

CCNAAUTO

Automating Networks Using Cisco Platforms

40 horas

Professional

Cisco

Cisco Continuing Education Credits

48 CE Credits

INTRODUÇÃO

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.

How You'll Benefit

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

OBJETIVO DO CURSO

- 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

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

PRÉ-REQUISITOS

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)

CONTEÚDO PROGRAMÁTICO

Course Outline

Practicing Modern Software Development
Describing Software Development Process
Designing Software
Introducing Network-Based APIs
Consuming REST-Based APIs
Introducing Cisco Platforms and APIs
Employing Programmability on Cisco Platforms
Describing IP Networks
Relating Network and Applications
Employing Model-Driven Programmability
Deploying Applications
Automating Infrastructure
Testing and Securing Applications

Lab Outline

Parse API Data Formats with Python
Use Git for Version Control
Inspect HTTP Messages
Use Postman
Utilize APIs with Python
Use the Cisco Webex Collaboration API
Perform Basic NETCONF Operations
Construct Infrastructure Automation Workflow
Construct a Python Unit Test
Utilize Docker Commands
Exploit Insufficient Parameter Sanitization