Deploying and Managing Juniper SD-WAN with Mist Al



COURSE OVERVIEW

This two-day course provides students with the knowledge required to configure, deploy, monitor, and troubleshoot Mist WAN Edge devices deployed in a hub-and-spoke topology. This course summarizes the Mist full-stack solution and how it aligns with enterprise architectures, followed by detailed information and lab exercises regarding operation, configuration, and deployment with Mist WAN Edge devices in software-defined wide area networks (SD-WAN). This course is based on Mist cloud, which updates on a bi-weekly basis. The labs use the virtual SSR version 6.1.2. SRX is based on Junos Release 21.3R3.10.

Key topics include Enterprise WAN Edge design principles, device onboarding and basic configuration in the Mist UI, common configuration tasks and workflows, and operational monitoring with application identification and device maintenance within Mist.

Although the course covers the theory of both platforms, the hands-on labs and basic configuration in the Mist UI and the common configuration tasks and workflows are performed with SSR Series devices. SRX is covered in lectures only.

COURSE LEVEL

Intermediate

AUDIENCE

This course benefits individuals responsible for implementing, configuring, and maintaining SSR Series and SRX Series devices using Mist AI WAN Assurance.

PREREQUISITES

- Basic Junos OS knowledge
- Basic SSR knowledge
- Strong Enterprise WAN Edge networking skills
- Completion of the following courses, or equivalent knowledge
 - o <u>Introduction to Juniper Mist AI</u>
 - o <u>Introduction to Session Smart Routing</u>
 - o <u>Juniper Security</u>

RELATED JUNIPER PRODUCTS

- Mist Al
- SRX Series
- SSR Series

CONTACT EDUCATION SERVICES:

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OBJECTIVES

- Describe the Mist Cloud.
- Explain the key concepts and terminology used in WAN Assurance.
- Explain how to onboard a WAN Edge device and perform basic configurations.
- Explain how Application Policy influences access to resources.
- Explain how Mist translates intent into configurations for WAN Edge.
- Define and apply WAN Assurance scaling features.
- Describe how Mist enables site-to-site connectivity.
- Explain how Mist translates intent into configurations for SD-WAN.

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COURSE CONTENTS

DAY 1

Course Introduction

- 1 Introduction to Mist
 - Explain the benefits of Mist Al
 - Explore Mist subscription options
 - Describe Mist Al-Driven networking solutions
- 2 Juniper Mist WAN Assurance
 - Describe the Mist WAN Assurance solution
 - Define the WAN Edge
 - Define the terminology used in WAN Assurance
 - List the deployment models for WAN Assurance
 - Explore the supported WAN Edge platforms
- 3 WAN Assurance Quick Start
 - Explain the onboarding options for a WAN Edge in Mist
 - Explain the basic WAN Assurance workflow

Lab 1: WAN Assurance Quick Start

- 4 Networks, Applications, and Policies
 - Explain networks
 - Explain applications
 - Explain traffic steering
 - Explain Application Policy
- 5 Mist Intent-Model for Standalone WAN Edge
 - Explain intent-based networking
 - Compare WAN Edge Platforms
 - Explain the intent-based model for SRX
 - Explain the intent-based model for SSR

Lab 2: Application Policy

DAY 2

6 Templates, Variables, and Scaling

- Explain WAN Edge templates
- Explain site variables
- Explain importing, exporting, and applying templates
- Define organization-level Application Policy

Lab 3: Scaling with Templates and Site Variables

- 7 SD-WAN and Intersite Connectivity
 - Define SD-WAN
 - Describe hub profiles
 - Explain key deployment considerations
- 8 Mist Intent Model for SD-WAN
 - · Explain the intent-based model for SRX SD-WAN
 - Explain the intent-based model for SSR SD-WAN
 - Explain SD-WAN deployment considerations

Lab 4: SD-WAN with SSR

- 9 Application Identification and Discovery
 - Outline application identification in Juniper Mist WAN
 Assurance
 - Describe application identification on the SRX Series Firewalls and Juniper Mist Premium Analytics
 - Describe application identification on the Juniper Session Smart Router and Juniper Mist Premium Analytics
- 10 Application Policy and Application Steering
 - Define Application Steering in Juniper Mist WAN
 - Explain how to use AppID to implement Application Steering
 - Define Application Steering considerations
- 11 Troubleshooting and Monitoring Mist WAN
 - Describe monitoring with WAN Edge details
 - Explain monitoring with WAN Edge Insights
 - Outline troubleshooting with Marvis and SLEs in Mist WAN
 - Review troubleshooting tools

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