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)

CONTEÚDO PROGRAMÁTICO

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