

Enterprise Network Technologies
CPTR 2245
Lab 03

- 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.

3 Lab 03: Compute Engine

- 3.1 Upload each answer to the D2L Bright Space Assignment section 3.1 before the due date found in the 2245a.pdf document. Submit a Portable Document Format (PDF) or word processing file(s) containing the following. Put your answer in a single document.
 - 3.1.1 Provide all the hypervisor settings for a router/firewall installation.
 - 3.1.2 Provide all the router/firewall installation option configuration settings for a virtual machine.
 - 3.1.3 Show your virtual router/firewall installation is current with updates.
 - 3.1.4 Provide the DHCPv4 and DHCPv6 setting for both internal connections.
 - 3.1.5 Provide the Firewall settings for all connections.
 - 3.1.6 Provide the NAT/PAT settings.
 - 3.1.7 Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used.
- 3.2 Upload each answer to the D2L Bright Space Assignment section 3.2 before the due date found in the 2245a.pdf document. Submit a Portable Document Format (PDF) or word processing file(s) containing the following. Put your answer in a single document.
 - 3.2.1 Provide local virtual machine host 01 IP address.
 - 3.2.2 Provide local virtual machine host 01 chrony or similar program to serve NTP on the local network only.
 - 3.2.3 Show host 01 successfully performed time synchronization through your router/firewall.
- 3.3 Upload each answer to the D2L Bright Space Assignment section 3.3 before the due date found in the 2245a.pdf document. Submit a Portable Document Format (PDF) or word processing file(s) containing the following. Put your answer in a single document.
 - 3.3.1 Provide local virtual machine host 2 IP address. The address must be in the same subnet as host01.
 - 3.3.2 Provide local virtual machine host 02 chrony or similar program to get NTP from host 01 only on the local network.
 - 3.3.3 Show host 01 successfully performed time synchronization on the local network.
 - 3.3.4 Provide local virtual machine host 2 IP address. The address must be in a different subnet as host01.
 - 3.3.5 Provide local virtual machine host 02 chrony or similar program to get NTP from host 01 only on the remote network.
 - 3.3.6 Show host 01 successfully performed time synchronization on the remote network.
- 3.4 Upload each answer to the D2L Bright Space Assignment section 3.4 before the due date found in the 2245a.pdf document. Submit a Portable Document Format (PDF) or word processing file(s) containing the following. Put your answer in a single document.
 - 3.4.1 Build in the cloud and provide the cloud settings for a Debian family operating system installation.
 - 3.4.2 Provide all the Debian family operation system installation option configuration settings for a cloud virtual machine.
 - 3.4.3 Show your cloud virtual Debian family operation system is current with updates.
 - 3.4.4 Show your cloud virtual Debian family operating system network settings. (ip a sh).
 - 3.4.5 Show your cloud virtual Debian family operating system hostname is configured to a form of your name. (hostname)
 - 3.4.6 Provide a copy of the firewall settings
 - 3.4.7** Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used