

Cisco Implementing Automation for Cisco Data Center Solutions (DCAUI) v1.1

Overview

The Implementing Automation for Cisco Data Center Solutions (DCAUI) v1.1 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. This course also earns you 24 Continuing Education (CE) credits towards recertification.

Prerequisite Comments

Before taking this course, you should have the following knowledge and skills:

- Basic programming language concepts
- Basic understanding of virtualization and VMware
- Ability to use Linux and Command Line Interface (CLI) tools, such as Secure Shell (SSH) and bash
- CCNP level data center knowledge
- Foundational understanding of Cisco ACI

Target Audience

This course is designed for network and software engineers who hold the following job roles:

- Network engineer
- Systems engineer
- Wireless engineer
- Consulting systems engineer
- Technical solutions architect
- Network administrator

[Register Online](#)

Schedule

Class Length: 3 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.

Wireless design engineer
Network manager
Site reliability engineer
Deployment engineer
Sales engineer
Account manager

Course Objectives

After taking this course, you should be able to:

Leverage the tools and APIs to automate Cisco ACI powered data centers.

Demonstrate workflows (configuration, verification, healthchecking, monitoring) using Python, Ansible, and Postman.

Leverage the various models and APIs of the Cisco Nexus OS platform to perform day 0 operations, improve troubleshooting methodologies with custom tools, augment the CLI using scripts, and integrate various workflows using Ansible and Python.

Describe the paradigm shift of Model Driven Telemetry and understand the building blocks of a working solution.

Describe how the Cisco Data Center compute solutions can be managed and automated using API centric tooling, by using the Python SDK, PowerTool, and Ansible modules to implement various workflows on Cisco UCS, Cisco IMC, Cisco UCS Manager, Cisco UCS Director, and Cisco Intersight.

Course Outline

1 - Course Outline

Describing the Cisco ACI Policy Model

Describing the Cisco APIC REST API

Using Python to Interact with the ACI REST API

Using Ansible to Automate Cisco ACI

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

Automating Cisco UCS Using Developer Tools

Implementing Workflows Using Cisco UCS Director

Describing Cisco DCNM

Describing Cisco Intersight