

DNAPUC

Programming Use Cases for Cisco Digital Network Architecture

16 horas

Network Programmability

Cisco

INTRODUÇÃO

The Programming Use Cases for Cisco Digital Network Architecture (DNAPUC) v1.0 course highlights the shift toward the digital enterprise and examines the components, benefits, and use cases of Cisco Digital Network Architecture (Cisco DN) in an enterprise environment. You will learning about key platforms including Cisco DNA Center, Cisco WebEx Teams, Cisco Connected Mobile Experiences (CMX), and their related APIs. This course also covers open standards, tools, and network APIs that you can use to complement the Cisco DNA software portfolio, including Python, JavaScript Object Notation (JSON), Network Configuration Protocol (NETCONF), Representational State Transfer Configuration Protocol (RESTCONF), and Yet Another Next Generation (YANG).

OBJETIVO DO CURSO

After taking this course, you should be able to:

- Understand the role that programmable infrastructure is having on the transition to the digital enterprise
- Describe Cisco DNA, its components and benefits, and explain a few use cases
- Describe the different technologies and solutions within the Cisco programmable infrastructure portfolio
- Describe Cisco DNA Center REST APIs
- Understand the functionality provided by Cisco WebEx Teams
- Describe Cisco CMX, services, and related APIs
- Describe the importance of DevOps culture within network operations in the shift to becoming a digital enterprise

PÚBLICO-ALVO

- Sales engineers
- Account managers
- Networking engineers
- Technical and non-technical audiences

PRÉ-REQUISITOS

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

- CCNA certification or equivalent experience
- The following Cisco learning offering can help you prepare:

Programming for Network Engineers (PRNE)

Understanding Programmable Infrastructure

- Digital Enterprise
- Four Pillars of Digitization
- Network Programmability and Automation
- What Should Be Automated?
- Quantifying Programmability and Automation for the Business
- Network Programmability and Automation Use Cases

Introducing Cisco DNA

- Cisco DNA Overview
- Cisco DNA Components
- Benefits of Cisco DNA
- Cisco DNA Use Cases

Describing Programmable Infrastructure

- Cisco Programmability Options
- Data Center Infrastructure
- Enterprise Network Programmability
- Streaming Telemetry
- Collaboration
- Management, Monitoring, and Analytics

Describing Network APIs

- How APIs Enable Business Automation
- API Overview
- Data Encoding with JSON and XML
- RESTful APIs
- RESTCONF and NETCONF Overview
- Data Modeling with YANG

Describing Cisco DNA Center APIs

- Cisco DNA Center Overview
- Cisco DNA Center Automation Enterprise Benefits
- Cisco DNA Center Applications and Use Cases
- Cisco DNA Center REST API Overview
- Case Study: Network Automation at Symantec

Describing Cisco Collaboration APIs

- Cisco Webex Teams Overview
- Cisco Webex Teams Business Benefits
- Cisco Webex Teams API Overview

Describing Cisco Mobility APIs

- Cisco CMX Overview
- Cisco CMX Programmability Business Benefits
- Cisco CMX Mobility Services API Overview
- Case Study: Victoria University and Cisco CMX

Implementing DevOps Culture Within Network Operations

Transition to DevOps

CALMS Model (Culture, Automation, Lean, Measurement, Sharing)

Role of Cisco Technology in the Transition to DevOps