

Juniper Campus Networks with Mist AI

COURSE OVERVIEW

This two-day course will provide students with detailed exposure to Juniper's Mist Wired Assurance solution. This includes the three stages associated to switch installations: Day Zero-Provisioning, Day One-Deployment, and Day Two-Operations. This course will explore the supporting technologies, software, and hardware that make up traditional campus LANs and campus fabric LANs. Through demonstrations and hands-on labs, students will gain experience with provisioning, deploying, and managing Juniper EX Series and QFX Series switches. Students will also deploy switches to create an EVPN-VXLAN campus fabric. These tasks will all be completed by the students in a dedicated lab through the Mist UI.

COURSE LEVEL

Intermediate

AUDIENCE

- Individuals who want an understanding of Juniper Mist Wired Assurance and Juniper switches
- Individuals who want to learn how to deploy campus networks using Mist
- Individuals who want an introduction to network fabrics and their application in a campus LAN environment

PREREQUISITES

- Completion of the [Juniper Mist AI Networks \(MIST\)](#) course, or equivalent knowledge;
- General understanding of campus and enterprise networks;
- Advanced networking knowledge of routing and switching and supporting technologies;
- Basic knowledge of Juniper switching devices; and
- Strong understanding of the BGP routing protocol.

RELATED JUNIPER PRODUCTS

- Mist AI
- EX Series
- QFX Series
- SRX Series

CONTACT YOUR REGIONAL EDUCATION SERVICES TEAM

- Americas: training-amer@juniper.net
- Europe, Middle East, Africa: training-emea@juniper.net
- Asia-Pacific: training-apac@juniper.net

OBJECTIVES

- Describe the benefits of Juniper Mist Wired Assurance (switch installation and campus fabrics).
- Explain each of the three processes that make up switch installation.
- Summarize the management of standalone and Virtual Chassis switches in the Mist UI.
- Correlate switch configurations and template options available in the Mist UI.
- Explain traditional and modern campus architectures.
- Install a Juniper enterprise switch with the Mist UI.
- Deploy switches in a traditional campus LAN.
- Deploy an EVPN-multihomed campus fabric using Mist.

COURSE CONTENTS

DAY 1

1

Course Introduction

2

Wired Assurance Overview

- Mist overview
- Mist switch installation processes
- Mist campus LAN
- Supported devices and software

3

Wired Assurance Day Zero: Provision

- Provisioning switches in Mist
- Onboarding processes
- Telemetry

4

Wired Assurance Day One: Deploy

- Deployment options
- Configuration options and hierarchy
- Templates
- Configurable items

Continued on the next page.

COURSE CONTENTS (contd.)

DAY 1 (contd.)

5 Wired Assurance Virtual Chassis

- Prerequisites
- Wiring and connections
- Configuration
- Deployment

6 Wired Assurance Day Two: Operations

- Junos OS configuration basics
- Monitoring
- Management
- Device insights
- SLEs and troubleshooting
- WAN Assurance

Lab 1: Provision, Deploy, and Manage EX Series Switches with Mist

DAY 2

7 Campus Fabric Architectures

- Describe traditional campus architectures
- Explain the benefits of EVPN-VXLAN in a campus environment
- Describe Layer 3 campus network designs

8 VXLAN

- Describe Layer 2 tunneling
- Explain VXLAN functionality
- Describe VXLAN gateways

9 EVPN-VXLAN

- Describe EVPN features
- Explain EVPN operations
- Describe EPN and VXLAN for data plane encapsulation

10 Mist Campus Fabric Deployment

- Describe the campus fabric deployments supported by Mist
- Provision an EVPN-multihoming fabric using Mist

Lab 2: EVPN Multihoming

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