Cloud SQL

Fundamental 7 Steps 7 hours 36 Credits

Cloud SQL is a fully managed database service that stands out from its peers due to high performance, seamless integration, and impressive scalability. In this fundamental-level quest, you will receive hands-on practice with the basics of Cloud SQL and quickly progress to advanced features, which you will apply to production frameworks and application environments. From creating instances and querying data with SQL, to building Deployment Manager scripts and highly available databases that run on GKE containers, Cloud SQL will give you the knowledge and experience needed so you can start integrating this service right away.

Infrastructure Application Development Data

Prerequisites:

Although this quest will teach you the fundamentals of Cloud SQL, you will still need prior hands-on experience with the platform's core tools and services. It is recommended that you have earned at least the Badge for completing the GCP Essentials and/or the Baseline: Infrastructure Quests before beginning.

Quest Outline

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

Cloud SQL for MySQL: Qwik Start

Create a Google Cloud SQL MySQL instance and perform SQL operations using Google Cloud Platform Console and mysql client. Watch this short video, Manage PostgreSQL and MySQL Databases Easily with Cloud SQL.

30 minutes	Introductory	1 Credit

Cloud SQL for PostgreSQL: Qwik Start

Create a Google Cloud SQL PostgreSQL instance. Perform SQL operations using the GCP Console and the psql client.

30 minutes	Introductory	1 Credit

Loading Data into Google Cloud SQL

In this lab you will import data from CSV text files into Cloud SQL and then carry out some basic data analysis using simple queries.

45 minutes	Advanced	7 Credits

Cloud SQL with Terraform

In this hands-on lab you will learn to create Cloud SQL instances with Terraform, then set up the Cloud SQL Proxy, testing the connection with both MySQL and PostgreSQL clients.

1 hour	Advanced	7 Credits

[Using Ruby on Rails with Cloud SQL for PostgreSQL](#)

In this lab, you'll learn how to deploy a new Ruby on Rails application using Google Cloud SQL for PostgreSQL to Google App Engine Flexible environment.

1 hour	Advanced	7 Credits

[APIs Explorer: Cloud SQL](#)

In this lab, you will get hands-on practice with the Cloud SQL API and its associated methods by making calls through the APIs Explorer tool.

45 minutes	Fundamental	5 Credits

[Connect to Cloud SQL from an Application in Kubernetes Engine](#)

This lab shows how easy it is to connect an application in Kubernetes Engine to a Cloud SQL instance using the Cloud SQL Proxy container as a sidecar container. You will deploy a Kubernetes Engine cluster and a Cloud SQL Postgres instance and use the Cloud SQL Proxy container to allow communication between them.

1 hour	Advanced	7 Credits

Quest Complete!

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