

Deploying and Managing Juniper Wireless Networks with Mist AI

Category: Networking & Security | **Vendor:** Juniper

Duration: 32.00 hours (4 days)

26.0 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This four-day course provides students with the knowledge required to work with enterprise wireless technologies and Juniper Driven by Mist AI™ wireless networks. Students will gain in-depth knowledge of wireless technologies, Juniper Mist™ technologies, and how to configure and use them. Through demonstrations and hands-on labs, students will gain experience with the features and functionalities of Mist AI-driven Wi-Fi.

About This Course

- Wi-Fi Standards
- Wi-Fi Radio Frequency Bands
- Applying Radio Frequency Basics to Wi-Fi
- Modulation and Coding for Wireless Networks
- Understanding Client Association and Roaming
- Network Contention Factors
- Wi-Fi Architectures and Life Cycle
- Getting Started with Juniper Mist
- Juniper Mist Configuration Objects
- Juniper Access Points
- WLANs
- Juniper Mist Edge
- Guest Portals
- Juniper Mist WxLAN Policies
- Juniper Mist Wi-Fi Security
- Juniper Mist Service-Level Expectations
- Juniper Mist Events and Insights
- Juniper Mist Radio Resource Management
- Juniper Mist Dashboard and Reports
- Juniper Mist Artificial Intelligence and Troubleshooting Options
- Marvis Queries
- Marvis Actions
- Location-Based Services
- User Engagement and Asset Visibility

Who Should Attend

Individuals working with enterprise wireless networks and applying artificial intelligence to their activities

Prerequisites & Entry Requirements

General Prerequisites:

- Basic TCP/IP skills
- General networking
- Completion of the Introduction to Juniper Mist AI (IJMA) course or equivalent knowledge

Learning Outcomes

Upon successful completion of this course, participants will be able to:

After successfully completing this course, you should be able to:

- Describe the IEEE 802.11 standard and amendments.
- Describe wireless frequency bands.
- Apply radio frequency (RF) basics in wireless networks.
- Identify how modulation and coding make up wireless networks.
- Describe the interworkings of association and roaming.
- Describe network contention factors.
- Define WLANs.
- Define Juniper Mist.
- Describe Juniper Mist configuration objects for wireless networks.
- Describe Juniper Access Points and their configuration options.
- Describe Juniper Mist's WLAN configuration objects.
- Describe Juniper Mist™ Edge.
- Describe the Juniper Mist guest options.
- Describe WxLAN policies and how apply them to resources.
- Examine wireless intrusion detection and prevention from Juniper Mist.
- Describe WLAN security threats detected by the Juniper Mist WLAN system.
- Interpret wireless service-level expectations (SLEs) in relation to users.
- Gather events and insights from the Mist™ cloud.
- Summarize Juniper Mist's radio resource management (RRM).
- Review additional data to create dashboard and reports.
- Evaluate machine learning and artificial intelligence.
- Summarize Marvis queries.
- Extend Mist's Marvis actions.
- Describe the functions of Marvis Actions and Marvis Minis.
- Compare the concepts and methods of location services.
- Explain Juniper Mist's approach to user engagement and asset visibility.

Detailed Course Outline

Wi-Fi Standards

- Describe the purpose of the 802.11 standard and its physical layer amendments

Wi-Fi Radio Frequency Bands

- Describe the 2.4-GHz, 5-GHz, and 6-GHz frequency bands used for WLANs and their channels

Applying Radio Frequency Basics to Wi-Fi

- Describe the properties of an RF wave
- Convert dBm to Milliwatts using RF math
- Explain factors that contribute to RF signals and how they relate to WLANs

Modulation and Coding for Wireless Networks

- Explain RF modulation and how it relates to WLAN data rates
- Describe the relationship between SNR and MCS

Understanding Client Association and Roaming

- Describe the 802.11 state machine and steps required for an 802.11 station to connect to an access point
- Explain the protocols used in a client's connection to the network

Network Contention Factors

- Describe 802.11 contention

Wi-Fi Architectures and Life Cycle

- Differentiate WLAN architectures
- Describe the stages of the WLAN life cycle

Getting Started with Juniper Mist

- Examine the Juniper Mist architecture
- Create a Juniper Mist account
- Summarize Juniper Mist subscriptions
- Summarize the MSP dashboard

Lab 1: Initial Setup

Juniper Mist Configuration Objects

- Explain the difference between organization-level and site-level configuration objects
- Define Juniper Mist configuration objects and their uses

Lab 2: Remote Site and Site Groups and Variables

Juniper Access Points

- Summarize access points and connectivity
- Describe the boot procedure for a Juniper Access Point, its requirements, and the process of adding a Juniper Access Point to the Juniper Mist cloud
- Describe common AP configuration settings
- Use the Juniper Access Points dashboard to get information about an Access Point

WLANs

- Define a SSIDs, BSSIDs, and their functions
- Review additional WLAN configuration options
- Explain WLAN security options and how they are configured in a Juniper Mist WLAN configuration object
- Describe data rates and how they are configured in Juniper Mist
- Explain SSID strategies for multiband deployments

Juniper Mist Edge

- Define the features and benefits
- Identify popular use cases
- Categorize the product options
- Summarize the installation
- Review the Edge management
- Troubleshoot the device and connectivity

Guest Portals

- Describe the Juniper Mist guest options

Juniper Mist WxLAN Policies

- Explain WLAN policies and how they are configured

Lab 3: WLANs and WxLAN

Juniper Mist Wi-Fi Security

- Describe WLAN security threats detected by the Juniper Mist WLAN system

Juniper Mist Service-Level Expectations

- List Wi-Fi Assurance SLEs and their classifiers

Juniper Mist Events and Insights

- Describe site, AP, and client events
- Explain the packet capture functionality of the Juniper Mist system
- Describe the 802.11 MAC header and list 802.11 MAC frame types

Lab 4: SLE Troubleshooting

Juniper Mist Radio Resource Management

- Describe Juniper Mist RRM operations and their purposes

Juniper Mist Dashboard and Reports

- Explain custom dashboard and report options

Juniper Mist Artificial Intelligence and Troubleshooting Options

- Assess Juniper Mist's application of artificial intelligence
- Describe the reactive and proactive troubleshooting methodologies

Marvis Queries

- Explain the difference between Marvis natural language and Marvis query language

Marvis Actions

- Explain the features of Marvis Actions
- Explain the functions of Marvis Minis

Lab 5: Marvis

Location-Based Services

- Describe real-time location services
- Explain Wi-Fi components for location services

User Engagement and Asset Visibility

- Explain Juniper Mist's approach to user engagement
- Describe Juniper Mist's asset visibility capabilities

Skills You Will Learn:

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Frequently Asked Questions

Q: What delivery options are available for Deploying and Managing Juniper Wireless Networks with Mist AI?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: How many CPD hours does this course provide?

The 4-day Deploying and Managing Juniper Wireless Networks with Mist AI course provides up to 26.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Deploying and Managing Juniper Wireless Networks with Mist AI training?

The training takes place over 4 day(s), with each day lasting approximately 32.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Deploying and Managing Juniper Wireless Networks with Mist AI?

Yes, we provide corporate training, dedicated training, and closed classes for Deploying and Managing Juniper Wireless Networks with Mist AI. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Deploying and Managing Juniper Wireless Networks with Mist AI, Enterprise Routing & Switching, DMJWN

Q: Why choose Nexus Human for Deploying and Managing Juniper Wireless Networks with Mist AI?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Deploying and Managing Juniper Wireless Networks with Mist AI training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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