Implementing Automation for Cisco Enterprise Solutions (ENAUI) – e-Learning

Cisco

- **Nível:** Avançado
- **Duração:** h

Sobre o curso

Implementing Automation for Cisco Enterprise Solutions (ENAUI) v.1.2 teaches you how to implement Cisco Enterprise automated solutions, including programming concepts, orchestration, telemetry, and automation tools.

This course highlights the tools and the benefits of leveraging programmability and automation in the Cisco-powered Enterprise Campus and Wide Area Network (WAN). You will also examine platforms including Cisco IOS XE software for device-centric automation, Cisco DNA Center for the intent-based enterprise network, Cisco Software-Defined WAN, and Cisco Meraki. Their current ecosystem of Application Programming Interfaces (APIs), software development toolkits, and relevant workflows are studied in detail together 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 Configuration Protocol (RESTCONF), and Yet Another Next Generation (YANG).

Certification

- Associated Certifications: CCNP Enterprise, Cisco Certified DevNet Professional
- Associated Exam: 300-435 ENAUTO

This course includes

- Access duration: 180 days
- Labs
- Self-paced training
- Video training
- Continuing Education Credits: 24

This course is also available in an Instructor-Led Training (ILT) format. For more information, select this link: Implementing Automation for Cisco Enterprise Solutions (ENAUI)

Destinatários

This course is designed primarily for network and software engineers who are interested in learning about automation and programmability and hold the following job roles:

- Account manager
- Consulting systems engineer
- Network administrator
- Network engineer
- Network manager
- Sales engineer
- Systems engineer
- Technical solutions architect
- Wireless design engineer
- Wireless engineer

Objetivos

After taking this course, you should be able to:

- Be familiar with different API styles (REST, RPC) and synchronous and asynchronous API requests
- Learn how to use Postman software development tool in order to test the API calls
- Learn how to automate repetitive tasks using Ansible automation engine
- Explore a Python programming language, Python libraries and Python virtual environments and learn how can they be used for automation of network configuration tasks
- Learn about GIT version control system and its common operations
- Learn how to leverage the various models and APIs of the Cisco IOS XE platform to perform day-zero operations, improve troubleshooting methodologies with custom tools, augment the CLI using scripts, and integrate various workflows using Ansible and Python

- Learn about the paradigm shift of model-driven telemetry and the building blocks of a working solution
- Learn how to leverage the tools and APIs to automate Cisco DNA infrastructure managed by Cisco DNA Center
- Demonstrate workflows (configuration, verification, health checking, and monitoring) using Python, Ansible, and Postman
- Understand Cisco SD-WAN solution components, implement a Python library that works with the Cisco SD-WAN APIs to perform configuration, inventory management, and monitoring tasks, and implement reusable Ansible roles to automate provisioning new branch sites on an existing Cisco SD-WAN infrastructure
- Learn how to leverage the tools and APIs to automate Cisco Meraki managed infrastructure and demonstrate workflows (configuration, verification, health checking, monitoring) using Python, Ansible, and Postman

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Pré-requisitos

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

- Basic programming language concepts
- Basic understanding of virtualization
- Ability to use Linux and CLI tools, such as Secure Shell (SSH) and bash
- CCNP-level core networking knowledge
- Foundational understanding of Cisco DNA, Meraki, and Cisco SD-WAN

The following Cisco courses can help you gain the knowledge you need to prepare for this course:

- Introducing Automation for Cisco Solutions (CSAU)
- Implementing and Administering Cisco Solutions (CCNA)
- Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR)