

# Juniper Mist AIOps (JMA)

ID JMA Prix US\$ 3 000,- (Hors Taxe) Durée 3 jours

## A qui s'adresse cette formation

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

## Pré-requis

- 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 Juniper Mist AI Networks (MIST) course, or equivalent experience

## Objectifs

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

- Describe the data available in the Mist Cloud
- Describe Marvis components and operations
- Leverage Marvis to access Mist AI data
- Explain the built-in integration options
- Describe Mist RESTful API features and limitations
- Describe Mist WebSockets API features and limitations
- Describe Mist Webhook API features and limitations
- Perform Mist AI Operations using Postman
- Perform Mist AI Operations using Node-RED
- Explore Mist API using Python
- Perform advanced Mist AI automation using Python
- Describe 802.1X Authentication and operations
- Perform RADIUS server integration and role-based policy configuration

## Contenu

### DAY 1

#### 1 Course Introduction

### 2 What Is AIOps?

- Define AI and ML terminology
- Define AIOps
- Explain the goals of AIOps
- Discuss the importance of data
- Explain Mist Cloud components

### 3 Mist AI Data

- Describe Access Point (AP) Data
- Describe LLDP Data
- Describe Switch Data
- Describe Config Data—JSON
- Describe Event Data
- Describe Insight Data
- Describe Client Stats
- Describe AP Stats

### 4 RESTful API

- Define RESTful API
- Describe how to build RESTful API requests
- Describe features available using the RESTful API

### 5 Postman

- Define Postman
- Explain how Postman interacts with the Mist API
- Describe how to use Postman to automate tasks
- Set up your own Postman's environment
- Use the Juniper Mist Collection within your own
- Postman's environment

### Lab 1: Automating Mist AI Operations using Postman Lab 2: Mist Runner Collection

### DAY 2

#### 6 Marvis

- Describe Marvis natural language queries
- Describe Marvis query language queries
- Describe the Marvis Conversational Interface
- Explain Marvis Actions

## 7 Marvis Data

- Describe Marvis Client and Roaming data
- Describe how to access and query Mist data
- Explain how Marvis uses Mist data

## 8 Mist WebSocket 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

## 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 Mist API
- Describe how to use Node-RED and the Mist API to solve use cases
- Use Node-RED in the lab to interact with the Mist API

## 11 Python and Mist API

- Define Python
- Explain why we use Python to perform network automation
- Describe how to interact with the Mist API using Python
- Build Python scripts to interact with the Mist APIs

## Lab 3: Mist Operations Using Python

## DAY 3

## 12 Built-In Integration

- 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

### 13 Python Automation

- Explain Ekahau and iBwave Import
- Explain CloudShark integration
- Describe how to integrate external captive portals

## Demo: Building In Integration

### 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

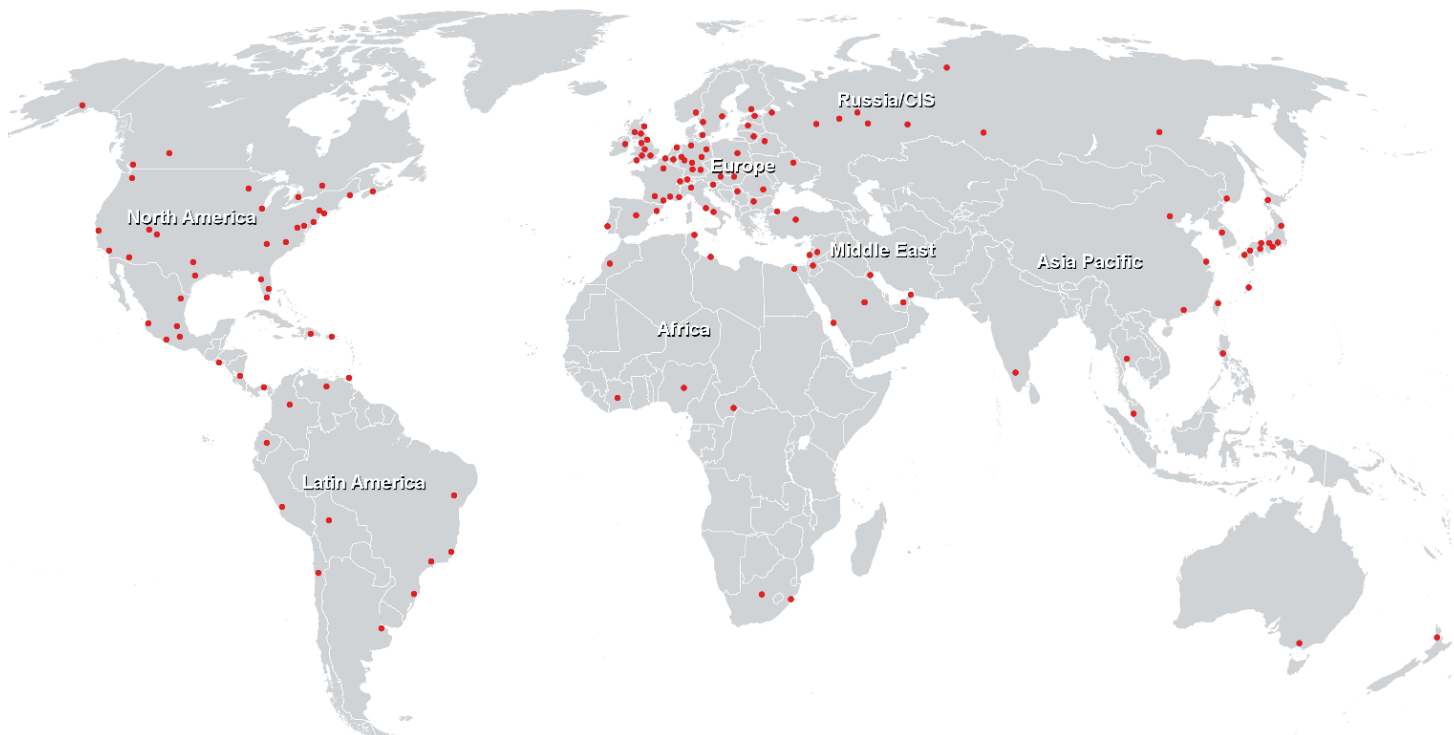
### 15 RADIUS Integration

- 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

# Juniper Mist AIOps (JMA)

---

## Centres de formation dans le monde entier



### Fast Lane Institute for Knowledge Transfer GmbH

Husacherstrasse 3  
CH-8304 Wallisellen  
Tel. +41 44 832 50 80

[info@flane.ch](mailto:info@flane.ch), <https://www.flane.ch>