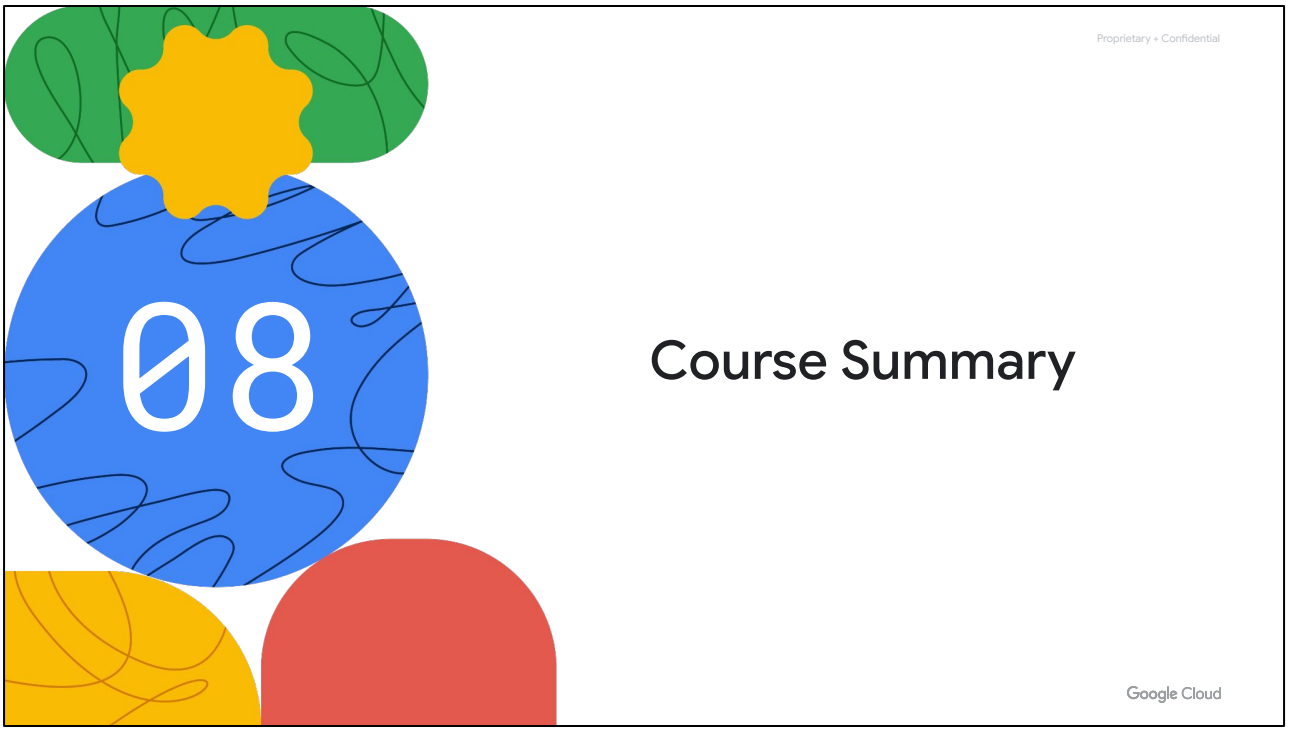
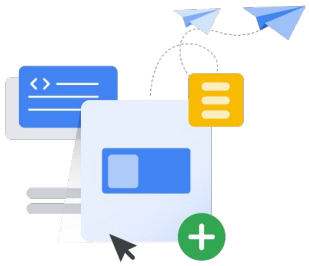


This brings us to the end of the “Architecting with Google Kubernetes Engine” course! We covered many topics, so let’s take a moment to review what you learned.

Module 1
Deployments and Jobs



01 What a Deployment is, and identified methods available to create and use them.

02 How to configure, manage and update Deployments.

03 What Jobs and CronJobs are, and explored relevant use cases.

04 How to create and Run Jobs.

05 GKE logging and monitoring.

06 How to scale clusters automatically and manually.

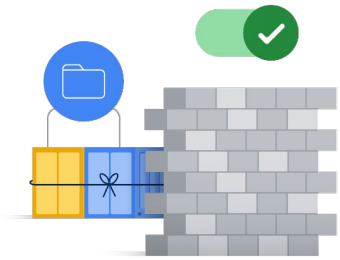
07 And how to configure node and pod affinity.

The first section of the course was all about deployments, Jobs, and workloads in GKE.

You learned:

- What a Deployment is, and identified methods available to create and use them.
- How to configure, manage and update Deployments.
- What Jobs and CronJobs are, and explored relevant use cases.
- How to create and Run Jobs.
- How to scale clusters automatically and manually.
- And how to configure node and pod affinity.

Module 2
Google Kubernetes Engine networking



01 Pod and cluster networking in GKE.

02 Service creation to expose applications running within Pods.

03 Load balancer configuration to expose services to external clients.

04 Container-native load balancing in GKE.

05 Configuring GKE Networking.

Next, you learned about networking in GKE.

You learned about:

- Pod and cluster networking in GKE.
- Service creation to expose applications running within Pods.
- Load balancer configuration to expose services to external clients.
- Container-native load balancing in GKE.
- Configuring GKE Networking.

Module 3
Persistent Data and Storage

01 Running and maintaining pods using StatefulSets.

02 Using ConfigMaps to decouple configuration from Pods.

03 Managing and storing sensitive access and authentication data.

04 Configuring Persistent Storage.

The third section of the course covered storage abstraction.

You explored:

- Running and maintaining pods using StatefulSets.
- Using ConfigMaps to decouple configuration from Pods
- Managing and storing sensitive access and authentication data.
- Configuring Persistent Storage

Module 4
Access Control and Security in Kubernetes and Google Kubernetes Engine

01 Securing GKE clusters with Kubernetes RBAC and IAM.

02 Configuring Workload Identity.

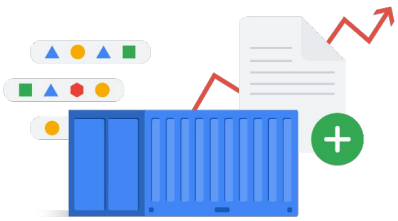
03 Using Pod Security Standards and Pod Security Admission to secure GKE.

04 Implementing Role-Based Access Control.

From there, you moved on to authentication, authorization, and security in GKE, where you learned about:

- Securing GKE clusters with Kubernetes RBAC and IAM.
- Configuring Workload Identity
- Using Pod Security Standards and Pod Security Admission to secure GKE.
- Implementing Role-Based Access Control.

Module 5
Google Kubernetes Engine Logging and Monitoring



01 Configure Google Cloud Observability to monitor and manage performance availability.

02 Inspect Kubernetes logs.

03 Monitor system performance.

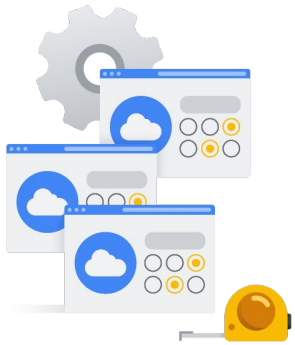
04 Create dashboards and alerts.

05 Configure GKE-Native Monitoring and Logging.

Then we journeyed further into the world of logging and monitoring in GKE in the fifth section, where you examined how to:

- Configure Google Cloud Observability to monitor and manage performance availability
- Inspect Kubernetes logs
- Monitor system performance
- Create dashboards and alerts
- Configure GKE-Native Monitoring and Logging.

Module 6
Using Google Cloud Managed Storage Services with Google Kubernetes Engine



01 Contrast managed storage services with self-managed storage.

02 Identify use cases for Cloud Storage for Kubernetes applications.

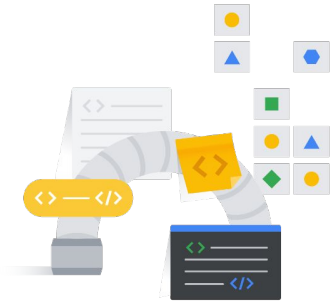
03 Compare the range of Google Cloud managed database services.

In the sixth section of the course, you explored Google Cloud managed storage service options, where you learned to:

- Contrast managed storage services with self-managed storage.
- Identify use cases for Cloud Storage for Kubernetes applications.
- Compare the range of Google Cloud managed database services.

You also explored Cloud SQL Auth Proxy and used Cloud SQL with GKE.

Module 7
Using CI/CD with Google Kubernetes Engine



01 Continuous Integration and Continuous Delivery pipelines, and how they can optimize app releases.

02 Code management in a source repository.

03 Best practices for CI/CD pipelines.

Finally, in the last section of the course, you learned about CI/CD pipelines. This section covered:

- Continuous Integration and Continuous Delivery pipelines, and how they can optimize app releases.
- Code management in a source repository.
- Best practices for CI/CD pipelines

We'd love your feedback!

Please take a few minutes to complete the survey and help us improve this course for future learners.

Survey

Your feedback matters and is greatly appreciated! Please share your thoughts on your experience by completing a short survey. It only takes a few minutes and will help us improve future sessions.

Thank you

This brings up to the end of this course! Thank you for your time and participation. See you next time!