Cloud Engineering

Fundamental 5 Steps 5 hours 17 Credits

This fundamental-level quest is unique amongst the other Qwiklabs offerings. The labs have been curated to give IT professionals hands-on practice with topics and services that appear in the Google Cloud Certified Associate Cloud Engineer Certification. From IAM, to networking, to Kubernetes engine deployment, this quest is composed of specific labs that will put your Google Cloud knowledge to the test. Be aware that while practice with these labs will increase your skills and abilities, we recommend that you also review the exam guide and other available preparation resources.

Prerequisites:

This Quest expects familiarity with Google Cloud Services, particularly those in computing and networking. It is recommended that the student have earned a Badge by completing the hands-on labs in the Baseline: Infrastructure and/or the Google Cloud Essentials Quests before beginning. Additional lab experience with the Security and Identity Fundamentals and the Kubernetes In the Google Cloud Quests will be useful.

Quest Outline

Cloud IAM: Qwik Start

Google Cloud IAM unifies access control for Cloud Platform services into a single system to present a consistent set of operations. Watch the short video Manage Access Control with Google Cloud IAM.

| 45 minutes | Introductory | 1 Credit |

Introduction to SQL for BigQuery and Cloud SQL

In this lab you will learn fundamental SQL clauses and will get hands on practice running structured queries on BigQuery and Cloud SQL.

| 1 hour | Introductory | 1 Credit |

Multiple VPC Networks

In this lab, you create several VPC networks and VM instances and test connectivity across networks.

| 1 hour 10 minutes | Advanced | 7 Credits |

Cloud Monitoring: Qwik Start

This lab shows you how to monitor a Google Compute Engine virtual machine (VM) instance with Cloud Monitoring. Watch the short videos Monitor Health of All Your Cloud Apps with Google Cloud monitoring and Monitor a VM Instance with Cloud monitoring, GCP Essentials.

| 50 minutes | Introductory | 1 Credit |

[Managing Deployments Using Kubernetes Engine](#)

Dev Ops best practices make use of multiple deployments to manage application deployment scenarios. This lab provides practice in scaling and managing containers to accomplish common scenarios where multiple heterogeneous deployments are used.

1 hour   Advanced   7 Credits

Quest Complete!

Congrats! You completed this quest and earned a badge. Become a cloud expert and start another.