+33 (0)1 48 10 09 46
formation@ambient-it.net
140 Avenue Jean Lolive 93500 Pantin - France

Updated on 12/04/2025

Register

JNCIS-MistAI Wired Certification Training

3 days (21 hours)

Overview

JNCIS – MistAI Wired is a Juniper network certification dedicated to AI-driven wired LAN. Based on EX Series switches and the Juniper Mist cloud platform, this solution offers advanced automation, continuous monitoring, and an optimized user experience thanks to embedded AI.

Our JNCIS - MistAI Wired training will enable you to master Mist architecture, EX switch configuration, wired security policy management, and daily network operations using Marvis and SLEs.

You will learn how to diagnose incidents, automate recurring tasks, and operate a modern, reliable, and consistent LAN across multiple sites.

One section of the training is entirely devoted to preparing for the JNCIS–MistAI Wired exam. You will be guided through the key points of the official blueprint, methodologies for success, and best practices for revision.

Like all our training courses, this one is based on the latest version of the Mist AI ecosystem and focuses on a highly practical and operational approach.

Note: Ambient IT does not own the JNCIS - MistAI Wired certification; it belongs to Juniper Networks Inc.

Objectives

- Understand the Juniper MistAI Wired architecture and its components.
- Configure and administer EX Series switches via Mist Cloud.
- Implement access security.
- Use Marvis and SLEs for troubleshooting.
- Industrialize multi-site management and automation.

- Effectively prepare for JNCIS - MistAI Wired certification.

Target audience

- Network engineers
- System and infrastructure administrators
- Network technicians
- IT architects

Prerequisites

- Good basic knowledge of TCP/IP, VLAN, and switching
- Practical experience with a corporate LAN
- General understanding of cloud and managed environments

JNCIS - MistAI Wired Training Program

[Day 1 - Morning]

Introduction to MistAI and Juniper architecture

- Overview of MistAI and AI applied to wired networks
- Juniper Mist cloud-native architecture and key components
- Role of EX Series switches in the Mist solution
- Typical uses: campus LAN, multi-site, IoT, edge
- Overview of the Marvis ecosystem and associated services
- Hands-on workshop: Getting started with the Mist interface and exploring the equipment.

[Day 1 - Afternoon]

Wired configuration: sites, profiles, and VLANs

- Organization into Organizations, Sites, and Switch Profiles
- Port configuration: access, trunk, native VLAN, aggregations
- Essential settings: LLDP, PoE, storm control
- Automatic profile application via the Mist cloud
- Visualization of topologies, link states, and inventory
- Hands-on workshop: Creating a site and fully configuring an EX switch.

SLEs and MistAI insights for wired networks

- Understanding SLEs (Service Level Expectations) for wired LAN

- Proactive analysis: onboarding, DHCP/DNS, latency, availability
- Interpreting cabling, PoE, and port error metrics
- Automatic correlation of incidents by Mist AI
- Introduction to the Marvis virtual assistant
- Hands-on workshop: SLE-guided incident analysis and Marvis actions.

[Day 2 - Morning]

Wired security and access control

- 802.1X, MAC Auth, and guest VLAN concepts
- Integration with a RADIUS/NAC server
- Implementation of Zero Trust access policies
- Segmentation and micro-segmentation of wired devices
- Management of BYOD and IoT environments
- Hands-on workshop: 802.1X configuration and port authentication testing.

[Day 2 - Afternoon] AI-assisted

troubleshooting

- Diagnostic methodology in the Mist portal
- Advanced port analysis: errors, CRC, flapping, instability
- Diagnosing PoE, cable, loop, and VLAN issues
- Using Marvis Actions for automatic detection
- Leveraging events, logs, and incident timelines
- Hands-on workshop: Guided resolution of a complex LAN failure scenario.

Automation, APIs, and integrations

- Discovering Mist REST APIs and common use cases
- Automatic provisioning of switches and sites
- Using scripts for repetitive tasks
- Multi-site management and template factorization
- Introduction to the DevNetOps approach for Juniper LAN
- Hands-on workshop: Automating a switch configuration workflow.

[Day 3 - Morning]

Advanced administration and daily operations

- Lifecycle management: updates, versions, planned maintenance
- Operational monitoring: dashboards, alerts, notifications
- Building a MistAI operations runbook
- Recurring incident management and remediation plans

- Optimizing service quality for end users
- Hands-on workshop: Designing a runbook and simulating incidents.

[Day 3 - Afternoon]

Governance, reporting, and multi-site environment

- Role management, permissions, and RBAC in Mist
- Naming conventions, key prefixes, and governance best practices
- Reporting and exports for management
- Management of multi-tenant environments / MSP
- Resource optimization and operating costs
- Hands-on workshop: Configuring a governed multi-site organization.

Preparation for JNCIS - MistAI Wired certification

- Presentation of the Mist AI-Wired exam and track
- Detailed review of the blueprint and assessed domains
- Strategies for success: time management, reading questions, pitfalls
- Revision plan: official documentation, labs, best practices
- Useful resources: Juniper portal, official training, practice tests
- Practical workshop: Mock exam + correction.

Target companies

This training is aimed at both individuals and companies, large or small, wishing to train their teams in new advanced IT technology or to acquire specific professional knowledge or modern methods.

Placement at the start of training

The positioning at the start of the training complies with Qualiopi quality criteria. Upon final registration, the learner receives a self-assessment questionnaire that allows us to assess their estimated level of proficiency in different types of technologies, as well as their expectations and personal objectives for the upcoming training, within the limits imposed by the selected format. This questionnaire also allows us to anticipate certain connection or internal security issues within the company (intra-company or virtual classroom) that could be problematic for the monitoring and smooth running of the training session.

Teaching methods

Practical training: 60% practical, 40% theory. Training materials distributed in digital format to all participants.

Organization

The course alternates between theoretical input from the trainer, supported by examples and

reflection sessions and group work.

Assessment

At the end of the session, a multiple-choice questionnaire is used to verify that the skills have been correctly acquired.

Certification

A certificate will be issued to each trainee who has completed the entire training course.