



# **NSO Advanced for Python Programmers**

## Duration: 4 Days Course Code: NSO300

#### Overview:

This course explores how to create advanced services using the NSO application framework and Python scripting with both new and existing Layer 3 Multiprotocol Label Switching (MPLS) VPN services. Students will also learn how to manage and scale these services, and how to use NSO Network Functions Virtualization (NFV) orchestration features and Cisco Elastic Services Controller (ESC) to manage Virtualized Network Functions (VNFs).

#### **Target Audience:**

The primary audience for this course is system installers, system integrators, system administrators, network administrators, and solutions designers.

### **Objectives:**

- At the end of this course, you will be able to:
- Pescribe the NSO's transactional application framework and mapping model options
- Pescribe the Reactive Fastmap design pattern and the NSO Configuration Database (CDB) subscriber in the NSO Transaction model
- Simplify packages to remove the need for subscriber applications, scale orchestration solutions, and integrate NSO with external systems (east-west integration)
- Pescribe the Cisco ESC architecture and integration with NSO, and how the NSO VNF Orchestration (VNFO) Release 2 bundle interacts with ESC for orchestration

## Content:

? Module 1:	? Lab 1: Device Setup Using Python Script	? Lab 5: Stacked Services
<ul> <li>Cisco NSO Programmability</li> <li>NSO Application Framework</li> <li>NSO Python Scripting</li> <li>NSO Python and Template-Based Services</li> </ul>	? Lab 2: Create an SVI Service Using pre_modification Service Callback	? Lab 6: Service Action
Resources	? Lab 3: Create a L3VPN Service Using	? Lab 7: ESC Integration
? Module 2: Augmenting Cisco NSO Service	Dynamic ID Allocation	? Lab 8: NFV for the DMZ Service
<ul> <li>Service Lifecycle and Integration Options Overview</li> <li>Greenfield Layer 3 MPLS VPN Service</li> <li>Brownfield Layer 3 MPLS VPN Service</li> </ul>	? Lab 4: L3VPN Service Upgrade	
? Module 3: Managed Services		
<ul> <li>Managed Services Overview</li> <li>Stacked Service Design Overview</li> <li>Design-Managed Network Services</li> <li>Scaling Service Orchestration</li> </ul>		
? Module 4: Cisco NSO Network Functions Virtualization (NFV) Orchestration		
<ul> <li>ETSI MANO</li> <li>Cisco ESC</li> <li>Cisco NSO Orchestration © 2018 Cisco and/or its affiliates</li> </ul>		

## Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

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