



TRAINING OFFERING

You can reach us at:

Arrow ECS, Nidderdale House, Beckwith Knowle, Harrogate, HG3 1SA

Email: educationteam.ecs.uk@arrow.com

Phone: 0870 251 1000



Deploying and Managing Juniper Wireless Networks with Mist AI (JWMA)

CODE:	LENGTH:	PRICE:
JUN_JWMA	32 Hours (4 days)	£3,195.00

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

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
10 Feb 2025	Virtual Training Class - TP	GMT	English	Instructor Led Online		£3,195.00

Additional Information

[This training is also available as onsite training. Please contact us to find out more.](#)