Enterprise Computing Solutions - Education Services

TRAINING OFFERING

You can reach us at:

Arrow Enterprise Computing Solutions Ltd, Part 1st Floor, Suite 1D/1, Central House, Otley Road, Harrogate, HG3 1UG

Email: educationteam.ecs.uk@arrow.com
Phone: 0870 251 1000

Deploying and Managing Wired Networks for Campus and Branch with Juniper Mist AI (JCMA)

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

Description

This four-day, intermediate-level course provides students with detailed exposure to the Juniper Mist™ Wired Assurance solution, covering its three installation stages: Day Zero—Provisioning, Day One—Deployment, and Day Two+—Operations. This course explores the supporting technologies, software, and hardware that make up traditional campus LANs and fabrics. The course includes Juniper Mist Wired Assurance Day One configuration, Virtual Chassis configuration through Juniper Mist™, wired client management, site variable and dynamic port configuration management, campus fabric deployment, and lastly, the discussion and implementation of group-based policies (GBPs) and microsegmentation.
Through demonstrations and hands-on labs, students will gain experience with provisioning, deploying, and managing Juniper Networks® EX Series Switches and Juniper Networks® QFX Series Switches. Students will also deploy switches to create an Ethernet VPN–Virtual Extensible LAN (EVPN-VXLAN) campus fabric. The students will complete all these tasks in a dedicated lab through the Juniper Mist portal. Juniper Mist is a Software as a Service (SaaS) platform that updates in a monthly cadence. The labs focus on implementing and managing switches using the Juniper Mist GUI in both a traditional campus architecture and a modern campus fabric architecture.
This course is based on the latest update of Juniper Mist prior to the course release. It is also based on Junos OS Release 24.4R1-S2.12 and Junos OS Release 24.4R1.9.

Deploying and Managing Wired Networks for Campus and Branch with Juniper Mist AI
is an intermediate-level course.

Objectives

• Describe the benefits of Juniper Mist Wired Assurance (switch installation and campus fabrics).
• Explain each of the three processes that make up switch installation.
• Summarize the management of standalone and Virtual Chassis switches in the Juniper Mist GUI.
• Correlate switch configurations and template options available in the Juniper Mist GUI.
• Explain traditional and modern campus architectures.
• Install a Juniper enterprise switch with the Juniper Mist GUI.
• Deploy switches in a traditional campus LAN.
• Deploy an EVPN-multihomed campus fabric using Juniper Mist.
• Deploy a three-stage IP Clos campus fabric using Juniper Mist.
• Demonstrate how to configure and verify VLANs, access ports, and trunk ports on a switch running Junos OS.
• Explain the advantages of EX Series Switches and QFX Series Switches, and the wireless, wired, and WAN solutions offered by Mist AI™.
• Describe and configure Juniper® Data Center Assurance (formerly Juniper Apstra™ Cloud Services).
• Describe the administration and requirements of Data Center Assurance.

Audience

• Individuals who want an understanding of Juniper Mist Wired Assurance and Juniper switches.
• Individuals who want to learn how to deploy campus networks using Juniper Mist.
• Individuals who want an introduction to network fabrics and their application in a campus LAN environment.

Prerequisites

• Completion of the *Introduction to Juniper Mist AI* course or equivalent knowledge.
• General understanding of campus and enterprise networks.
• Advanced networking knowledge of routing and switching and supporting technologies.
• Basic knowledge of Juniper switching devices.

• Strong understanding of the BGP routing protocol.

Programme

DAY 1
Module 01: Juniper Mist Wired Assurance—Overview
• Provide an overview of Juniper Mist
• Define the Juniper Mist Wired Assurance solutions and supported devices
• Create a Juniper Mist account
Module 02: Juniper Mist Wired Assurance, Day Zero—Provisioning
• Describe the integration workflow
• Explain greenfield provisioning and review the ZTP processes
• Explain brownfield provisioning
• Describe telemetry collection
Lab 01: Onboarding Switches
Module 03: Juniper Mist Wired Assurance—Virtual Chassis
• Define Virtual Chassis
• Describe how to form a Virtual Chassis using Juniper Mist's VC wizard
• Describe how to form a Virtual Chassis manually
• Describe how to modify a Virtual Chassis
• Describe how to monitor a Virtual Chassis
Module 04: Juniper Mist Wired Assurance, Day One—Deployment
• Describe the configuration options available from Juniper Mist to manage all, some, or single switches
Lab 02: Managing Switches and Templates

DAY 2
Module 05: Juniper Mist Wired Assurance, Day One—Configuration
• Define the Juniper Mist configuration and template options
Module 06: Configuration Scalability Use Cases
• Describe the site variables use case
• Describe the dynamic port configuration use case
• Describe the select switches use case
• Describe the bulk upload of switch configurations
• Describe the Juniper Mist Edge switch proxy service
Module 07: Juniper Mist Wired Assurance, Day Two+—Operations
• Describe Juniper Mist Wired Assurance SLEs and their classifiers
• Describe Alerts and Events
• Describe Switch Insights
• Describe Switch Utilities
Lab 03: Juniper Mist Utilities, Dynamic Port Configuration, and Marvis
Module 08: Juniper Mist Wired Clients
• Explain the operations of Juniper Mist Wired Clients

DAY 3
Module 09: Campus Fabric Architectures
• Describe a traditional campus network design
• Explain the need for a new architectural design
• Describe Layer 3-based campus network designs
Module 10: VXLAN Overview
• Describe the underlay and overlay in EVPN-VXLAN
• Describe Layer 2 tunneling
• Explain VLXAN functionality
• Describe VXLAN gateways
Module 11: EVPN-VXLAN
• Describe EVPN features
• Describe EVPN operations
• Describe EVPN with VXLAN for data plane encapsulation
• Describe IPv6 underlay
Module 12: Juniper Mist Campus Fabric Deployment—EVPN Multihoming
• Deploy Juniper Mist campus fabric EVPN multihoming
Lab 04: EVPN Multihoming Fabric

DAY 4
Module 13: Juniper Mist Campus Fabric Deployment—Core-Distribution
• Deploy Juniper Mist campus fabric core-distribution
Module 14: Group-Based Policy and Microsegmentation
• Explain network segmentation
• Explain GBP and microsegmentation

• Configure GBP in Juniper Mist
Module 15: Juniper Mist Campus Fabric Deployment—IP Clos
• Deploy Juniper Mist campus fabric IP Clos
Lab 05: Campus Fabric IP Clos
SELF-STUDY MODULES
Module 16: Junos OS Switches, Part 1—VLANs, MAC Tables, and Access Ports
• Demonstrate how to configure and verify VLANs on a switch running Junos OS
• Describe how to configure access ports and verify MAC tables
Module 17: Junos OS Switches, Part 2—Trunk Ports
• Describe how to deploy trunk ports on Junos OS switches
• Demonstrate how to configure multiple logical units on IP interfaces

Follow on courses

Automating Juniper Mist AI Enterprise

Test and Certification

RELATED CERTIFICATION:
JNCIS-MistAI-Wired

Session Dates

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
18 Jan 2027	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.