

## 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

[Register Online](#)**Schedule**

Class Length: 5 Days

G2R = "Guaranteed to Run" | OLL = "Online LIVE"  
ILT = "Instructor-Led-Training"

*This course is not currently available on the public schedule. Please contact us using the information in the footer below to inquire about future dates or to schedule a private class.*

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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### 1 - Course Outlines

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