

Developing Applications and Automating Workflows using Cisco Core Platforms (DEVASC)

Description

The course is appropriate for software developers, application developers, and network engineers who want to expand their skill base and validate their skills in programmability, software, and automation. Students preparing for Cisco Certified DevNet Associate certification will also find this material useful.

Course Content

- The Developing Applications and Automating Workflows using Cisco Core Platforms (DEVASC) course is designed to help you prepare for the Cisco DevNet Associate certification and for associate-level network automation engineer roles
- The focus of this course is implementation of basic network applications using Cisco platforms as a base, as well as implementing automation workflows across network, security, collaboration and computing infrastructure. the course provides hands-on experience solving real world problems using Cisco Application Programming Interfaces (APIs) and modern development tools
- This course is designed for anyone who performs or seeks to perform a developer role and has one or more years of hands-on experience developing and maintaining applications that are built on top of Cisco platforms

Lab / Exercises

- Parse API Data Formats with Python
- Use Git for Version Control
- Identify Software Architecture and Design Patterns on a Diagram
- Implement Singleton Pattern and Abstraction-Based Method
- Inspect HTTP Protocol Messages
- Use Postman
- Troubleshoot an HTTP Error Response
- Utilize APIs with Python
- Use the Cisco Controller APIs
- Use the Cisco Webex Teams™ Collaboration API
- Interpret a Basic Network Topology Diagram
- Identify the Cause of Application Connectivity Issues
- Perform Basic Network Configuration Protocol (NETCONF) Operations
- Use Cisco Software Development Kit (SDK) and Python for Automation Scripting
- Utilize Bash Commands for Local Development
- Construct a Python Unit Test
- Interpret a Dockerfile
- Utilize Docker Commands to Manage Local Developer Environment
- Exploit Insufficient Parameter Sanitization
- Construct Infrastructure Automation Workflow

Documentation

- Digital courseware included

Exam

- This course prepares you to the 200-901 DEVASC exam. If you wish to take this exam, please contact our secretariat who will let you know the cost of the exam and will take care of all the necessary administrative procedures for you.

Participant profiles

- Network engineers, architects and designers
- Developers / integrators

Prerequisites

- Basic computer and Internet knowledge
- Basic skills of a PC operating system
- Practical experience with a programming language (specifically Python)

Objectives

- Describe the processes and practices used in software development
- Describe the options for organizing and building modular software
- Describe HTTP concepts and their application to network-based APIs
- Apply Representational State Transfer (REST) ??concepts with HTTP APIs
- Describe the programmability features of different Cisco platforms
- Describe the interaction of applications between the network, troubleshooting tools
- Apply Python programmability concepts to automate tasks

Niveau

Fondamental

Virtual Classroom Registration Price (CHF)

4350

Duration (in Days)

5

Reference

CIS-DEVASC