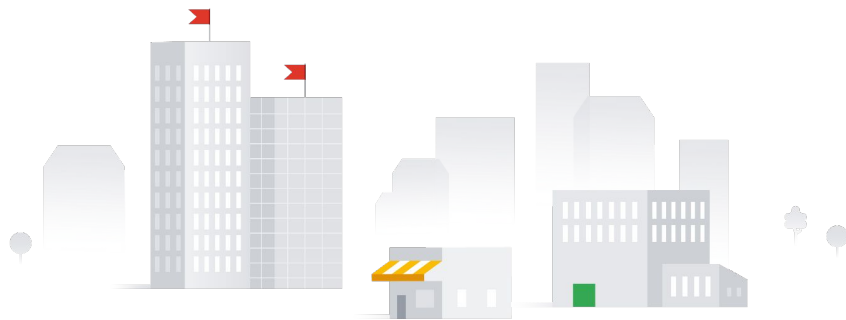




Course Summary

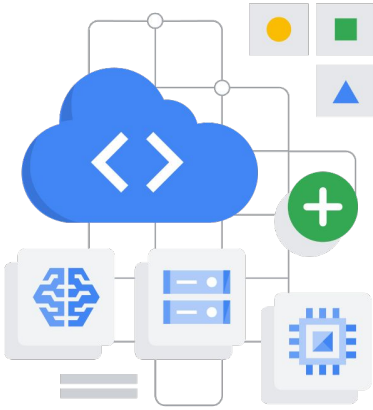


Google Cloud

And this brings us close to the end of this course. Thank you for your time and attention today!

Before you go, let's take a few minutes to review what's been covered.

Module 01



- 01 Google Cloud and cloud computing
- 02 Managed infrastructure and services with IaaS and PaaS
- 03 The Google Cloud network
- 04 Security throughout the infrastructure
- 05 Open source
- 06 Pricing structure and billing tools

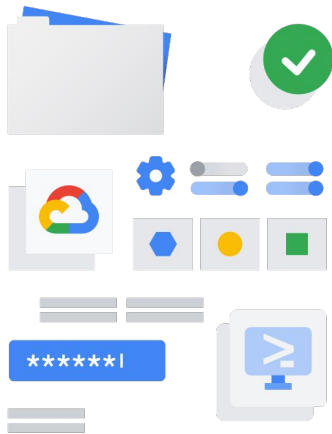
Module 1 recap

In module 1, you were introduced to Google Cloud and cloud computing.

Specifically, you explored:

- The concept of managed infrastructure and managed services, through IaaS, or infrastructure as a service, and PaaS, or platform as a service.
- The Google Cloud network.
- Google Cloud's focus on security throughout our infrastructure.
- How Google publishes key elements of technology using open source licenses.
- And Google Cloud's pricing structure and billing tools.

Module 02



01

Google Cloud Resource Hierarchy:

- Resources
- Projects
- Folders
- Organization node

02

Policies

03

Identity and Access Management (IAM)

04

Ways to access and interact with Google Cloud:

- Google Cloud console
- Cloud SDK and Cloud Shell
- APIs
- Google Cloud App

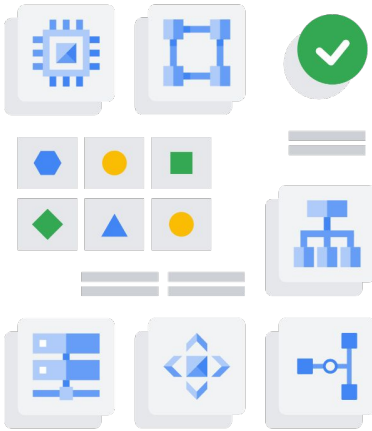
Module 2 recap

In module 2, you learned about the Google Cloud Resource Hierarchy, which is made up of four levels: **resources**, **projects**, **folders**, and an **organization node**.

You also learned about:

- Defining policies and their downward inheritance.
- When to use Cloud Identity and Access Management, or Cloud IAM,
- And the four ways to access and interact with Google Cloud: through the **Cloud Console**, the **Cloud SDK** and **Cloud Shell**, **APIs**, and the **Google Cloud app**.

Module 03



- 01 Google Compute Engine
- 02 Virtual private cloud (VPC)
- 03 Compute Engine's Autoscaling feature
- 04 Google Virtual Private Cloud compatibility features: routing tables, firewalls, VPC peering, shared VPC
- 05 Cloud Load Balancing
- 06 Google Cloud interconnect

Module 3 recap

In module 3, you explored how Compute Engine works, with a focus on virtual machines and virtual networking.

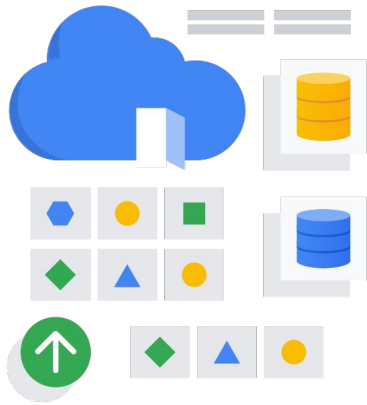
You were introduced to:

- The VPC, or **virtual private cloud**.
- Compute Engine's **Autoscaling** feature.
- And important Google Virtual Private Cloud compatibility features, like **routing tables, firewalls, VPC peering** and **shared VPC**, all of which result in the need for less network management.

You also explored **Cloud Load Balancing**, a fully distributed, software-defined, managed service for all your traffic.

Finally, you compared how on-premises or other-cloud networks can be **interconnected** with a Google VPC.

Module 04



01 Google Cloud's core storage options

- Cloud Storage
- Bigtable
- Cloud SQL
- Spanner
- Firestore

02 Four Cloud Storage classes

- Standard
- Nearline
- Coldline
- Archive

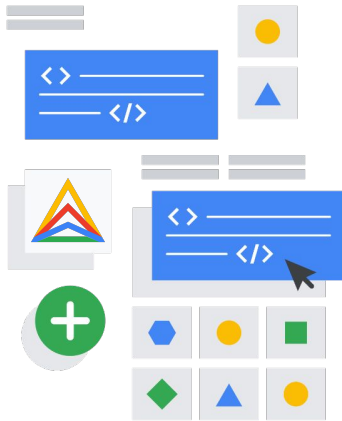
Module 4 recap

In module 4, you explored Google Cloud's five core storage options: **Cloud Storage**, **Bigtable**, **Cloud SQL**, **Spanner**, and **Firestore**.

You also examined the four storage classes that make up Cloud Storage:

- **Standard Storage**, which is used for frequently accessed *hot data*,
- **Nearline Storage and Coldline Storage**, which are used for less-frequently accessed *cool data*,
- and **Archive Storage**.

Module 05



- 01 Containers
- 02 Kubernetes
- 03 Google Kubernetes Engine (GKE)

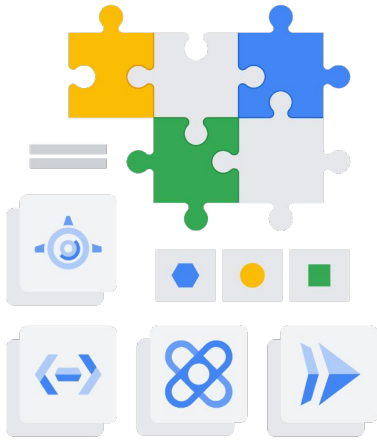
Module 5 recap

In module 5, you learned about **containers**, which are invisible boxes around your code and its dependencies.

You were introduced to containers, along with:

- **Kubernetes**, an open-source platform for managing containerized workloads and services.
- And **Google Kubernetes Engine (GKE)**, a Google-hosted managed Kubernetes service in the cloud.

Module 06



- 01 Cloud Run
- 02 Cloud Functions

Module 6 recap

In module 6, the focus was on developing applications in the cloud.

You explored:

- **Cloud Run**, a managed compute platform that lets you run stateless containers via web requests or Pub/Sub events.
- And **Cloud Functions**, a lightweight, event-based, asynchronous compute solution to create single-purpose functions.

Module 07



- 01 What is generative AI?
- 02 What is a large language model?
- 03 What is prompt engineering?
- 04 Prompt engineering best practices

Module 7 recap

Finally, in module 7, you explored how to combine Google Cloud knowledge with prompt engineering to improve Gemini responses.

You discovered answers to the following questions:

- What is generative AI?
- What is a large language model?
- And what is prompt engineering?

You ended the module by identifying prompt engineering best practices.

What's next for Cloud Engineer?



Cloud Engineer

If you're a Cloud Engineer who does or will deploy applications, monitor operations, and manage enterprise solutions.

1

Core Infrastructure

2

Cloud Engineer Learning Path

3

Architecting with Google Compute Engine

Congratulations on completing today's course. We realize that we've imparted a ton of information to you, but hopefully now you have a thorough understanding of Google Cloud's technology, products, and services, that you can take back with you to your organizations.

So, what's next? How can you continue your learning journey with Google Cloud?

Well, we offer learning paths for different cloud roles...

If you're a **Cloud Engineer** who does or will deploy applications, monitor operations, and manage enterprise solutions, you should take the [Cloud Engineer Learning Path](#) and continue next with the course: [Architecting with Google Compute Engine](#).

What's next for Cloud Architect?



Cloud Architect

If you're a Cloud Architect who does or will design, develop, and manage robust and scalable cloud architecture solutions.

1

Core Infrastructure

2

Cloud Architect Learning Path

3

Architecting with Google Compute Engine

If you're a **Cloud Architect** who does or will design, develop, and manage robust and scalable cloud architecture solutions, you should take the [Cloud Architect Learning Path](#) and also continue next with the course: [Architecting with Google Compute Engine](#).

What's next for Cloud Developer?



Cloud Developer

For Cloud Developer who does or will build scalable and highly available cloud applications using Google Cloud and tools that leverage fully managed services.

1

Core Infrastructure

2

Cloud Developer Learning Path

3

Developing Applications with Google Cloud

If you're a **Cloud Developer** who does or will build scalable and highly available cloud applications using Google Cloud and tools that leverage fully managed services, you should take the [Cloud Developer Learning Path](#) and then continue next with the course: [Developing Applications with Google Cloud](#).

What's next for Cloud DevOps Engineer?



Cloud DevOps Engineer

If you're a Cloud DevOps Engineer who does or will maintain the efficient operations of the full software delivery pipeline.

1

Core Infrastructure

2

Cloud DevOps Engineer
Learning Path

3

Architecting with Google
Cloud: Design and Process

If you're a **Cloud DevOps Engineer** who does or will maintain the efficient operations of the full software delivery pipeline, you should take the [Cloud DevOps Engineer Learning Path](#) and then continue next with the course: [Architecting with Google Cloud: Design and Process](#).

Google Cloud Certified

Show the world that you can design, develop, manage, and administer **application infrastructure** and **data solutions** on Google Cloud technology



Google Cloud

By becoming Google Cloud Certified, you can show the world that you can design, develop, manage, and administer application infrastructure and data solutions on Google Cloud technology. The Google Cloud Certified designation means you've demonstrated the necessary skills to leverage Google Cloud technology in a way that transforms businesses and meaningfully impacts the people and customers they serve.

Helpful links

VMs and Networks

[Compute Engine](#)

cloud.google.com/compute/docs

[Virtual Private Cloud](#)

cloud.google.com/compute/docs/vpc

[Google Cloud Observability](#)

cloud.google.com/stackdriver/docs

[gcloud CLI](#)

cloud.google.com/sdk/gcloud

[Cloud Source Repositories](#)

cloud.google.com/source-repositories/docs

Storage

[Overview of Cloud Storage](#)

cloud.google.com/storage

[Cloud SQL](#)

cloud.google.com/sql/docs

[Bigtable](#)

cloud.google.com/bigtable/docs

[Spanner](#)

cloud.google.com/spanner/docs

[Firestore](#)

firebase.google.com/docs/firestore

So that you can find out a little more about some of the topics we've discussed today, we've put together a list of helpful links that you can access in your own time. You'll have access to a copy of this deck where you'll find these links.

Thank you for attending this training!

We love your feedback! Please take
a minute to complete the survey and
help us improve our courses.



Feedback

We hope you've enjoyed today's course. It would be great for us if you could take a couple of minutes to give us feedback to ensure that we can continue to improve our training offering in the future.



Thank you!