

Enterprise Network Technologies  
CPTR 2245  
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 insure 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.
- All videos must be viewable in the VLC player.

### Lab 08: Cloud Operations

- 8.1 Each part is worth four points for a maximum of twenty-five points. Upload each section answer to D2L Bright Space Assignment section 8.1 before the due date found in the 2245a.pdf document. The text must be readable by the instructor. Submit a Portable Document Format (PDF) or word processing file containing your answers.
- 8.1.1 Provide evidence of successfully completing the following Qwiklabs Quest, Cloud Engineering (5 hours – 12 credits )
- 8.1.1.1 Cloud IAM: Qwik Start
  - 8.1.1.2 Introduction to SQL for BigQuery and Cloud SQL
  - 8.1.1.3 Multiple VPC Networks
  - 8.1.1.4 Cloud Monitoring: Qwik Start
  - 8.1.1.5 Managing Deployments Using Kubernetes Engine
- 8.1.2 Provide the URL showing you earned the badge. If you were not able to finish the quest, explain the troubleshooting you did to resolve the problem(s).
- 8.2 Each part is worth four points for a maximum of twenty-five points. Upload each section answer to D2L Bright Space Assignment section 8.2 before the due date found in the 2245a.pdf document. The text must be readable by the instructor. Submit a Portable Document Format (PDF) or word processing file containing your answers.
- 8.2.1 Provide evidence of successfully completing the following Qwiklabs Quest, Networking Fundamentals in Google Cloud (5 hours – 21 credits)
- 8.2.1.1 VPC Networking Fundamentals
  - 8.2.1.2 HTTP Load Balancer with Cloud Armor
  - 8.2.1.3 Create an Internal Load Balancer
  - 8.2.1.4 HTTP Load Balancer with Cloud Armor
  - 8.2.1.5 Automating the Deployments of Networks with Terraform
- 8.2.2 Provide the URL showing you earned the badge. If you were not able to finish the quest, explain the troubleshooting you did to resolve the problem(s).
- 8.3 Each part is worth eight points for a maximum of twenty-five points. Upload each section answer to D2L Bright Space Assignment section 8.3 before the due date found in the 2245a.pdf document. The file must be human readable text only and must show your login name and all entered commands. Submit a Windows or Unix text file with the appropriate Windows extension.
- 8.3.1 Provide evidence of successfully completing the following Qwiklabs Quest, Exploring Data with Looker (7 hours – Free )
- 8.3.1.1 Looker Data Explorer – Qwik Start
  - 8.3.1.2 Filtering and Sorting Data in Looker
  - 8.3.1.3 Merging Results from Different Explores in Looker
- 8.4 Each part is worth four points for a maximum of twenty-five points. Upload each section answer to D2L Bright Space Assignment section 8.4 before the due date found in the 2245a.pdf document. The text must be readable by the instructor. Submit a Portable Document Format (PDF) or word processing file containing your answers.
- 8.4.1 Provide the disk performance results of a VM on your system.
  - 8.4.2 Provide the disk performance results of a Docker instances on your system.
  - 8.4.3 Provide the disk performance results of a cloud VM.
  - 8.4.4 Provide the disk performance results of a Docker instance in the cloud.
  - 8.4.5 Format the data into an easy to understand format.
  - 8.4.6 In a paragraph or more, explain the performance differences.