

Managing Google Cloud's Apigee API Platform for Hybrid Cloud

Learn how to install and manage Google Cloud's Apigee API Platform in a hybrid cloud. This course uses lectures and a lab to show you how to install, manage, and scale your Apigee hybrid API Platform.

**DURATION**

3 days

**LEVEL**

100 - Introductory

**FORMAT**

Instructor-led, On-demand

What you'll learn

- Identify the purpose and value of Apigee API Platform.
- Describe basic concepts and capabilities of Google Cloud, Kubernetes, REST, and Anthos.
- Discuss Apigee API Platform architecture and recommended practices for topology design.
- Explain Apigee terminology and logical organizational structures.
- Install Apigee hybrid on Google Kubernetes Engine.
- Discuss infrastructure security, user access management, data storage, and encryption practices used in Apigee hybrid.
- Manage environments in Apigee hybrid.
- Discuss capacity planning and scale runtime components in the hybrid runtime plane.
- Describe the upgrade and rollback process used for the Apigee hybrid installation.
- Troubleshoot and monitor the hybrid runtime plane components using logs, metrics, and analytics.

Overview	8 modules · 54 videos · 1 lab
Who this course is for	• Cloud Architect, Cloud Engineer
Products	• Apigee Hybrid • Apigee Integration
Prerequisites	• Familiarity with Linux commands and command line interface • Basic understanding of Google Cloud • Basic understanding of GKE • Basic understanding of networking • Basic understanding of shell scripts, XML, JSON, HTTP, REST, and TLS

Module 01

Fundamentals

Topics	• Apigee overview • Introduction to Google Cloud • Introduction to Kubernetes and Anthos • REST concepts
Objectives	• Describe the Apigee API management platform, and the services and features it provides. • Describe basic concepts and the capabilities of Google Cloud, Kubernetes, REST, and Anthos.
Activities	• 1 quiz

Module 02

Architecture

Topics

- Terminology and organizational structure
- Architecture
- Networking
- Apigee API

Objectives

- Describe the architecture and networking used in Apigee hybrid, and the various components that are used to operate the runtime plane.
- Describe the terminology, organizational structure, and the management API used in Apigee hybrid.

Activities

- 1 quiz
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Module 03

Installation and platform operation

Topics

- Installation process
- Platform operation
- Backup and restore

Objectives

- Describe the process involved in installing Apigee hybrid.
- Describe the tools and commands used to configure and manage the components of the hybrid runtime plane.
- Perform an installation of the Apigee hybrid runtime plane in a Kubernetes cluster on GKE.
- Configure the Apigee hybrid runtime plane.
- Configure Apigee hybrid environments and environment groups by using the Apigee hybrid UI.
- Deploy simple API proxies to the Apigee hybrid environments.
- Validate Apigee hybrid environments by testing API proxies.

Activities

- 1 lab and 1 quiz
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Module 04 Deployment and environment management

Topics	• Building and deploying API proxies • Debugging • Developer portal solutions • Managing environments
Objectives	• Manage environments and API proxy deployments in Apigee hybrid.
Activities	• 1 quiz

Module 05 Security

Topics	• Infrastructure security • Data storage and encryption • RBAC
Objectives	• Determine how hybrid runtime components communicate securely within the runtime plane and with the hybrid management plane in Google Cloud. • Describe how data is encrypted and how you can use role-based access control to manage user access in Apigee hybrid.
Activities	• 1 quiz

Module 06 Capacity planning and scaling

Topics	• Capacity planning • Scaling
Objectives	• Determine how to plan capacity for the Apigee hybrid runtime plane. • Scale the Apigee hybrid runtime components.
Activities	• 1 quiz

Module 07

Upgrade

Topics	• Upgrade process • Rollback process
Objectives	• Upgrade an Apigee hybrid installation to a new release. • Discuss the steps to roll back an upgraded Apigee hybrid installation.
Activities	• 1 quiz

Module 08

Logging and monitoring

Topics	• Logging • Metrics • Analytics • Monitoring and troubleshooting • Apigee support
Objectives	• Explain how the Apigee runtime plane generates logs, metrics, and analytics data. • Monitor the health of Apigee hybrid runtime plane components. • Troubleshoot issues with the runtime components, using logs and metrics data.
Activities	• 1 quiz