Cloud Architecture

Fundamental 4 Steps 6 hours 28 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 Professional Cloud Architect](#) 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

[Orchestrating the Cloud with Kubernetes](#)

In this lab you will learn how to provision a complete Kubernetes cluster using Google Container Engine; deploy and manage Docker containers using kubectl; and break an application into microservices using Kubernetes' Deployments and Services.

| 1 hour 15 minutes | Fundamental | 5 Credits |

[Continuous Delivery Pipelines with Spinnaker and Kubernetes Engine](#)

Create a Kubernetes Engine cluster, deploy an application, and use Spinnaker to continuously deploy the application when changes are made to the application.

| 1 hour 30 minutes | Expert | 9 Credits |

[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 |

[Site Reliability Troubleshooting with Cloud Monitoring APM](#)

The objective of this lab is to familiarize yourself with the specific capabilities of Cloud Monitoring to monitor GKE cluster infrastructure, Istio, and applications deployed on this infrastructure.

| 1 hour 30 minutes | Advanced | 7 Credits |

Quest Complete!

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