Cybersecurity for Local Governments and Schools A Weekly Cybersecurity Awareness Month Web Series NYS COMPTROLLER THOMAS P. DINAPOLI

Week 3 - Wireless Technology and Security Sarah Bowser, Municipal Auditor Division of Local Government and School Accountability NYS COMPTROLLER THOMAS P. DINAPOLI

Agenda

- Review IT Contingency Planning
- Wireless Technology Overview
- Wireless Technology Concepts
- Best Practices



Review of IT Contingency Planning

- What is IT contingency planning?
- IT contingency planning's impact on unplanned IT disruptions
- IT contingency planning best practices
- Business continuity plans and disaster recovery plans
- Backup procedures
- Backup procedure preventive controls
- Backup procedure best practices



Overview of Wireless Technology

- Wireless technology has changed how computers and devices communicate and access the Internet.
- The threats and vulnerabilities are many of the same that affect wired networks.
- Security weakness can expose internal network resources to additional cybersecurity threats.



Wireless Technology Concepts

Types of Wireless Technology

- Radio
- Cellular
- Wireless local area networks (WLAN)

Wireless local area networks use access points (APs) that are physically connected to the local area network (LAN).



Best Practices

Adopt wireless policies and procedures

- Critical or sensitive data
- Unauthorized access points
- Virtual Private Networks (VPN)
- Users

Access Points

- Location and broadcast power
- Inventory and monitoring



Best Practices

Service Set Identifier (SSID) Naming

- Change default name
- Exclude identifiable information

Passwords

- Access
- Default administrative



Best Practices

Encryption

- 1997 Wired Equivalent Privacy (WEP)
- 2003 Wi-Fi Protected Access (WPA)
- 2004 Wi-Fi Protected Access 2 (WPA2)
- 2018 Wi-Fi Protected Access 3 (WPA3)

Updates and Patches

- Newer devices
- Older devices



Office of the State Comptroller https://www.osc.state.ny.us/files/localgovernment/publications/pdf/wireless-technology-and-security.pdf Multi-State Information Sharing & Analysis Center (MS-ISAC) https://www.cisecurity.org/resources/70-ms-isad National Institute of Standards and Technology (NIST) https://nist.gov New York State Office of Information Technology Services (NYS ITS) https://its.ny.gov Cybersecurity and Infrastructure Security Agency (CISA) https://www.cisa.gov

Sneak Peek - Week 4

Ransomware

- What is ransomware?
- · Headline examples
- What is the impact?
- What can you do to lower your risk of becoming a victim of ransomware?



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Thank You



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