



Enterprise Computing Solutions - Education Services

## TRAINING OFFERING

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# Deploying and Managing Juniper Wireless Networks with Mist AI

CODE:	LENGTH:	PRICE:
JUN_JWMA	32 Hours (4 dage)	kr 28,300.00

## Description

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.

### RELATED JUNIPER PRODUCT

COURSE LEVEL • Juniper Mist AI  
Intermediate

## Objectives

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.

## Audience

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

## Prerequisites

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

## Programme

- 1 Wi-Fi Standards
  - Describe the purpose of the 802.11 standard and its physical layer amendments
- 2 Wi-Fi Radio Frequency Bands
  - Describe the 2.4-GHz, 5-GHz, and 6-GHz frequency bands used for WLANs and their channels
- DAY 1**
  - 3 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
  - 4 Modulation and Coding for Wireless Networks
    - Explain RF modulation and how it relates to WLAN data rates
    - Describe the relationship between SNR and MCS
  - 5 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
  - 6 Network Contention Factors
    - Differentiate WLAN architectures
    - Describe 802.11 contention
  - 7 Wi-Fi Architectures and Life Cycle
    - Describe the stages of the WLAN life cycle
  - 8 Getting Started with Juniper Mist
    - Examine the Juniper Mist architecture
    - Create a Juniper Mist account
    - Summarize Juniper Mist subscriptions
    - Summarize the MSP dashboard
  - 9 Juniper Mist Configuration Objects
    - Explain the difference between organization-level and site-level configuration objects
    - Define Juniper Mist configuration objects and their uses
  - Lab 1: Initial Setup **DAY 2**
  - Lab 2: Remote Site and Site Groups and Variables
  - 10 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
  - 11 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
  - 12 Juniper Mist Edge
    - Define the features and benefits
    - Identify popular use cases
    - Categorize the product options
    - Summarize the installation
    - Review the Edge management
  - 13 Guest Portals
    - Describe the Juniper Mist guest options
  - 14 Juniper Mist WxLAN Policies
    - Explain WLAN policies and how they are configured
  - Lab 3: WLANs and WxLAN
  - 15 Juniper Mist Wi-Fi Security
    - Describe WLAN security threats detected by the Juniper Mist WLAN system
  - 16 Juniper Mist Service-Level Expectations
    - List Wi-Fi Assurance SLEs and their classifiers
  - 17 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
  - 18 Juniper Mist Radio Resource Management
    - Describe Juniper Mist RRM operations and their purposes
  - 19 Juniper Mist Dashboard and Reports
    - Explain custom dashboard and report options
  - 20 Juniper Mist Artificial Intelligence and Troubleshooting Options
    - Assess Juniper Mist's application of artificial intelligence
    - Describe the reactive and proactive troubleshooting methodologies
  - 21 Marvis Queries
    - Explain the difference between Marvis natural language and Marvis query language
  - 22 Marvis Actions
    - Explain the features of Marvis Actions
    - Explain the functions of Marvis Minis
  - 23 Location-Based Services
    - Describe real-time location services
  - 24 User Engagement and Asset Visibility
    - Explain Juniper Mist's approach to user engagement
    - Describe Juniper Mist's asset visibility capabilities
  - Lab 4: SLE Troubleshooting
  - Lab 5: Marvis

## Follow on courses

Juniper Mist AIOps (JMA) Deploying and Managing Juniper Wired Networks for Campus and Branch with Mist AI (JCMA)

## Test and Certification

RELATED CERTIFICATION  
JNCIS-MistAI-Wireless Certification

## Session Dates

På anmodning. [Kontakt os venligst](#)

## Yderligere Information

[Denne træning er også tilgængelig som træning på stedet. Kontakt os for at finde ud af mere.](#)