

kod szkolenia: NSO201 / PL DL 4d

# NSO Essentials for Programmers and Network Architects

The NSO Essentials for Programmers and Network Architects (NSO201) v4.1 course introduces you to Cisco Network Services Orchestrator (NSO). You will learn to install Cisco NSO and use it to manage devices and create services based on YANG templates with XPath. This course provides an overview of NSO as a network automation solution as well as introducing you to NETCONF, YANG, and XPath. You will learn about managing devices and creating device templates, service management and service package creation, network element drivers, interfacing with other systems using APIs, configuring and troubleshooting system settings, managing alarms and reporting, configuring NSO for scalability and performance, and capabilities that can be added to Cisco NSO.

Pay with CLC points.:

Cisco Learning Credits accepted : 36 Credits

Details and registration on the provider's website:

<https://learninglocator.cloudapps.cisco.com/#/home>

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[Cisco Continuing Education Program - CE](#)

Participation in authorized training allows you to earn additional points needed to maintain your certification.

NSO201: 40 points CE



## Odbiorcy szkolenia

This course is designed primarily for network and software engineers who are interested in learning about automation and programmability and hold the following job roles:

- Network administrators
- Solutions designers
- System installers
- System integrators
- System administrators



## Korzyści

This course will help you:

- Learn to install Cisco Network Services Orchestrator (NSO)
- Practice configuring devices with NSO
- Practice designing and managing services with YANG models
- Gain confidence with NSO configuration



## Program szkolenia

Course outline

- Introducing Service Orchestration with Cisco NSO
- Exploring Cisco NSO Architecture
- Orchestrating Network Solutions
- Describing Cisco NSO Operation
- Installing Cisco NSO
- Exploring the Advantages of NETCONF
- Managing Devices Using the Device Manager
- Creating YANG Models
- Using Services
- Implementing Services with Model-to-Model Mapping

- Designing Services in Cisco NSO
- Managing the Service Lifecycle
- Programming with Python in Cisco NSO
- Configuring and Troubleshooting System Settings
- Discovering Cisco NSO Northbound APIs
- Managing Alarms and Reporting
- Configuring Cisco NSO for Scalability and Performance
- Describing Cisco NSO VNF Manager and Function Packs

#### Lab outline

- Install Cisco NSO
- Use Device Manager
- Create a Device Template
- Create a Loopback Template Service
- Create a VLAN Template Service
- Create an L3VPN Template Service
- Migrate a CDM Device
- Set Up a Device Using Python Scripts
- Create an SVI Python Template Service
- Use NSO RESTCONF API with Postman



## Oczekiwane przygotowanie uczestnika

We require the following knowledge and skills before taking this course:

- Basic knowledge of the Cisco Command-Line Interface (CLI) or the CLI of UNIX-like operating systems
- Working knowledge of UNIX-based operating systems and basic tasks
- Basic knowledge of programming constructs
- Basic knowledge of YANG data modeling
- Basic knowledge of the NETCONF communication protocol
- Knowledge of XML data structures and schemas
- Basic management of network components (routers, switches, etc.)

The following Cisco courses can help you gain the knowledge you need to prepare for this course

- Network Programmability Basics (Cisco DevNet Course)
- Introducing Automation for Cisco Solutions (CSAU)
- Programming for Network Engineers (PRNE)



### Szkolenie obejmuje

- 4 dni pracy z trenerem
- Nadzór trenera
- Kontakt ze społecznością
- Autoryzowany podręcznik w wersji elektronicznej
- Środowisko laboratoryjne

### Metoda szkolenia

- wykład
- warsztaty



### Czas trwania

4 dni / 28 godzin

### Język

- Szkolenie: polski
- Materiały: angielski