



## IT-DCAUI - Implementing Automation for Cisco Data Center Solutions

Cisco - CCNP DevNet - Networking

Durata:

**3 Giorni**

Lingue:

**Italiano**

Certificazione:

**Cisco Certified DevNet Professional**

### Descrizione del corso

The Implementing Automation for Cisco Data Center Solutions (DCAUI) v1.0 course teaches you how to implement Cisco® Data Center automated solutions including programming concepts, orchestration, and automation tools.

Through a combination of lessons and hands-on practice, you will manage the tools and learn the benefits of programmability and automation in the Cisco-powered Data Center.

You will examine Cisco Application Centric Infrastructure (Cisco ACI®), Software-Defined Networking (SDN) for data center and cloud networks, Cisco Nexus® (Cisco NX-OS) platforms for device-centric automation, and Cisco Unified Computing System (Cisco UCS®) for Data Center compute.

You will study their current ecosystem of Application Programming Interfaces (APIs), software development toolkits, and relevant workflows along with open industry standards, tools, and APIs, such as Python, Ansible, Git, JavaScript Object Notation (JSON), Yaml Ain't Markup Language (YAML), Network Configuration Protocol (NETCONF), Representational State Transfer Configuration Protocol (RESTCONF), and Yet Another Generation (YANG).

This course prepares you for the 300-635 Automating Cisco Data Center Solutions (DCAUTO) certification exam. Introducing Automation for Cisco Solutions (CSAU) is required prior to enrolling in Implementing Automation for Cisco Data Center Solutions (DCAUI) because it provides crucial foundational knowledge essential to success.

### Programma

- Describing the Cisco ACI Policy Model
- Describing the Cisco APIC REST API
- Using Python to Interact with the ACI REST API

#### ITCore Group

Via Balestra, 12  
6900 Lugano (CH)  
+41.091.9760019  
[www.itcoregroup.com](http://www.itcoregroup.com)

Via Lanino, 36  
21047 Saronno (VA)  
+39.02.84108669  
[www.itcoregroup.com](http://www.itcoregroup.com)

- Using Ansible to Automate Cisco ACI
- Describing Cisco ACI Apps Center and Kubernetes Integration
- Introducing Cisco NX-OS Programmability
- Describing Day-Zero Provisioning with Cisco NX-OS
- Implementing On-Box Programmability and Automation with Cisco NX-OS
- Implementing Off-Box Programmability and Automation with Cisco NX-OS
- Understanding Model-Driven Telemetry
- Automating Cisco UCS Using Developer Tools
- Implementing Workflows Using Cisco UCS Director
- Describing Cisco DCNM
- Describing Cisco Intersight

#### Lab outline

- Use Cisco APIC Web GUI
- Discover the Cisco APIC REST API
- Use Postman with the APIC REST API
- Use Python with the Cisco APIC REST API
- Configure and Verify Cisco ACI Using Acitoolkit
- Use Cobra and Arya to Recreate a Tenant
- Manage Configuration Using Ansible
- Set Up a New Tenant the NetDevOps Way
- Create an Infrastructure Health Report
- Install an Application from the App Center on the Cisco APIC
- Power on Auto Provisioning on the Cisco Nexus 9000
- Use Bash and Guest-Shell on Cisco NX-OS
- Use Python to Enhance CLI Commands
- Trigger a Python Script Using Cisco Embedded Event Manager (EEM)
- Docker Containers on NX-OS
- Configure and Verify Using NX-API and Python
- Configure and Verify Using NETCONF/YANG
- Use Ansible with NX-OS
- Streaming Telemetry
- Connect, Query, and Modify Cisco UCS Manager Objects Using Cisco UCS PowerTool

#### ITCore Group

Via Balestra, 12  
6900 Lugano (CH)  
+41.091.9760019  
[www.itcoregroup.com](http://www.itcoregroup.com)

Via Lanino, 36  
21047 Saronno (VA)  
+39.02.84108669  
[www.itcoregroup.com](http://www.itcoregroup.com)

- Discovery 21: Connect, Query, and Modify Cisco UCS Integrated Management Controller (IMC) Objects Using Cisco IMC PowerTool
- Utilize Cisco UCS Python Software Development Kit (SDK)
- Utilize Cisco IMC Python SDK
- Implement Ansible Playbooks to Modify and Verify the Configuration of Cisco UCS Manager

**ITCore Group**

Via Balestra, 12  
6900 Lugano (CH)  
+41.091.9760019  
[www.itcoregroup.com](http://www.itcoregroup.com)

Via Lanino, 36  
21047 Saronno (VA)  
+39.02.84108669  
[www.itcoregroup.com](http://www.itcoregroup.com)