
Cisco® Implementing DevOps Solutions and Practices Using Cisco® Platforms (DevOps) 1.0

Overview

This course teaches you how to automate application deployment, enable automated configuration, enhance management, and improve scalability of cloud microservices and infrastructure processes on Cisco® platforms. You will also learn how to integrate Docker and Kubernetes to create advanced capabilities and flexibility in application deployment. This course prepares you for the 300-910 Implementing DevOps Solutions and Practices Using Cisco Platforms (DEVOPS) certification exam.

Prerequisite Comments

Before taking this course, you should have the following knowledge and skills:

Basic programming language concepts and familiarity with Python

Basic understanding of compute virtualization

Ability to use Linux, text-driven interfaces, and CLI tools, such as Secure Shell (SSH), bash, grep, ip, vim/nano, curl, ping, traceroute, and telnet

Foundational understanding of Linux-based OS architecture and system utilities

CCNA® level core networking knowledge

Foundational understanding of DevOps concepts

Awareness and familiarity with continuous integration, continuous deployment, and continuous delivery (CI/CD) concepts

Hands-on experience with Git

Target Audience

This course is designed for network and software engineers interested in automation and programmability and who hold job roles such as:

Account manager

Consulting systems engineer

Network administrator

Network engineer

Network manager

Sales engineer

Systems engineer

Technical solutions architect

Wireless design engineer

Wireless engineer

Course Objectives

This course will help you: Gain the high-demand knowledge and skills to implement automation, streamline container orchestration, and enhance scalability

Learn the skills to maximize the lightweight design of containers to scale more quickly and allow more responsiveness to website traffic load

Prepare for the 300-910 DEVOPS exam

What to expect in the exam

The 300-910 DEVOPS exam certifies your knowledge and skills with DevOps. Key DevOps practices include deployment automation that enables configuration, management, and scalability of cloud microservices and infrastructure processes on Cisco platforms.

Course Outline

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INTRODUCING THE DEVOPS MODEL
INTRODUCING CONTAINERS
PACKAGING AN APPLICATION USING DOCKER
DEPLOYING A MULTITIER APPLICATION
INTRODUCING CI/CD
BUILDING THE DEVOPS FLOW
VALIDATING THE APPLICATION BUILD PROCESS
BUILDING AN IMPROVED DEPLOYMENT FLOW
EXTENDING DEVOPS PRACTICES TO THE ENTIRE INFRASTRUCTURE
IMPLEMENTING ON-DEMAND TEST ENVIRONMENTS AT THE INFRASTRUCTURE LEVEL
MONITORING IN NETDEVOPS
ENGINEERING FOR VISIBILITY AND STABILITY
SECURING DEVOPS WORKFLOWS
EXPLORING MULTICLOUD STRATEGIES
EXAMINING APPLICATION AND DEPLOYMENT ARCHITECTURES
DESCRIBING KUBERNETES
INTEGRATING MULTIPLE DATA CENTER DEPLOYMENTS WITH KUBERNETES
MONITORING AND LOGGING IN KUBERNETES
