FIREFLY

Automating Networks Using Cisco Platforms • CCNAAUTO 1.1

DURATION: 5 DAYS COURSE CODE: CNNAAUTO FORMAT: Kit & Lab (ILT)

RELEASE NOTES

In this minor update, the labs have been migrated from the LAS/CLL based lab system to the HTD lab systems. Discovery Lab: “Use Cisco SDK and Python for Automation Scripting” was removed as Cisco no longer supports repository for the SDK. The title of this training was changed from “Developing Applications and Automating Workflows Using Cisco Core Platforms (DEVASC)” to “Automating Networks Using Cisco Platforms (CCNAAUTO)”. The associated exam was changed from “DevNet Associate Exam (200-901 DEVASC)” to “Automating Networks Using Cisco Platforms (200-901 CCNAAUTO)”. Additionally, the associated certification was changed from “DevNet Associate” to “CCNA Automation”. There are no changes to the content.

COURSE DESCRIPTION

The Automating Networks Using Cisco Platforms (CCNAAUTO) training teaches you how to implement basic network applications using Cisco platforms as a base, and how to implement automation workflows across network, security, collaboration, and computing infrastructure. The training gives you hands-on experience solving real-world problems using Cisco Application Programming Interfaces (APIs) and modern development tools.

This training prepares you for the 200-901 CCNAAUTO v1.1 exam. If passed, you earn the Cisco Certified Network Associate (CCNA) Automation certification. This training also **earns you 48 Continuing Education (CE) credits toward recertification.**

WHO SHOULD ENROLL

- Network Automation Engineers
- Software Developers
- System Integration Programmers
- Infrastructure Architects
- Network Designers

Automating Networks Using Cisco Platforms

COURSE OBJETIVES

- Describe the importance of APIs and use of version control tools in modern software development
- Describe common processes and practices used in software development
- Describe options for organizing and constructing modular software
- Describe HTTP concepts and how they apply to network-based APIs
- Apply Representational State Transfer (REST) concepts to integration with HTTP-based APIs
- Describe Cisco platforms and their capabilities
- Describe programmability features of different Cisco platforms
- Describe basic networking concepts and interpret simple network topology
- Describe interaction of applications with the network and tools used for troubleshooting issues
- Apply concepts of model-driven programmability to automate common tasks with Python scripts
- Identify common application deployment models and components in the development pipeline
- Utilize tools to automate infrastructure through scripting and model-driven programmability
- Describe common security concerns and types of tests, and utilize containerization for local development

LAB OUTLINE

- 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 Messages
- Use Postman
- Troubleshoot an HTTP Error Response
- Utilize APIs with Python
- Use the Cisco Webex Collaboration API
- Interpret a Basic Network Topology Diagram
- Identify the Cause of Application Connectivity Issues
- Perform Basic NETCONF Operations
- Utilize Bash Commands for Local Development
- Construct Infrastructure Automation Workflow
- Construct a Python Unit Test
- Interpret a Dockerfile
- Utilize Docker Commands to Manage Local Developer Environment
- Exploit Insufficient Parameter Sanitization

COURSE BENEFITS

This training will help you:

- Take advantage of the network when you implement applications to fulfill business needs
- Gain a foundation in the essentials of applications, automation, and Cisco platforms
- Prepare for the 200-901 CCNAAUTO v1.1 exam
- Earn 48 CE credits toward recertification

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COURSE PREREQUISITES

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

- Basic computer literacy
- Basic PC operating system navigation skills
- Basic Internet usage skills
- Hands-on experience with a programming language (specifically Python)
- These skills can be found in the following Cisco Learning Offering:

Python Programming for Network Engineers (PRNE)

CCNAAUTO

5 Days course
45CLC / $4,495
48 CE

Instructor Led Training

To view the schedule and secure your site

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