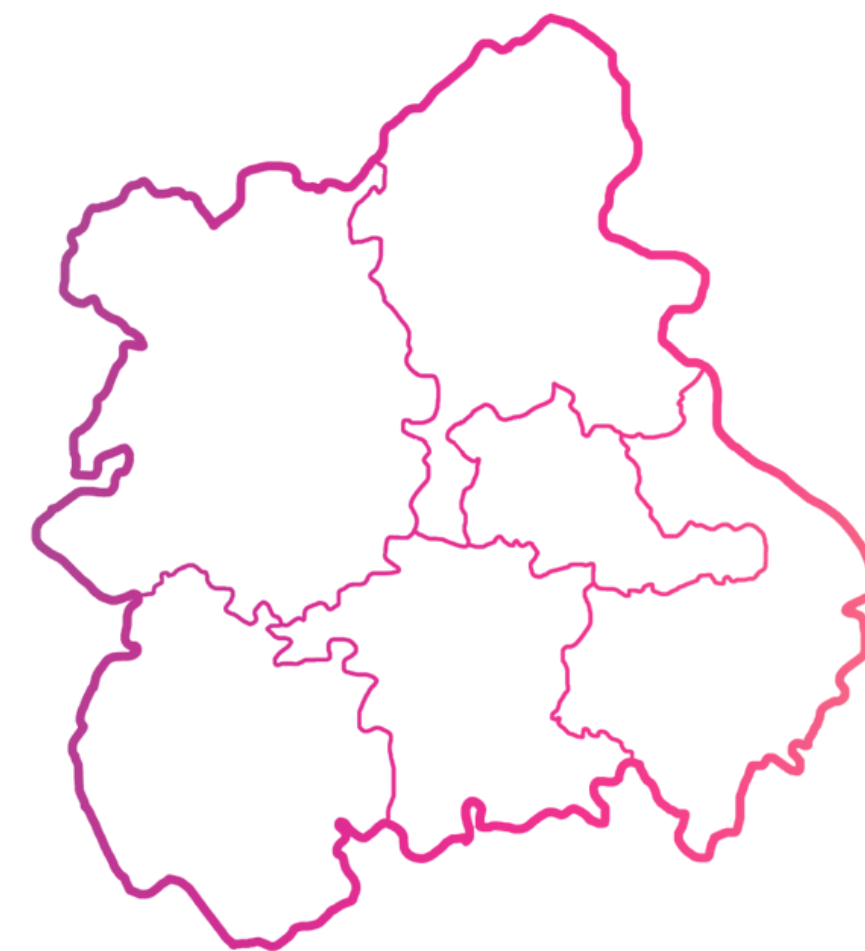


What are the Cyber Resilience Centres?

The [Regional Centres - National CRC Group](#) provide cyber security guidance and cyber resilience services to businesses of all sizes across the every region in England and Wales.

We are Police led, home office funded and not for profit.

Each CRC provides a “Go to” service of cyber security advice, guidance, support, partnership and affordable cyber security services.



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Your local CRC's

South East Cyber Resilience Centre [Free Information Pack | The Cyber Resilience Centre for the South East \(secrc.police.uk\)](#)

East Midlands Cyber Resilience Centre [Membership | The Cyber Resilience Centre for the East Midlands \(emcrc.co.uk\)](#)

West Midlands Cyber Resilience Centre [Membership | Cyber Resilience Centre for the West Midlands \(wmcrc.co.uk\)](#)



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Call to action – Free Core Membership

NCSC Guidance

How organisations can protect themselves in cyberspace, including the 10 steps to cyber security from the Government NCSC division.

NCSC Board Toolkit

Resources designed to encourage essential cyber security discussions between the Board and their technical experts.

NCSC Exercise in a Box

A free online tool from the NCSC which helps businesses test and practise their response to a cyber-attack.

Free Business Consultation

30 minute consultation with the WMCRC Head of Cyber & Innovation and Services & Membership Advisor to review your current cyber security operations.

E-news

Regular digestible updates relevant to West Midlands businesses and charities about cyber resilience.



Getting the basics right – Ten Easy Steps

1 – Back up your data – which ever way is best for your organisation - essential for attacks and accidents such as fire, flooding or theft of devices. Good Data housekeeping



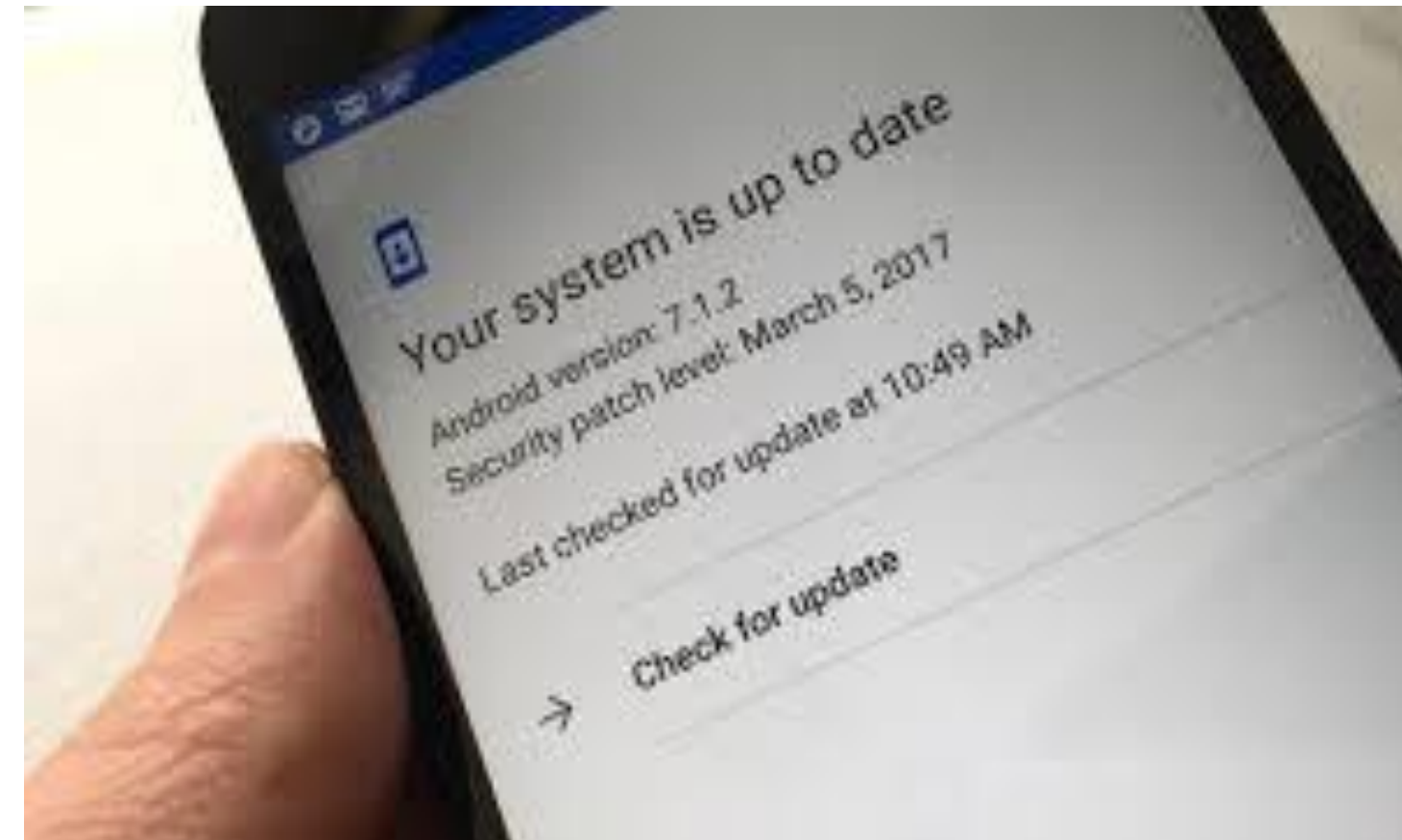
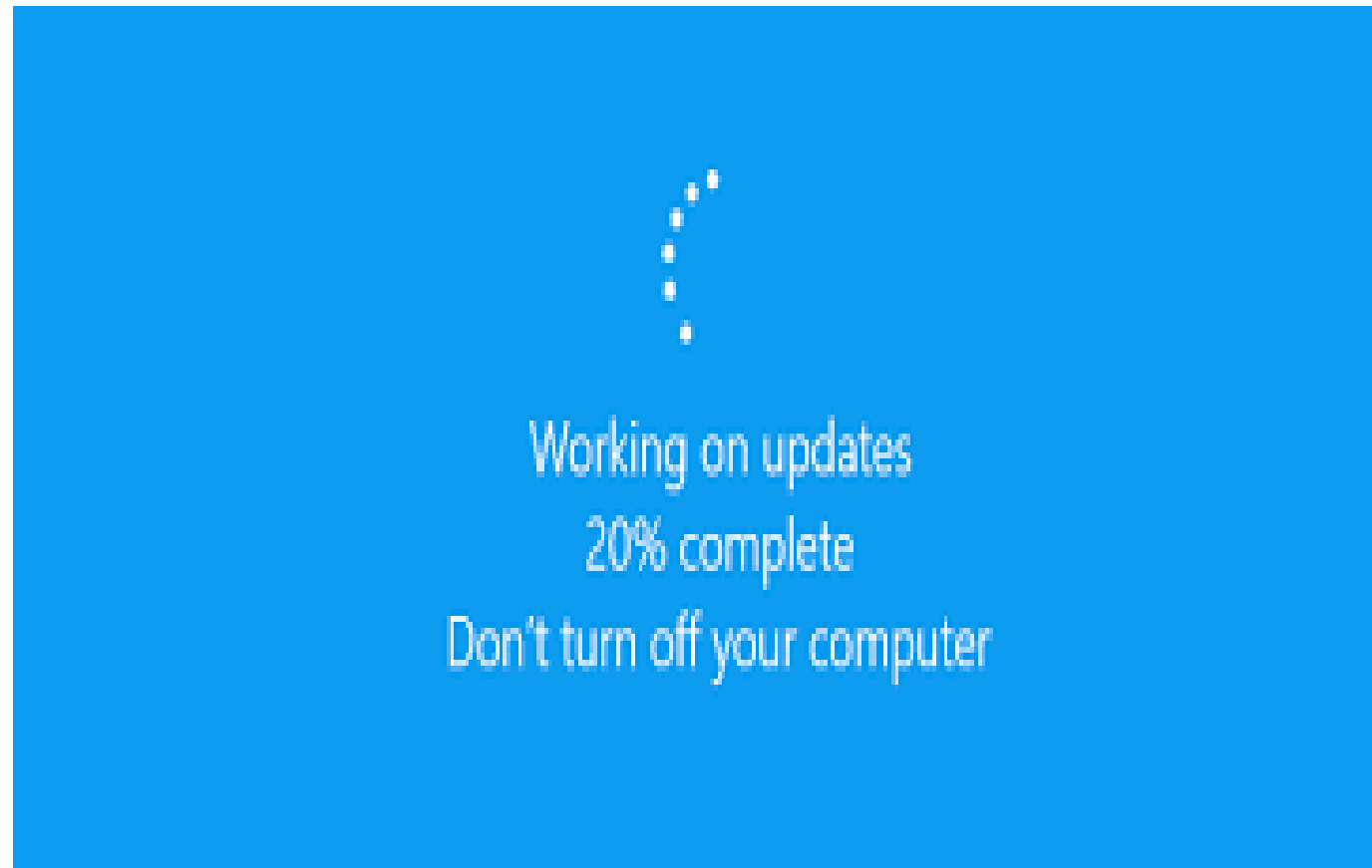
The CRC can help your clients – Ten Easy Steps

2 – Protect from Malware - turn on and update anti virus software



The CRC can help your clients – Ten Easy Steps

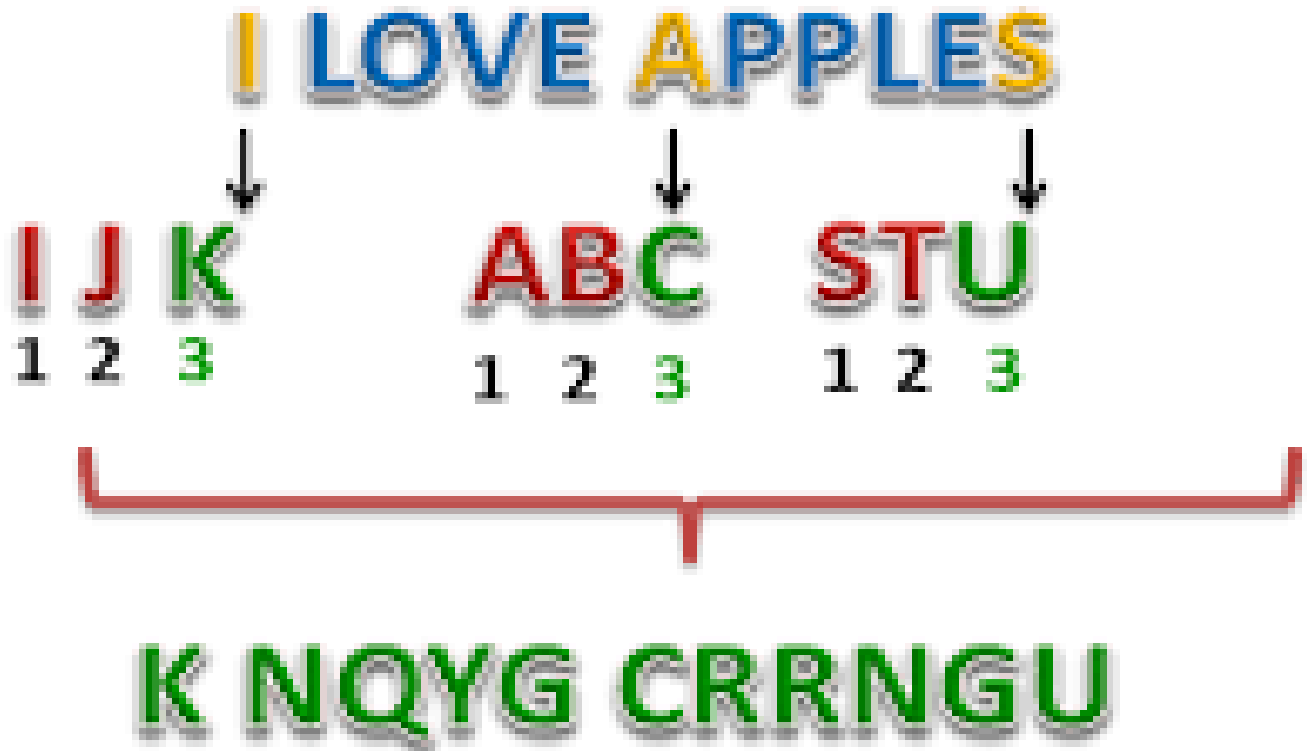
3 – Keep your IT up to date – old devices will not have updates and become more vulnerable as time goes by



The CRC can help your clients – Ten Easy Steps

4 – Switch on encryption – this will keep what you are doing/sending secret from others

Key: Replace every letter with 3rd successive letter



```
{  
  "amzn-ddb-map-desc": Binary(b'\x00\x00\x00\x00\x00\x00\x10amzn-ddb-env-alg  
\x00\x00\x00\xe0AQEBAAHhA84wnXjEJdBb8BylRUFcZZK2j7xwh6UyLoL28nQ  
+0FAAAAH4wfAYJKoZIhvcNAQcGoG8wbQIBADBoBgkqhkiG9w0BBwEwHgYJYIZIAWUDBAEuMBEEDPeFBYdnoJ  
izYl8R8C4M7wAK6E1/N/bgTmHI=\x00\x00\x00\x17amzn-ddb-map-signingAlg\x00\x00\x00\rHmac  
\x00\x00\x00\x11/CBC/PKCS5Padding\x00\x00\x00\x10amzn-ddb-sig-alg\x00\x00\x00\x00etna  
\x00\x00\x00\x00faws-kms-ec-attr\x00\x00\x00\x06*keys*'),  
  "amzn-ddb-map-sig": Binary(b'\xd3\xc6\xc7\n\xb7#\x13\xd1Y\xea\xe4. |^\xbd\xdf\x0  
'binary': Binary(b'!\xc5\x92\xd7\x13\xd1\xe8Bs\x9b\x7f\xa8\x8e\x9c\xcf\x10\x1e)\n  
'example': Binary(b'b\x933\x9a+s\xfb1\xd6a\xc5\xd5\x1aZ\xed\xed6\xce\xe9X\xfb0T\x0c  
'numbers': Binary(b'\xd5\xa8\td\xcc\x85\xfb5\x1e\xb9-f|\xb9\xb8\x8a\x1aT\xbaq\xfb7  
'partition_attribute': 'value1',  
'sort_attribute': 55,  
'test': 'test-value'  
}
```



The CRC can help your clients – Ten Easy Steps

5 – Control/reduce the use of USB sticks/removeable media – especially free USB sticks!



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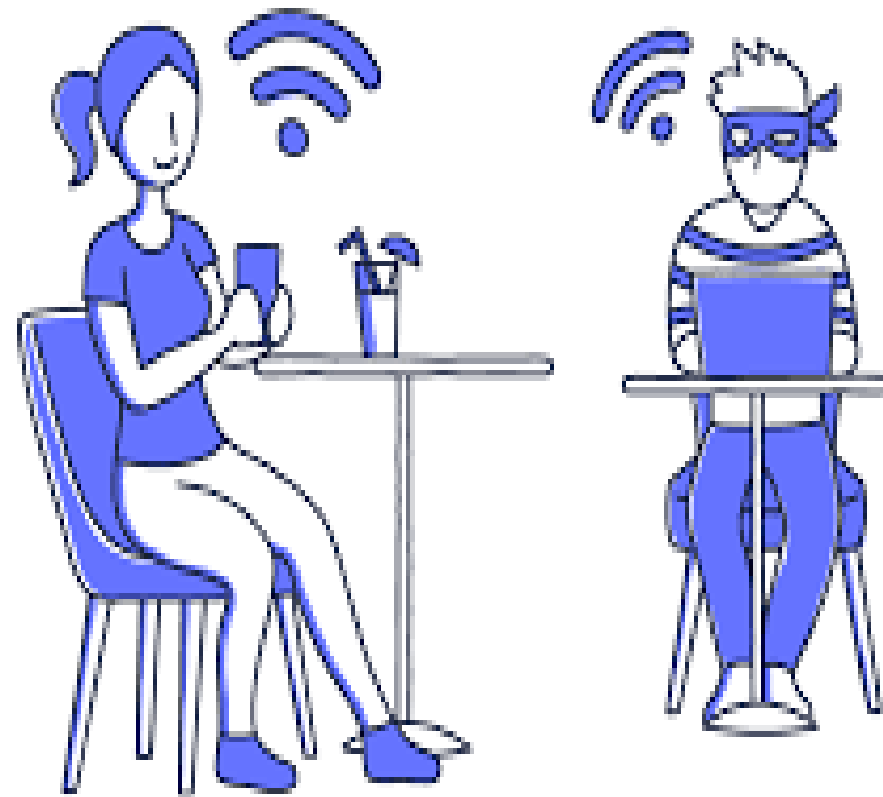
6 – Keep your devices safe, ensure they can be tracked and able to be locked and wiped if needed



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The CRC can help your clients – Ten Easy Steps

7 – Public Wi-Fi – something free that’s not good for you. Hackers intercept + see what you’re doing



MAN-IN-THE-MIDDLE ATTACK



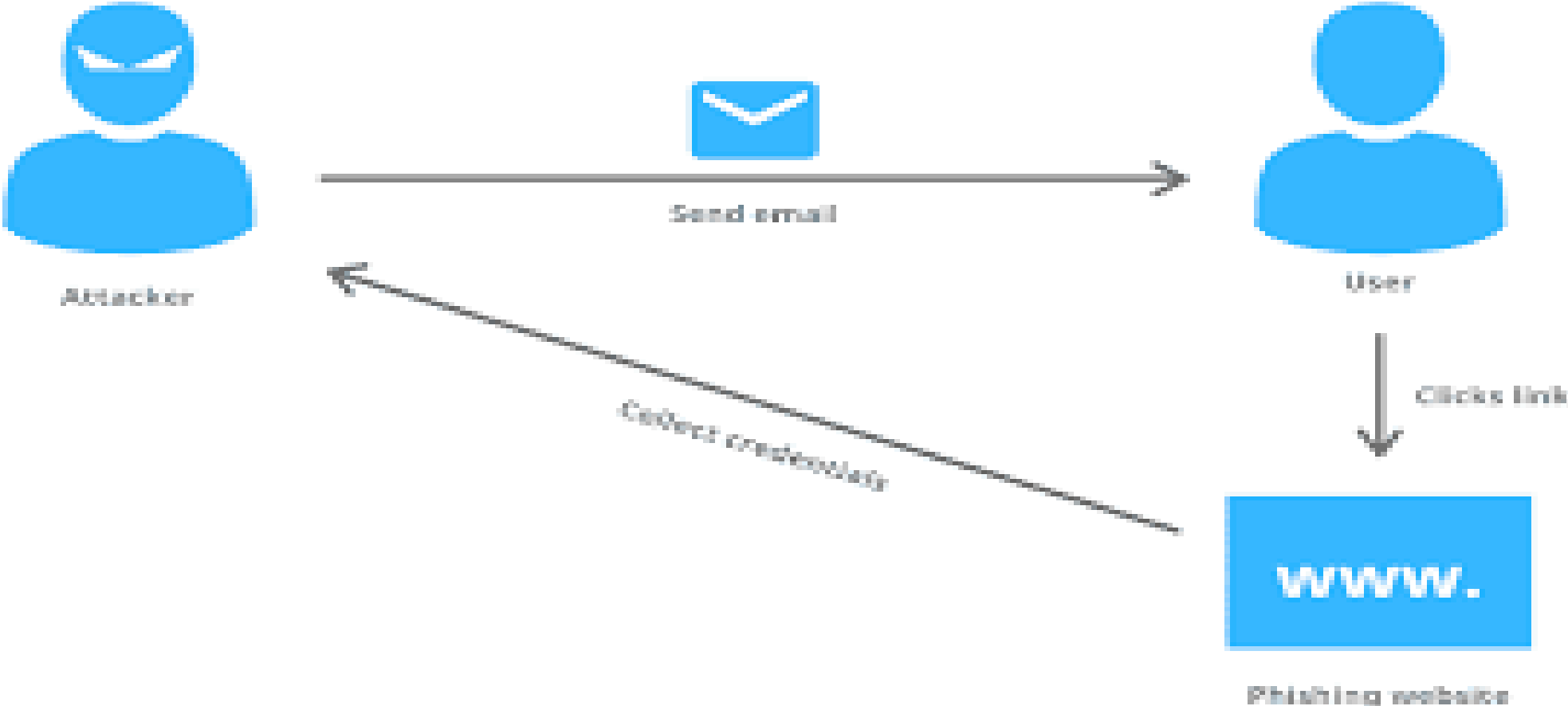
The CRC can help your clients – Ten Easy Steps

8 – Strong and regular password usage is free and effective security – Three random words and Password Managers



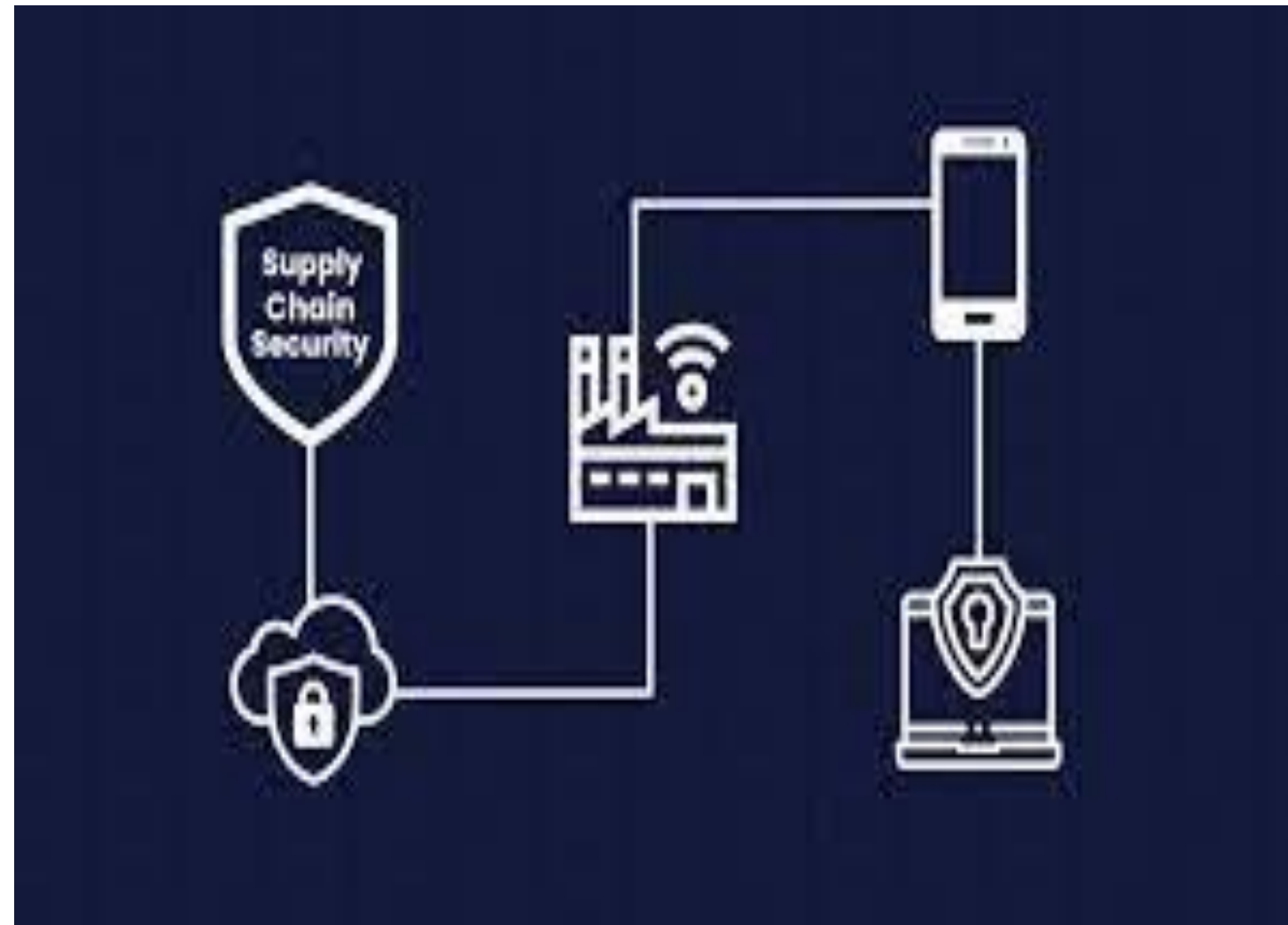
The CRC can help your clients – Ten Easy Steps

9 – Phishing attacks – urgent requests for money, offers too good to be true, click here, delivery. Ensure all staff are effectively trained and on the look out to help your business against this growing method of cyber attacks on businesses.



The CRC can help your clients – Ten Easy Steps

10 – Supply chains can be attacked by hackers to get to bigger companies. Have policies in place to stop bad practice



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Use our affordable, relevant services

Individual Vulnerability Assessment

Find out how much damage an attacker could do if they did manage to breach your network or launch an attack from the inside.

Remote Vulnerability Assessment

We can scan your network remotely, like an attacker might, and see if there are obvious weaknesses present which they might choose to exploit.

Corporate Internet Discovery

Find out what information an attacker can gather about your business and how it can be used in a cyber-attack.

Individual Internet Discovery

Find out what exists online about you and your team, and how it could be used in an attack.

Web Application Vulnerability Assessment

How secure is your website? Does it contain vulnerabilities just waiting to be exploited? Our assessments can help identify these weaknesses so you can fix them.

Cyber Business Continuity Exercise

Practical scenario-based exercises tailored for your organisation to test your business continuity plan and your recovery plan in the event of an attack.

Our Cyber Services (Continued)

Security Awareness Training

Ensure your staff are aware of the risks associated with cyber and how to protect themselves and your business. The training is focused on those with little or no cyber security or technical knowledge.

This one is particularly popular and effective. Your people are often your biggest vulnerability.

Security Policy Review

Find out how robust your current cyber security policies are and what you can do to improve them.

Trusted Partner Resource

Trusted Partner resource will be used to fill temporary resource gaps, support extended resource requirements to support projects or during incident response.



I will leave you with this thought...

- [Live Cyber Threat Map | Check Point](#)
- With all of those attacks going on, it only takes one successful attack on your clients organisation for the devastation to begin
- Now you know where there is free help – spread the word



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Join the WMCRC today. Be “in the know”. Help your clients to also “be in the know” - chat about cyber concerns. Book a slot.

Vanessa Eyles

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West Midlands Cyber Resilience Centre
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