

# Cyber Survival Guide: Basics

PROTECT YOURSELF AND YOUR ORGANIZATION

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# Perception

- Security is expensive, with no tangible benefit
- My IT guy knows what he's doing
- Security is inconvenient
- Security slows down business
- I have nothing to hide and no secrets
- We're just a small business, no-one is going to attack us
- The UAE is safe
- Our developers look after all the security stuff



# Reality

- Scammers actively target small businesses
  - Lack of controls = easy target
  - ▶ Less chance of being hunted down by the authorities
- Your money is just as desirable as from a large business
- Small business losses are proportionally larger than for large businesses
  - ▶ 60% of small businesses that pay a ransom or are defrauded fail within 6 months
- It's orders of magnitude cheaper to prevent issues than to recover from them
- Your IT guy is a generalist, not a specialist
- Developers have a narrow field of specialism. You wouldn't ask a cardiologist to do brain surgery.



# Strong Authentication on everything

- Passkeys. Considered to be phishing resistant
  - Stored in physical hardware
    - Yubikey
    - OS based
- Time based One Time Password (TOTP)
  - Microsoft Authenticator, Google Authenticator
  - ► Code changes every 30-60 seconds
- Long complex passwords
  - Use a trusted password manager
    - ▶ Bitwarden, Lastpass, 1Password...
    - ▶ NOT the password manager built into your OS or browser
- Avoid SMS based OTPs where possible



# Secure your email

- ► Email is involved in over 90% of all cyber attacks
- DMARC with a reject policy helps stop impersonation attacks (spoofing)
- Strong Authentication makes password guessing & leaked credential attacks far less likely to succeed
- Utilize a 3rd party email scanning service to block many phishing and malware attacks
- Phishing Awareness



# Phishing Awareness

- Messages require you to follow a link to sign in to something
- Unexpected invoices
- "Our bank account has changed"
- Links in emails from banks
  - Banks NEVER include a link to their service
- Something is held in customs / needs payment for delivery...
- Central Bank, Police, etc.
- Urgency, Authority, and Fear are common themes
  - Problem & pressure
  - ► Central Bank, Police, etc
  - ▶ The boss requesting that you buy something like vouchers etc and send the codes
- QR codes in emails



# Messaging Safety

- NEVER send credit card details over email
- NEVER share OTPs
- If in doubt, Call the supposed sender using a number that you KNOW is correct and verify with them.
  - ▶ NEVER use the contact details in a suspect message
  - Couriers are always happy to accept payment for any customs, delivery charges on delivery.



# Data Safety

- Don't store or share data on USB drives etc.
  - ► The cloud is safer and more convenient when protected with strong authentication
  - ▶ Use the cloud storage that is bundled with M365 / GWS.
- Check your shared data permissions regularly
- Backup your data
  - Protects against accidents and malicious actions
  - Use trusted automatic backup solutions
  - Cloud data is NOT backed up by the provider



#### Malware

- ► ALWAYS use good anti-malware (anti-virus) software
  - ▶ Free Microsoft Defender is good. The commercial version is better, and may be included in your M365 subscription.
  - Crowdstrike Falcon and other commercial managed XDR services.
  - Don't use free 3rd party anti-malware software
- Macs are also affected by malware
- Use a DNS filtering service such as NextDNS
- Your email filter service must include with a malware and URL filter
- ► NEVER install cracked software It usually includes malware or vulnerabilities.
- Enable auto-update on everything
- Don't use public WiFi use mobile data



#### Mobile Devices

- Use biometrics
- Use at least a 6 digit PIN
- Restart them at least every week
- Enable automatic updates for the OS and for apps
- ONLY install apps from the official app store
  - Don't sideload apps
  - Don't install unecessary/novelty apps
  - Check the app permissions before installing
  - Delete unneeded apps
- ▶ DO use Google/Apple/Samsung pay instead of credit cards
- Never hand the phone to someone else for payment



# Stay invisible

- Don't expose internal systems to the internet
  - NAS (Network Attached Storage)
  - ► PBX Systems
  - ▶ Remote control software
- ▶ If you can access it from the internet, so can the bad guys.



# Keep a clear desk

- ▶ Don't leave stuff lying around on desks etc.
  - Keys
  - ▶ USB drives
  - ▶ Laptops, phones, tablets...
  - Notebooks
  - Documents



#### Don't over-share

- Don't share travel details on social media. Wait until you get back.
- Don't share photos from inside the office.
  - ▶ A lot can be gained from an innocent office photo
    - Screens
    - Documents
    - Security cameras
    - ▶ Whiteboards/flipcharts
    - Post-it notes



# Loose Lips Sink Ships

- ▶ Don't have confidential discussions in public, including on the phone
  - ▶ You're not a Kardashian. NEVER use the speaker on the phone in public.
- Don't view/edit anything confidential in public
  - ▶ Planes, Airports, Coffee shops...
  - Privacy filters are security theatre and are susceptible to shoulder surfing
- Beware of cameras
  - ▶ Phones, CCTV...



# Summary

# You're not paranoid if they're really out to get you



# Contact Details



Andrew's LinkedIn



Cyber Warden LinkedIn



Andrew's Contact



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