

# WMUAPI (MANAGING UNIFIED ACCESS NETWORKS WITH CISCO PRIME INFRASTRUCTURE)

## Objetivo

O curso WMUAPI estabelece uma base sólida para a gestão de uma infraestrutura Cisco em redes cabeadas e sem fio utilizando o Cisco Prime Infrastructure 2.0. Durante este curso, o aluno vai explorar as capacidades de visibilidade proporcionada pelas aplicações para controle do Cisco Prime Infrastructure para monitoramento e suporte na solução dos problemas na rede. O curso aborda um contexto de um cenário realista, e abrange todos os aspectos na abordagem pelo Cisco Prime Infrastructure 2.0 no gerenciamento denominado de “Lifecycle Management”. O aluno criará Sites, Mapas, realizar configurações, executar a descoberta dos dispositivos a serem gerenciados, bem como aprender a definir alarmes e solucionar problemas da rede. Depois de concluir este curso, os alunos serão capazes de: Descrever a arquitetura, licenciamento, recursos de migração, segurança, recursos de conformidade e a configuração do Cisco Prime Infrastructure 2.0. Identificar as tarefas para pré-implantação (pre-deployment) e de projeto (Design) abordadas no processo denominado Lifecycle do Cisco Prime Infrastructure; Descrever como implantar as configurações dos dispositivos com o Cisco Prime Infrastructure. Examinar os diferentes modelos (templates) disponíveis, suas capacidades e como os utilizar para a criação de configurações dos equipamentos, bem como os aplicar; Descrever os papéis envolvidos nas operações do Cisco Prime Infrastructure; Realizar a descoberta de dispositivos e tarefas de configuração envolvidas; Explorar os recursos de monitoramento e gerenciamento da Cisco Prime Infrastructure; Criar modelos para monitoramento, assim como realizar o monitoramento de desempenho e status da rede; Utilizar Cisco Prime Infrastructure nas atividades de suporte, identificação e solução dos problemas da rede; Criar e personalizar uma ampla gama de relatórios utilizando Prime Infrastructure 2.0.

## Público Alvo

O público principal deste curso são os responsáveis em projetar, implantar e prestar suporte em gerência utilizando o Cisco Prime Infrastructure 2.0.

## Pré-Requisitos

Para aproveitar ao máximo este curso, é recomendável que os alunos possuam as seguintes habilidades e conhecimentos: Conhecimentos básicos em rede cabeada e sem fio; Conhecimentos básicos na configuração de equipamentos cisco (roteadores, switches e controladora); Conhecimentos básicos em gerenciamento da rede e suas terminologias; Conhecimento do sistema operacional Microsoft Windows.

## Carga Horária

24 horas (3 dias).

## Conteúdo Programático

### Cisco Prime Infrastructure Overview

Upon completing this lesson, you will be able to describe Cisco Prime Infrastructure key features, licensing structure, and the lifecycle approach to network management.

Describe the purpose of Unified Access networks

Introduce Cisco Prime Infrastructure 2.0

Describe device support of Cisco Prime Infrastructure

Describe the licensing model of Cisco Prime Infrastructure 2.0

### Cisco Prime Infrastructure Lifecycle Theme

Upon completing this lesson, you will be able to describe the purpose of the Lifecycle theme and all of its components.

Describe the activities implied by managing Unified Access Networks map onto specific phases of the network lifecycle

Discuss the coexistence of two different GUI paradigms in Cisco Prime Infrastructure

Introduce the case study that will be used as a guideline throughout the course

### Cisco Prime Infrastructure Installation

Upon completing this lesson, you will be able to describe the technical requirements and deployment options for Cisco Prime Infrastructure.

Describe the task flow for the Cisco Prime Infrastructure server installation

Describe the hardware requirements for Cisco Prime Infrastructure

Describe how to install a virtual appliance using an OVA file

Describe how to troubleshoot the installation

### Cisco Prime Infrastructure Server Administration

Upon completing this lesson, you will be able to identify the steps and features that are required to launch and manage Cisco Prime Infrastructure.

Describe the first login to the Cisco Prime Infrastructure server, the Getting Started guide, and tasks for the initial Cisco Prime Infrastructure server administration

Describe license management

Describe how to add and manage users of Cisco Prime Infrastructure

Describe system settings in Cisco Prime Infrastructure

### Cisco Prime Infrastructure Lifecycle Design Phase

Identify the features and functional aspects of the design lifecycle phase that are used by predeployment and design engineers.

### Design Phase Overview

Upon completing this lesson, you will be able to describe how the Cisco Prime Infrastructure Lifecycle view is organized to assist in tasks that are performed during the design phase of a network.

Explain the design phase in the network lifecycle

Describe the problems to solve during the case study design phase and the IT network team strategies that are employed

Describes how to visualize a workflow of the tasks that are accomplished in the design phase

## Adding Devices and Creating Groups and Sites

Upon completing this lesson, you will be able to explain how to add a device and how to create sites and maps in Cisco Prime Infrastructure.

Describe the task flow for adding devices to Cisco Prime Infrastructure

Describe how to add devices to Cisco Prime Infrastructure

Describe different types of groups in Cisco Prime Infrastructure and how to create them

Describe the Endpoint-Site Association feature

## Creating Templates

Upon completing this lesson, you will be able to describe Cisco Prime Infrastructure templates and how to create composite templates.

Describe templates that are available in Cisco Prime Infrastructure

Describe how to create composite templates

## Managing Wireless Networks

Upon completing this lesson, you will be able to configure wireless LAN operation in your network using the Cisco Prime Infrastructure 2.0 Design megamenu.

Describe why the BYOD phenomenon must be recognized by IT organizations

Describe the notion of groups as it applies within Cisco Prime Infrastructure

Describe different types of groups in Cisco Prime Infrastructure and how to create them

Describe how to configure wireless templates in Cisco Prime Infrastructure

Explain the term Unified Access

## Cisco Prime Infrastructure Lifecycle Deploy Phase

Deploy device configurations using templates.

### Deploy Phase Overview

Upon completing this lesson, you will be able to describe deployment lifecycle phase, when it occurs, and troubleshooting strategies used in the deployment phase.

Illustrate the problems that are solved in the deployment phase and explain why and when the deployment phase should occur

Describe the main strategies that are used in the case study to address the problems that must be solved during the deployment phase

Describe a summarized workflow of the Cisco Prime Infrastructure deployment phase

### Deploying Templates

Upon completing this lesson, you will be able to deploy configurations to wired and wireless devices.

Describe the task flow for using templates

Describe the types of templates that are available for different devices

Describe how to schedule template deployments

## Cisco Prime Infrastructure Lifecycle Operate Phase

Identify the features and functionalities of Cisco Prime Infrastructure used by the network engineers, administrators, and network operations center workforce associated with the operate lifecycle phase.

### Operate Phase Overview

Upon completing this lesson, you will be able to describe the roles of the operations workforce and the applicable features in the operate lifecycle phase of Cisco Prime Infrastructure.

Summarize the operations phase in the network lifecycle

Identify the problems to solve during the case study of Olympian Industries, Inc. and describe the high-level process of running and managing operation

Explain the operate phase workflow in Cisco Prime Infrastructure

Device Discovery and Management

Upon completing this lesson, you will be able to identify the Cisco Prime Infrastructure discovery and management functionalities for network engineers and administrators. Describe the use of the Device Work Center and how to discover devices on the network.

Describe the Workflows Menu

Describe how to add devices to Cisco Prime Infrastructure using plug-and-play workflow

Describe how to manage device configuration files

Describe how to manage device software images

Mobility Work Center

Upon completing this lesson, you will be able to create a full mobility domain.

Explain a high-level view of the converged access mobility architecture

Describe the order in which the components of a mobility domain are created

Describe how to troubleshoot a mobility problem

Describe how to obtain mobility statistics for a mobility controller from the Device Work Center

Describe how to enable the Mobility Oracle feature on a mobility controller

Monitoring and Troubleshooting

Upon completing this lesson, you will be able to describe the monitoring, management, troubleshooting, and problem-isolation capabilities of Cisco Prime Infrastructure for the network operations center.

Describe the monitoring features and functionalities of Cisco Prime Infrastructure

Describe how to monitor and troubleshoot alarms and events

Describe how to monitor and troubleshoot wireless networks using maps

Describe how to monitor and troubleshoot clients and users

Describe how to monitor performance and service health

Using Cisco Prime Infrastructure Reports

Upon completing this lesson, you will be able to create, customize, and schedule reports in Cisco Prime Infrastructure.

Describe how to create and customize reports

Describe how to schedule reports using templates and access scheduled report results

Roteiro de Laboratórios

Lab 1: Creating Users and Groups

Create Virtual Domains

Viewing User Group Tasks

Add Users to Cisco Prime Infrastructure

Add Devices to Cisco Prime Infrastructure

Create a Device Group

Create Port Groups

Lab 2: Creating Sites and Maps

Create a Site Design

Add Access Points to Maps

Use the Map Editor  
Use the Planning Tool  
Configure Endpoint-to-Site Association

Lab 3: Deploying Configurations Using Templates  
Create, Publish, and Deploy a Template for a Cisco IOS Switch and Router  
Configure a Switch Port Using a Template with Variables  
Create and Deploy a Composite Template to a Switch  
Using IOS Configuration Groups  
Create Templates for a Wireless Controller  
Create and Deploy a Controller Configuration Group with Templates for a Wireless Controller  
Create and Deploy a Template for a Unified (Lightweight) Access Point

Lab 4: Using Device Work Center  
Discovering Devices from the Device Work Center  
Discovering Devices from the Device Work Center  
Add Devices to Site Groups  
Configuring Devices from Device Work Center  
Managing Configurations  
Image Management

Lab 5: Monitoring, Alarms, Events, and Troubleshooting  
Viewing Alarms, and Events  
Using Monitoring Dashboards  
Using Device 360 Views  
Monitoring Clients and Users

Lab 6: Using Reports  
Using the Report Launch Pad  
Schedule Reports  
Customize Reports  
Run Compliance Reports