

# MNCPI 3.X (MANAGEMENT NETWORK WITH CISCO PRIME INFRASTRUCTURE)

## Objetivo

Esse curso proporciona aos administradores e engenheiros de rede os conhecimentos necessários para gerenciar uma rede corporativa cabeada e sem fio, utilizando o produto Cisco Prime Infrastructure 3.1. Ao término deste treinamento, você deverá ser capaz de:

- Descrever os conceitos fundamentais em gerenciamento de redes, e as características e funcionalidades do Cisco Prime Infrastructure;
- Gerenciar o inventário de rede com o Cisco Prime Infrastructure;
- Mapear a rede utilizando as ferramentas do Cisco Prime Infrastructure;
- Gerenciar o acesso dos usuários as tarefas, funções e equipamentos pelo Cisco Prime Infrastructure;
- Gerenciar equipamentos e os arquivos de configurações no Cisco Prime Infrastructure;
- Trabalhar com Cisco AVC, QoS e serviços Cisco IWAN utilizando as ferramentas do Cisco Prime Infrastructure, e implantar os serviços Cisco TrustSec Identity com o Cisco Prime Infrastructure;
- Monitorar e realizar atividades de suporte na rede com o Cisco Prime Infrastructure;
- Realizar tarefas administrativas de sistema no Cisco Prime Infrastructure.

## Público Alvo

O público primário inclui os indivíduos os profissionais que demandam conhecimentos para instalar, operar, prestar suporte e otimizar uma solução Cisco Prime Infrastructure 3.x.

## Pré-Requisitos

Para maior aproveitamento é recomendado que o aluno possua conhecimentos básicos e suas terminologias em redes cabeadas (referência CCNA Routing & Switching) e sem fio (CCNA Wireless). Conhecimentos e práticas em processos de administração e suporte em redes são desejáveis.

## Carga Horária

40 horas (5 dias).

## Conteúdo Programático

Course Introduction

Cisco Prime Infrastructure Overview

- Defining Network Management
- FCAPS Model
- Benefits of Network Management

Network Management Process

- Performing Network Management

- Management: Protocol & Standards
- Defining MIB
- MIB: Object Identifiers
- Public MIB Structure
- Cisco Proprietary MIB Structure
- MIB Variable Types
- SNMP Protocol
- SNMP GET Request and Response
- SNMP SET Request
- SNMP Version and Security Levels
- Using SNMP Polling
- Using SNMP Traps

#### Cisco Prime Infrastructure Architecture

- CPI & Networks Management
- Cisco Prime Infrastructure Features
- Cisco Prime Infrastructure Tools
- Benefits & Advantages
- Preparing Device Integration
- CPI & MSE Integration
- CPI & ISE Integration
- Cisco Prime Infrastructure Licensing Model

#### Installing Cisco Prime Infrastructure 3.X

- Cisco Prime Infrastructure Deployment Options
- Upgrade from Previous Versions
- Client and Browser Requirements
- High Availability Framework
- Multiple Instances with Operations Center
- Troubleshoot the Installation

#### Getting Started with Cisco Prime Infrastructure

- CLI Interface Overview
- CLI Interface Commands
- Stop and Start the Server
- Password Reset
- Repository Creation
- Backup Operation
- Restore Operation
- Patch Installation
- Cisco Prime Infrastructure GUI Overview
- Using Started Guide
- Cisco Prime Infrastructure Menus
- User Preferences
- Change Password of Logged in User

#### Configuring Initial CPI Server Settings

- Configure Basic Server Settings

- Alarms and Events Settings
- Client Settings
- Data Retention Settings
- Mail Server Configuration
- Server Settings
- License Management

#### Managing Network Inventory

- Different Types of Credentials
- Add Devices to the Inventory
- View Device Status
- Device Details Page
- Managing the Network Inventory
- Device 360° Views
- View Network Device Reports
- Managing Groups
- Cisco Prime Infrastructure Groups

#### Managing Devices Software Images

- Manage the Software Images Repository
- Distribute Software Images
- View Software Image Recommendations
- Perform an Image Upgrade Analysis
- Distribute Image
- Verify Image Upgrade
- Wireless Software Support

#### Managing Cisco Wireless Networks

- Wireless Technologies Overview
- Wireless Connections Overview
- Wireless Site Maps Overview
- Manage Wireless Sites Maps
- Add New Campus
- Add New Building to Campus
- Add New Floor to Building
- Add APs to the Floor
- Modify Floor View Settings
- Edit Floor Maps
- Export and Import Site Maps

#### CPI & Network Topology Maps

- Network Topology Overview
- Topology Maps Management
- Customize Topology Maps
- Unmanaged Device Elements
- Drill Down vs. Expand

#### CPI & Role-Based Access Control

- Introduction to Virtual Domains
- Root Domain
- User-Defined Virtual Domains
- Local User Authentication and Authorization
- User Groups
- Managing Remote AAA Mode Settings

#### CPI & Configuration Management

- Configuration Archives
- Archive Management Overview
- Configuration Archive Management Options
- Configuration Templates for Wired Devices
- Configuration Templates Overview
- Features and Technologies Folder
- CLI Templates
- System-Defined CLI Templates
- User-Defined CLI Templates
- Configurations for Wireless Devices
- Wireless Devices Support
- Wireless Configuration Templates and Tools

#### CPI & Services Management

- CPI Management AVC, QoS, and IWAN Services
- AVC Readiness Assessment
- Applications and Services Data Sources
- NetFlow and Flexible NetFlow
- CPI & Cisco Prime NAM
- AVC Profile Management and Deployment
- Interface Configuration
- Introduction to Cisco IWAN

#### CPI & Monitor and Troubleshoot

- Monitoring Devices and Interfaces
- Device Data Collection: Polling vs. Traps
- Dashboards and Dashlets
- Alarms and Events
- Device and Interface Reports
- Monitoring the Wireless Network
- Wireless Data Collection
- Wireless Dashboards and Dashlets
- Cisco MSE Services
- Cisco CleanAir
- Finding Interference Sources
- Launching Spectrum Expert
- Wireless Alarms and Events
- Wireless Reports
- Application Data Collection: NetFlow and NAM
- Application Dashboards and Dashlets

- Application Baseline and Service Health
- Health Rules
- Service Health Dashboard
- Application Reports

#### CPI & Managing Clients and Users

- Monitor Clients and Users
- Client Troubleshooting
- Other Troubleshooting Tools
- User 360° View
- Client Profiling
- Client Profiling With Cisco ISE
- Client Profiling Without Cisco ISE

#### Generating Reports

- Report Launch Pad Overview

#### CPI & System Administration

- Managing the Server
- Admin Dashboard
- Cisco Prime Infrastructure API
- Introduction to Cisco Prime Infrastructure API
- Device Details
- Statistics
- Reports

#### CPI & Operations Center

- Introduction to Operations Center
- Operations Center Data Aggregation

#### Laboratórios

- Lab 1: Demo: Virtual Appliance Setup
- Lab 2: Access Cisco Prime Infrastructure
- Lab 3: Initial Server Configuration
- Lab 4: Populate the Network Inventory
- Lab 5: Manage the Network Inventory
- Lab 6: Manage Groups
- Lab 7: Manage Device Software Images
- Lab 8: Manage Wireless Maps
- Lab 9: Manage Network Topology Services
- Lab 10: Create a Virtual Domain and Add a User
- Lab 11: Manage the Configuration Archive
- Lab 12: Manage Wired Device Templates
- Lab 13: Manage Wireless Device Configurations
- Lab 14: Manage AVC and QoS Services
- Lab 15: Monitor Devices and Interfaces
- Lab 16: Monitor the Wireless Network
- Lab 17: Track Clients, Users and Applications

- Lab 18: Generate Reports
- Lab 19: Configure Operations Center