DevOps Essentials

Fundamental 6 Steps 5 hours 29 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! Looking for a hands on challenge lab to demonstrate your skills and validate your knowledge? On completing this quest, enroll in and finish the additional challenge lab at the end of this quest to receive an exclusive Google Cloud digital badge.

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

Quest Complete!

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