



## TRAINING OFFERING

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| CODE:   | LENGTH:           | PRICE:    |
|---------|-------------------|-----------|
| JUN_JMA | 24 Hours (3 days) | £2,550.00 |

## Description

This three-day course explores both the available resource-based Juniper Driven by Mist AI™ data and real-time event-based Mist AI™ data. The class examines how the data can be accessed and searched through the Mist UI through Marvis® Virtual Network Assistant. The class also explores automation and integration using the Juniper Mist™ APIs. Through demonstrations and hands-on labs, students will gain experience with features of Juniper Mist AI.

COURSE LEVEL RELATED JUNIPER PRODUCT  
Intermediate • Mist AI

## Objectives

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

- Describe the data available in the Juniper Mist™ cloud.
- Describe the components and operations of Marvis.
- Use Marvis to access Juniper Mist AI data.
- Explain the built-in integration options.
- Describe the features and limitations of Juniper Mist RESTful API.
- Describe the features and limitations of Juniper Mist WebSocket API.
- Describe the features and limitations of Juniper Mist Webhook API.
- Perform Juniper Mist AI operations using Postman.
- Perform Juniper Mist AI operations using Node-RED.
- Describe Juniper Mist API using Python.
- Perform advanced Juniper Mist AI automation using Python.
- Describe 802.1X authentication and operations.
- Perform RADIUS server integration and role-based policy configuration.

## Audience

Individuals responsible for accessing and using Mist AI data for business intelligent operations

## Prerequisites

- Basic networking (wired and wireless) knowledge
- Understanding of the Open Systems Interconnection (OSI) reference model and the TCP/IP protocol suite
- Basic scripting knowledge; Python knowledge recommended
- Completion of the Deploying and Managing Juniper Wireless Networks with Mist AI course or equivalent knowledge

## Programme

|              |   |                                   |
|--------------|---|-----------------------------------|
|              | 2 What Is AIOps?  | 3 Mist AI Data                    |
|              | • Define AI and ML terminology                                | • Describe Access Point (AP) Data |
|              | • Define AIOps  | • Describe LLDP Data              |
|              | • Explain the goals of AIOps                                  | • Describe Switch Data            |
|              | • Discuss the importance of data                              | • Describe Config Data—JSON       |
|              |   | • Describe Event Data             |
|              |   | • Describe Insight Data           |
|              |   | • Describe Client Stats           |
| <b>DAY 1</b> | 1 Course Introduction • Explain Juniper Mist cloud components | • Describe AP Stats               |

- 4 RESTful API
  - Define RESTful API
  - Describe how to build RESTful API requests
  - Describe features available using the RESTful API
  - Describe the limitations of the Mist RESTful API
- 5 Postman
  - Define Postman
  - Explain how Postman interacts with the Mist API
- Lab 1: Automating Juniper Mist AI Operations using Postman
  - Describe how to use Postman to automate tasks
  - Set up your own Postman environment
  - Use the Juniper Mist Collection within your own Postman environment
- Lab 2: Juniper Mist Runner Collection
- 6 Marvis
  - Describe Marvis natural language queries
  - Describe Marvis query language queries
  - Describe the Marvis conversational interface
- 7 Marvis Data
  - Describe Marvis Client and roaming data
  - Describe how to access and query Mist data
  - Explain how Marvis uses Juniper Mist data
- DAY 2** • Explain Marvis Actions
- 8 Mist WebSocket API
  - Define WebSocket API
  - Describe how to use the Mist WebSocket API
  - Describe the set of features available via the WebSocket API used by Juniper Mist
  - Describe the limitations of the Mist WebSocket API
- 9 Webhook API
  - Define Webhook API
  - Describe how to use the Mist Webhook API
  - Describe the set of features available via the Webhook API used by Mist
  - Describe the limitations of the Mist Webhook API
- 10 Node-RED
  - Define Node-RED
  - Describe how to use Node-RED to interact with the Juniper Mist API
  - Describe how to use Node-RED and the Juniper Mist API to solve use cases
  - Use Node-RED in the lab to interact with the Juniper Mist API
- 11 Python and Mist API
  - Define Python
  - Explain why we use Python to perform network automation
  - Describe how to interact with the Juniper Mist API using Python
  - Build Python scripts to interact with the Mist APIs
- Lab 3: Python and Juniper Mist API
- 12 Built-In Integration
  - Explain Ekahau and iBwave Import
  - Explain CloudShark integration
- DAY 3** • Describe how to integrate external captive portals
- 13 Python Automation
  - Explain how to leverage Python to perform automation
  - Describe what type of automation is possible with Python
  - Review automation use cases and examples
  - Build Python scripts to interact with the Mist APIs
- Lab 4: Python Automation
- 14 802.1X Authentication
  - List the components of AAA
  - Explain 802.1X operations
  - Describe EAP operations
  - Explain the different EAP types and how they differ
  - Describe the RADIUS protocol and server
  - Describe RADIUS attributes and how they are used
- 15 RADIUS Integration
  - Explain how to integrate a third-party RADIUS server into Mist
  - Explore the steps required to integrate ClearPass with Mist
  - Describe how to map RADIUS attributes to Mist labels
  - Explain how to use RADIUS attribute labels in WxLAN policies
  - Explain how SMAL can be used to integrate thirdparty identity providers for administrator logins

## Session Dates

| Date        | Location                    | Time Zone | Language | Type                  | Guaranteed | PRICE     |
|-------------|-----------------------------|-----------|----------|-----------------------|------------|-----------|
| 23 Sep 2024 | Virtual Training Class - TP | BST       | English  | Instructor Led Online |            | £2,550.00 |

## Additional Information

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