

Implement DevOps in Google Cloud

Fundamental 7 Steps 7 hours 38 Credits

Obtain a [competitive advantage](#) through DevOps. [DevOps](#) is an organizational and cultural movement that aims to increase software delivery velocity, improve service reliability, and build shared ownership among software stakeholders. In this quest you will learn how to use Google Cloud to improve the speed, stability, availability, and security of your software delivery capability. [DevOps Research and Assessment](#) has joined Google Cloud. How does your team measure up? [Take this five multiple-choice question quiz](#) and find out! Complete this quest, including the challenge lab at the end, to receive an exclusive Google Cloud digital badge. The challenge lab does not provide prescriptive steps, but require solutions to be built with minimal guidance and will put your Google Cloud technology skills to the test!

Quest Outline

[Accelerate the State of DevOps 2019](#)

2 minutes

[Cloud Source Repositories: Qwik Start](#)

In this lab you will create a local Git repository that contains files for a sample App Engine application, add a GCP repository as a remote, and push the contents of the local repository.

30 minutes

Introductory

1 Credit

[Managing Deployments Using Kubernetes Engine](#)

Dev Ops best practices make use of multiple deployments to manage application deployment scenarios. This lab provides practice in scaling and managing containers to accomplish common scenarios where multiple heterogeneous deployments are used.

1 hour

Advanced

7 Credits

[Deploy Kubernetes Load Balancer Service with Terraform](#)

In Terraform, a Provider is the logical abstraction of an upstream API. This lab will show you how to setup a Kubernetes cluster and deploy Load Balancer type Nginx service on it.

35 minutes

Advanced

7 Credits

[Site Reliability Troubleshooting with Cloud Monitoring APM](#)

The objective of this lab is to familiarize yourself with the specific capabilities of Cloud Monitoring to monitor GKE cluster infrastructure, Istio, and applications deployed on this infrastructure.

1 hour 30 minutes

Advanced

7 Credits

[Continuous Delivery with Jenkins in Kubernetes Engine](#)

In this lab you will deploy and completely configure a continuous delivery pipeline using Jenkins running on Kubernetes Engine and go through the dev - deploy process.

1 hour 15 minutes

Advanced

7 Credits

[Implement DevOps in Google Cloud: Challenge Lab](#)

This challenge lab tests your skills in implementing a continuous deployment pipeline using the Jenkins build and deployment automation tool

1 hour

Expert

9 Credits

Quest Complete!

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

