Getting Started with Kubernetes - TTDV7590

Explore Kubernetes Core Functionality, Work with the Cloud; Build Clusters, and Deploy and Manage Applications on Clusters

Duration: 2 Days
Skill Level: Introductory
Available Format: Instructor-Led Online; Instructor-Led, Onsite In Person ; Blended; On Public Schedule

Containerization has taken the IT world by storm, in the last few years. Large software houses, starting from Google and Amazon, are running significant portions of their production load in containers. **Kubernetes** is an open-source system for automating deployment, scaling, and management of containerized applications.

What You'll Learn

Overview

Containerization has taken the IT world by storm, in the last few years. Large software houses, starting from Google and Amazon, are running significant portions of their production load in containers. **Kubernetes** is an open-source system for automating deployment, scaling, and management of containerized applications. Kubernetes groups containers that make up an application into logical units for easy management and discovery. Kubernetes builds upon 15 years of experience of running production workloads at Google, combined with best-of-breed ideas and practices from the community.

Getting Started with Kubernetes is a hands-on workshop style course that teaches participants core features and functionality of Kubernetes. Students will exit the course knowing how to build a Kubernetes cluster, and how to deploy and manage applications on that cluster.

Objectives

This course is approximately **50% hands-on**, combining expert lecture, real-world demonstrations and group discussions with machine-based practical labs and exercises. Our engaging instructors and mentors are highly experienced practitioners who bring years of current "on-the-job" experienceinto every classroom.

Working in a hands-on learning environment led by our expert facilitator, students will explore:

- What a Kubernetes cluster is, and how to deploy and manage them on-premises and in the cloud.
- How Kubernetes fits into the cloud-native ecosystem, and how it interfaces with other important technologies such as Docker.
- The major Kubernetes components that let us deploy and manage applications in a modern cloud-native fashion.
- How to define and manage applications with declarative manifest files that should be version-controlled and treated like code.

Need different skills or topics? If your team requires different topics or tools, additional skills or custom approach, this course may be further adjusted to accommodate. We offer additional DevOps, Kubernetes, Containers, Docker, GitHub, programming and other related topics that may be blended with this course for a track that best suits your needs.

Audience

This in an introductory-level class for intermediate skilled team members. Students should have prior software development experience or exposure, have some basic familiarity with containers, have experience working in Linux (as this course is Linux based) and should also be able to navigate the command line.

Pre-Requisites

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Agenda

Please note that this list of topics is based on our standard course offering, evolved from typical industry uses and trends. We will work with you to tune this course and level of coverage to target the skills you need most. Topics, agenda and labs are subject to change, and may adjust during live delivery based on audience interests, participation and skill-level.

Getting Started

- Our sample application
- Kubernetes concepts
- Declarative vs imperative
- Kubernetes network model
- First contact with kubectl
- Setting up Kubernetes

Working with Containers

- Running our first containers on Kubernetes
- Exposing containers
- Shipping images with a registry
- Running our application on Kubernetes

Exploring the Kubernetes Dashboard

- The Kubernetes dashboard
- Security implications of kubectl apply
- Scaling a deployment

- Daemon sets
- Labels and selectors
- Rolling updates

Next Steps
- Accessing logs from the CLI
- Managing stacks with Helm
- Namespaces
- Next steps

Related Courses

TTDV7585   Advanced Ansible in Action: Building Smarter, Stronger Automation

All course software (limited versions, for course use only), digital courseware files or course notes, labs / data sets and solutions (as applicable) are provided for you in our "easy access / no install required" high-speed remote lab environment. Our tech team works with every student to ensure everyone is set up with working access and ready to go prior to every course start date, ensuring a smooth delivery and great hands-on experience. Please ask for details.

For More Information

Please contact us or call 844-475-4559 toll free for more information about our training services (instructor-led, self-paced or blended), coaching and mentoring services, public course enrollment or questions, partner programs, courseware licensing options and more.