

Fundamentals of Information Technology Security  
CSEC 1110  
Lab 08

- Contact your instructor with your questions about the assignments.
- The student must insure all the answers are free from any malware.
- The student must ensure all answers are legal as defined by the class syllabus.
- All parts of your answers must be neat and easy to read.
- Paragraphs are at least four properly constructed English sentences.
- Embedding documents within documents does not work with the D2L Bright Space assignments.
- Plagiarism will not be tolerated.
- Unless noted, all lab sections must be done as unprivileged login.
- Labeling answers is highly recommended.

**8. Lab 08: Network of Networks**

- 8.1. Upload each answer to the D2L Bright Space Assignment section 8.1 before the due date found in the csec1110a.pdf document. Submit a Portable Document Format (PDF) or word processing file containing the following.
  - 8.1.1. Provide the grant of permission to collect network traffic on the network. All tests must occur during the permission time. A properly signed permission statement is required for any lab section credit.
  - 8.1.2. Configure host1 as a file server. Provide all the configuration files/settings. This must be an unencrypted setup.
  - 8.1.3. Configure host2 as a client system for host1. Provide all the configuration files/settings.
  - 8.1.4. Provide the Wireshark capture of a file being transferred between host1 and host2.
  - 8.1.5. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used.
  
- 8.2. Upload each answer to the D2L Bright Space Assignment section 8.2 before the due date found in the csec1110a.pdf document. Submit a Portable Document Format (PDF) or word processing file containing the following.
  - 8.2.1. Configure host1 for IPsec. Provide all the configuration files.
  - 8.2.2. Configure host2 for IPsec. Provide all the configuration files.
  - 8.2.3. Provide a log file entry from host1 successfully showing IPsec connection to host2.
  - 8.2.4. Provide a log file entry from host2 successfully showing IPsec connection to host1.
  - 8.2.5. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used.
  
- 8.3. Upload each answer to the D2L Bright Space Assignment section 8.3 before the due date found in the csec1110a.pdf document. Submit a Portable Document Format (PDF) or word processing file containing the following.
  - 8.3.1. Provide the grant of permission to collect network traffic on the network. All tests must occur during the permission time. A properly signed permission statement is required for any lab section credit.
  - 8.3.2. Provide a Wireshark capture of the encrypted file transfer over IPsec between host1 and host2.
  - 8.3.3. Provide a Wireshark capture of the ping command over IPsec between host1 and host2.
  - 8.3.4. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used.
  
- 8.4. Upload each answer to the D2L Bright Space Assignment section 9.1 before the due date found in the csec1110a.pdf document. Submit a Portable Document Format (PDF) or word processing file containing the following.
  - 8.4.1. Provide the grant of permission to port scan on the network. All tests must occur during the permission time. A properly signed permission statement is required for any lab section credit.
  - 8.4.2. Report the scanner system IP addresses and scanner version. The scanner host and target systems may not be the same system. Please label your answer.
  - 8.4.3. Provide the IP address of the host to be scanned.
  - 8.4.4. Report all the findings of an external base port scanner like NMAP against a Windows host utilizing "Intense Scan, all TCP ports". The timestamps must be in Central Time or UTC time. Please label your answer.
  - 8.4.5. For each open port found, explain why it should or should not be open.
  - 8.4.6. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used.