

Deploy to Kubernetes in Google Cloud

Advanced 6 Steps 7 hours 30 Credits

Earn a **skill badge** by completing the **Deploy to Kubernetes in Google Cloud** quest, where you will learn about Google Kubernetes Engine and multiple deployment approaches including how to: configure and build images to run and debug Docker containers, build Kubernetes Engine clusters, and manage them with `kubectl`, deploy Kubernetes applications using deployments and continuous delivery techniques.

A skill badge is an exclusive digital badge issued by Google Cloud in recognition of your proficiency with Google Cloud products and services and tests your ability to apply your knowledge in an interactive hands-on environment. Complete this skill badge quest, and the final assessment challenge lab, to receive a skill badge that you can share with your network.

Infrastructure

Prerequisites:

Prior to enrolling in this skill badge quest, it is recommended that you complete the [Create and Manage Cloud Resources](#) quest.

Quest Outline

[Introduction to Docker](#)

In this lab you will familiarize yourself with the basic Docker container environment commands. You will create, run, and debug containers, and learn to pull and push images to and from Google Container Registry.

45 minutes

Introductory

1 Credit

[Kubernetes Engine: Qwik Start](#)

Google Kubernetes Engine provides a managed environment for deploying, managing, and scaling your containerized applications using Google infrastructure. This hands-on lab shows you how deploy a containerized application with Kubernetes Engine. Watch the short video [Manage Containerized Apps with Kubernetes Engine](#).

30 minutes

Introductory

1 Credit

[Orchestrating the Cloud with Kubernetes](#)

In this lab you will learn how to provision a complete Kubernetes cluster using Google Container Engine; deploy and manage Docker containers using `kubectl`; and break an application into microservices using Kubernetes' Deployments and Services.

1 hour 15 minutes

Fundamental

5 Credits

[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

[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

[Deploy to Kubernetes in Google Cloud: Challenge Lab](#)

This challenge lab tests your skills and knowledge from the labs in the Kubernetes in Google Cloud quest. You should be familiar with the content of the labs before attempting this lab.

1 hour 30 minutes

Expert

9 Credits

Quest Complete!

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

