



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
Three days

LEVEL
Beginner

FORMAT
ILT or 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
Prerequisites	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Apigee overview• Introduction to Google Cloud• Introduction to Kubernetes and Anthos• REST concepts
Objectives	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Terminology and organizational structure• Architecture• Networking• Apigee API
Objectives	<ul style="list-style-type: none">• 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

Module 03 Installation and platform operation

Topics	<ul style="list-style-type: none">• Installation process• Platform operation• Backup and restore
Objectives	<ul style="list-style-type: none">• 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

Module 04 Deployment and environment management

Topics	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Infrastructure security• Data storage and encryption• RBAC
Objectives	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Capacity planning• Scaling
Objectives	<ul style="list-style-type: none">• Determine how to plan capacity for the Apigee hybrid runtime plane.• Scale the Apigee hybrid runtime components.
Activities	1 quiz

Module 07 Upgrade

Topics	<ul style="list-style-type: none">• Upgrade process• Rollback process
Objectives	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• Logging• Metrics• Analytics• Monitoring and troubleshooting• Apigee support
Objectives	<ul style="list-style-type: none">• 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