



Enterprise Computing Solutions - Education Services

## 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
16 Dec 2024	Virtual Training Class - TP	GMT	English	Instructor Led Online		£2,550.00

## Additional Information

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