

IT ESSENTIALS V. 4.1

Module 9

Fundamental Security

- Who is affected by a lapse in security?
- How can a network or computer be harmed?
- What are the primary responsibilities of a technician?
- What is a physical threat?
- What is data threat?
- What is an internal threat?
- What is a malicious threat?
- What is an external threat?
- What is an unstructured threat?
- What is a structured threat?
- What is a virus?
- How are viruses transferred?
- What is the most damaging type of virus?
- What is a stealth virus?
- What is a worm?
- Why is a worm harmful?
- What is a Trojan?
- What is anti-virus software?
- How can the technician keep the anti-virus software up to date?
- Why is web security important?
- What is ActiveX?
- What is Java?
- What are examples of JavaScript?
- What is adware?
- What is grayware?
- What is phishing?
- What is spyware?
- What is denial of service?
- What are two common DoS attacks?
- What is a zombie?
- What is spam?
- What are common indicators of spam?
- What is a social engineer?
- How can you protect against social engineers?
- What is a SYN flood?
- What is spoofing?
- What is a man-in-the-middle attack?
- What is a Replay attack?
- What is DNS poisoning?
- What is hardware destruction?
- What are the three methods commonly used to destroy or recycle data and hard drives?
- What is data wiping?
- How can you fully ensure that data cannot be recovered from a hard drive?
- How often should security plans be reviewed?
- What questions should be covered in a basic security policy?
- Who is responsible for security?
- What are the recommended password guidelines?
- What is the Trusted Platform Module (TPM)?
- How can you protect the access to your facility?
- What are the two levels of password protection that are recommended?
- What password will prevent the operating system from booting?
- What is a lockout rule?
- What is a VPN connection?
- How does a VPN protect data?
- What is traffic?
- What is a software firewall?
- When should backups be made?
- Where should backups be stored?
- What is a smart card?
- What is biometric security?
- What is a profile?
- Which file system offers journaling and encryption capabilities?
- What utility do you run to convert from Fat32 to NTFS?
- What are the basic security settings that should be configured on a wireless router or access point?
- What is the SSID (service set identifier)?
- What is the first generation security for wireless?
- Which wireless encryption supports robust encryption provides government grade security?
- Which wireless security protocol was created by Cisco?
- What is WTLS (Wireless Transport Layer Security)?
- What are the steps to update a signature file?
- What do virus, spyware, and adware detection programs look for?
- What are the code patterns called?
- In order to ensure that the update is authentic and not corrupt, where should you retrieve the signature files from?
- What are mirrors?
- Where do you get the tools necessary to remove viruses and repair the computer code that has been modified?
- What are patches?
- What is a service pack?
- What are the steps in the troubleshooting process?
- What can you do if a user is receiving hundreds or thousands of junk emails each day?
- What can you do if an unauthorized access point is discovered on the network?
- How can you stop user with flash drives from infecting computers on the network?

9.1 Worksheet: Security Attacks

Print and complete this activity.

In this activity, you will use the Internet, a newspaper, or magazines to gather information to help you become familiar with computer crime and security attacks in your area. Be prepared to discuss your research with the class.

1. Briefly describe one article dealing with computer crime or a security attack.

2. Based on your research, could this incident have been prevented? List the precautions that might have prevented this attack.

9.2.1 Worksheet: Third-Party Anti-Virus Software

Print and complete this activity.

In this activity, you will use the Internet, a newspaper, or a local store to gather information about third-party anti-virus software.

1. Using the Internet, a newspaper, or a local store, research 2 different anti-virus software applications. Based on your research, complete the table below.

Company/Software Name Website URL	Software Features Subscription Length (Month/Year/Lifetime) Cost

2. Which anti-virus software would you purchase? List reasons for your selection.

9.4.2 Worksheet: Operating System Updates

Print and complete this activity.

In this activity, you will use the Internet to research operating system updates. Be prepared to discuss your research with the class.

1. Which operating system (OS) is installed on your computer?

2. List the configuration options available for updating the OS.

3. Which configuration option would you use to update the OS? List the reason for choosing a particular option.

4. If the instructor gives you permission, begin the update process for the OS. List all security updates available.

9.5.2 Worksheet: Gather Information from the Customer (Student Technician Sheet)

Print and complete this activity.

Gather data from the customer to begin the troubleshooting process. Document the customer's problem in the work order below.

Company Name: _____
Contact: _____
Company Address: _____
Company Phone: _____

Work Order

Generating a New Ticket

Category _____ Closure Code _____ Status _____

Type _____ Escalated _____ Pending _____

Item _____ Pending Until Date _____

Business Impacting? Yes No

Summary _____

Case ID# _____ Connection Type _____
Priority _____ Environment _____
User Platform _____

Problem Description: _____

Problem Solution: _____

