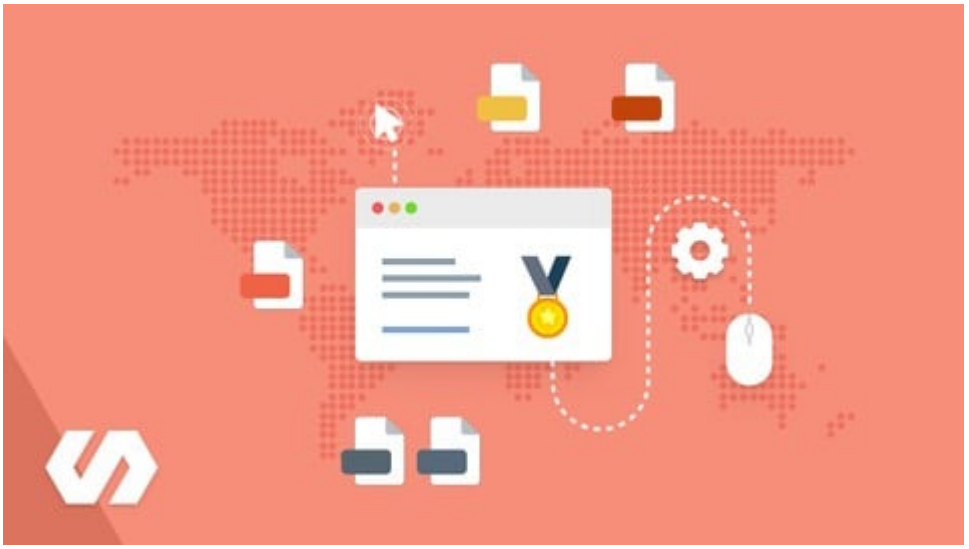
Docker and Kubernetes: The Complete Guide

udemy.com/course/docker-and-kubernetes-the-complete-guide/learn/lecture/20914618



Finished Project Code with Updates Applied

Attached is the finished project code for the multi-container application we just deployed to AWS. If you are having issues, you can use this to check against. It includes all of the updates specified in the course notes.

This particular download also includes working, fully updated Docker images that can be used instead of Stephen's original images.

Resources for this lecture

- 172-finished-gh.zip
- 172-finished-travis.zip

0 / 24 | 1hr 33min0 of 24 lectures completed1hr 33min

0 / 21 | 1hr 9min0 of 21 lectures completed1hr 9min

0 / 14 | 1hr 11min0 of 14 lectures completed1hr 11min

0 / 19 | 1hr 18min0 of 19 lectures completed1hr 18min

0 / 12 | 49min0 of 12 lectures completed49min

5 / 24 | 1hr 52min5 of 24 lectures completed1hr 52min

- Play
  149. Multi-Container Definition Files

  4min
- Play
  150. Finding Docs on Container Definitions

  3min
- Play
  151. Adding Container Definitions to DockerRun

  6min
- Play
  152. More Container Definitions

  5min
- Play
  153. Forming Container Links

  8min
- Start
  154. Creating the Elastic Beanstalk Environment

  2min

- Start
  155. AWS Configuration Cheat Sheet - Updated for new UI

  6min
- Play
  156. Managed Data Service Providers

  11min
- Play
  157. Overview of AWS VPC's and Security Groups

  9min
- Play
  158. RDS Database Creation

  7min
- Play
  159. ElastiCache Redis Creation

  4min
- Play
  160. Creating a Custom Security Group

  4min
- Play
  161. Applying Security Groups to Resources

  5min
- Play
  162. Setting Environment Variables

  8min
- Play
  163. IAM Keys for Deployment

  5min
- Start
  164. Travis Keys Update

  1min

- Play
  165. Travis Deploy Script

  3min
- Play
  166. Container Memory Allocations

  4min
- Play
  167. Verifying Deployment

  3min
- Play
  168. A Quick App Change

  1min
- Play
  169. Making Changes

  1min
- Play
  170. Cleaning Up AWS Resources

  5min
- Start
  171. AWS Configuration Cheat Sheet

  6min
- Start
  172. Finished Project Code with Updates Applied

  1min

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6 / 19 | 1hr 41min6 of 19 lectures completed1hr 41min

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0 / 19 | 1hr 32min0 of 19 lectures completed1hr 32min

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0 / 30 | 2hr 22min0 of 30 lectures completed2hr 22min

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0 / 14 | 40min0 of 14 lectures completed40min

0 / 36 | 2hr 18min0 of 36 lectures completed2hr 18min

0 / 18 | 49min0 of 18 lectures completed49min

0 / 7 | 30min0 of 7 lectures completed30min

0 / 1 | 1min0 of 1 lecture completed1min

information alert

Schedule learning time

Learning a little each day adds up. Research shows that students who make learning a habit are more likely to reach their goals. Set time aside to learn and get reminders using your learning scheduler.

Build, test, and deploy Docker applications with Kubernetes while learning production-style development workflows

Rating: 4.7 out of 54.7
61,333 ratings

324,780

Students

21.5 hours

Total

Last updated October 2025
English
English [CC], Arabic [Auto],

What you'll learn

- Learn Docker from scratch, no previous experience required
- Master the Docker CLI to inspect and debug running containers
- Build a CI + CD pipeline from scratch with Github, Travis CI, and AWS
- Understand the purpose and theory of Kubernetes by building a complex app
- Automatically deploy your code when it is pushed to Github!
- Develop practical skills through hands-on projects and exercises

Description

If you're tired of spinning your wheels learning how to deploy web applications, this is the course for you.

This course requires you to download Docker Desktop from Docker. If you are a Udemy Business user, please check with your employer before downloading software.

CI+CD Workflows? You will learn it. **AWS Deployment**? Included. **Kubernetes in Production**? Of course!

This is the ultimate course to learn how to deploy *any* web application you can possibly dream up. Docker and Kubernetes are the newest tech in the Dev Ops world, and have dramatically changed the flow of creating and deploying web apps. Docker is a technology that allows applications to run in constructs called 'containers', while Kubernetes allows for many different 'containers' to run in coordination.

Docker from Scratch!

In this course you'll **learn Docker from absolute fundamentals**, beginning by learning the answer to basic questions such as "What is a container?" and "How does a container work?". From the very first few lectures, we will do a **deep dive on the inner workings of containers**, so you get a core understanding of exactly how they are implemented. Once you understand what a container is, you'll learn how to work with them using basic Docker CLI commands. After that, you'll apply your new-found mastery of the Docker CLI to build your own custom images, effectively 'Dockerizing' your own personal applications.

CI + CD Pipelines

Of course, no course on Docker would be complete without a full understanding of common Continuous Integration and Continuous Deployment patterns. You will learn how to implement **a full CI + CD workflow** using Github, Travis CI, and Amazon Web Services, creating a pipeline that **automatically deploys your code** every time you push your latest changes to Github!

Multi-Container Deployments on AWS!

After building a deployment pipeline, you'll apply it to master both single-container and multi-container **deployments on Amazon Web Services.** You will construct a multi-container application utilizing **Node, React, Redis, and Postgres**, and see the amazing power of containers in action (Note: all Javascript coding in this course is optional, the full source code is provided if you don't want to write JS).

Kubernetes!

Finally, you will tackle Kubernetes, a production-grade system for managing complex applications with many different running containers. You will learn the **right way to build a Kubernetes Cluster** - this course doesn't have any of those annoying *"don't do this in production"* comments! You will first build a Kubernetes Cluster on your local machine, then eventually move it over to a cloud provider. You'll even learn how to **set up HTTPS on Kubernetes**, which is harder than it sounds!

Here's what you'll do:

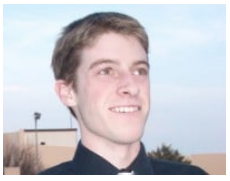
- Learn Docker from scratch, **no previous experience required**
- Build your own **custom images** tailored to your applications
- Master the Docker CLI to **inspect and debug** running containers
- Understand **how Docker works** behind the scenes, and what a container is
- Build a **CI + CD pipeline** from scratch with Github, Travis CI, and AWS
- **Automatically deploy** your code when it is pushed to Github!
- Build a **complex multi-container application** from scratch and deploy it to AWS
- Understand the purpose and **theory of Kubernetes**
- Deploy a **production-ready Kubernetes** Cluster to Google Cloud

Who this course is for:

Software engineers looking to deploy their apps easily and quickly

Instructor

Stephen Grider
Engineering Architect



- 4.6 Instructor Rating
- 493,325 Reviews
- 1,544,252 Students
- 37 Courses

Stephen Grider has been building complex Javascript front ends for top corporations in the San Francisco Bay Area. With an innate ability to simplify complex topics, Stephen has been mentoring engineers beginning their careers in software development for years, and has now expanded that experience onto Udemy, authoring the highest rated React course. He teaches on Udemy to share the knowledge he has gained with other software engineers. Invest in yourself by learning from Stephen's published courses.

Requirements

- Basic understanding of terminal and command line usage
- No previous Docker or Kubernetes experience is required!
- A credit card is required to deploy projects to AWS or Google Cloud