

Set Up and Configure a Cloud Environment in Google Cloud

Advanced 6 Steps 6 hours 26 Credits

Earn a **skill badge** by completing the **Set Up and Configure a Cloud Environment in Google Cloud** quest, where you learn multiple ways to deploy and monitor applications including how to: explore IAM roles and add/remove project access, create VPC networks, deploy and monitor Compute Engine VMs, write SQL queries, deploy and monitor VMs in Compute Engine, and deploy applications using Kubernetes with multiple deployment approaches.

A skill badge is an exclusive digital badge issued by Google Cloud in recognition of your proficiency with Google Cloud products and services and tests your ability to apply your knowledge in an interactive hands-on environment. Complete this skill badge quest, and the final assessment challenge lab, to receive a skill badge that you can share with your network.

Infrastructure Data Security

Prerequisites:

Prior to enrolling in this skill badge quest, it is recommended that you complete the following quests:

- [Create and Manage Cloud Resources](#)
- [Ensure Access & Identity in Google Cloud](#)
- [Deploy to Kubernetes in Google Cloud](#)

This quest is a great resource for understanding the topics that will appear on for the [Associate Cloud Engineer](#) certification exam.

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

[Set Up and Configure a Cloud Environment in Google Cloud: Challenge Lab](#)

This challenge lab tests your skills and knowledge from the labs in the Kubernetes in Google Cloud quest. You should be familiar with the content of the labs before attempting this lab.

1 hour

Expert

9 Credits

Quest Complete!

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

