

CISCO NSO ADMINISTRATION AND DEVOPS (NSO303) V5.0

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The Cisco Network Services Orchestrator (NSO) Administration and DevOps training continues the learning journey of the NSO Essentials for Programmers and Network Architects and NSO Advanced for Python Programmers trainings by introducing you to the system administration and DevOps focusing on NSO. This includes the robust bridge linking network automation and orchestration tools, examining the development, operation, and administration task functions. You will learn how to set up, configure, deploy, and maintain a Cisco NSO solution, and learn best practices for using DevOps. The examples shown in this training demonstrate real-world scenarios to prepare you for deployment and management of new or existing NSO instances.

The training guides you through the setup of production-ready NSO instances using system installation with access control settings, the deployment of NSO in Docker containers, and introduces modern DevOps concepts and tools such as Git and Continuous Delivery/Continuous Deployment (CI/CD). You will learn how to migrate Continuous Diagnostics and Mitigation (CDM) devices, how to build Network Configuration Protocol (NETCONF) Network Element Drivers (NEDs) from the NSO Command-Line Interface (CLI), how to handle NSO Alarms, and many more features that benefit you in your journey with Cisco NSO. This training also earns you 32 Continuing Education (CE) credits toward recertification.

How you'll benefit

This class will help you:

- Install, configure, and maintain a Cisco Network Services Orchestrator solution
- Apply DevOps best practices for Cisco NSO development, operations, and administrative tasks
- Implement Layered Service Architecture (LSA) within a Cisco NSO solution
- Gain knowledge for protocols, solutions, and designs to acquire professional-level and expert-level networking roles
- Earn 32 CE credits toward recertification

Why Attend with Current Technologies CLC

- Our Instructors are in the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

Who Should Attend

The primary audience for this course is as follows:

- DevOps Engineers
- Integration Engineers
- Network and Software Architects
- Network Engineers
- Software Engineers
- System Administrators

Course Duration

4 days

Course Price

\$3,595.00 or 36 CLCs

Methods of Delivery

- Instructor Led
- Virtual ILT
- On-Site

OUTLINE

Module 1: Introducing Network and IT Convergence

Module 2: Introducing Cisco NSO Architecture

Module 3: Introducing Linux

Module 4: Explaining Cisco NSO Setup

Module 5: Exploring Access Control

Module 6: Describing Integration Options

Module 7: Explaining Version Control System

Module 8: Describing Continuous Integration and Continuous Delivery

Module 9: Introducing Scalability and High Availability

Module 10: Describing Scalable System Management

Module 11: Describing Software Development Methodologies

Module 12: Introducing Service Maintenance

Module 13: Performing Network Element Driver (NED) Upgrades

Module 14: Introducing Configuration Management

Module 15: Describing Change Management

Module 16: Explaining Service Problem Management

Module 17: Explaining Service Monitoring and Compliance Reporting

Module 18: Introducing Inventory Management

Module 19: Describing Cisco NSO Use Cases

LAB OUTLINE

- **Lab 1: Perform NSO System Install**
- **Lab 2: Implement Role-Based Access and PAM**
- **Lab 3: Using Cisco NSO APIs**
- **Lab 4: Learn to work with Git**
- **Lab 5: Use NSO in Docker**
- **Lab 6: Configure High Availability**
- **Lab 7: Migrating a Monolithic Service to LSA**
- **Lab 8: Deploying the LSA Services**
- **Lab 9: Use the Network Connectivity Tool (NCT)**
- **Lab 10: Perform Service Backup and Restore**
- **Lab 11: Migrate a CDM Device**
- **Lab 12: Build a NETCONF NED**
- **Lab 13: Replacing a Device**
- **Lab 14: Troubleshoot NSO Alarms and Services**
- **Lab 15: Creating a Compliance Report**