

## Junos Subscriber Management (JSM)

ID JSM Price US \$ 4,000.—(excl. VAT) Duration 4 days

### Who should attend

This course is intended for network administrators who configure and administer subscriber management features on MX routers running the Junos OS.

### Prerequisites

You should have the following prerequisite skills:

- A strong base of networking fundamentals;
- A high-level understanding of broadband access concepts;
- Experience and familiarity with the Junos OS;
- Familiarity with the Junos command-line interface (CLI); and
- Completion of the [Introduction to the Junos Operating System \(IJOS\)](#) course.

### Course Objectives

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

- Describe the various WAN domains.
- Describe the use cases for NorthStar.
- Describe the use cases for NorthStar Planner.
- Describe the usage of PCEP.
- Describe RSVP signaling using the CSPF algorithm.
- Describe the NorthStar VMs and their processes.
- Describe the post installation setup process.
- Describe the behavior of topology discovery.
- Describe the configuration of IGP topology discovery.
- Describe the configuration of BGP-LS topology discovery.
- Describe how to access the NorthStar Controller Operator and Planner user interfaces.
- Describe the basic features of the NorthStar Controller Operator user interface.
- Describe the various LSP types.
- Configure PCC controlled LSPs.
- Configure PCE delegated LSPs.
- Configure PCE initiated LSPs.

- Monitor LSPs from the NorthStar Operator user interface.
- Describe primary, secondary, and standby LSPs.
- Describe symmetric pairs of LSPs.
- Describe diversity groups.
- Describe using Junos MPLS LSP templates.
- Describe LSP calendaring.
- Describe Inter-AS LSPs.
- Describe how to provision multiple LSPs.
- Describe LSP optimization.
- Configure Segment Routing
- Manage NorthStar using the REST API
- Troubleshoot NorthStar Controller
- Create P2MP LSPs
- Explain the features, capabilities, and benefits of NorthStar Planner and how they work to optimize WAN design.
- Access NorthStar Planner and navigate and customize the NorthStar Planner administrative interface.
- Explain different methods of creating a network model.
- Manage different files that make up a network model and understand how these files are organized.
- Modify a network model by performing tasks such as adding links, nodes, and sites and save these changes to a modeled network.
- Optimize network demand paths, design diverse paths, and perform what-if scenarios to see how demands are routed.
- Simulate link and node failures and view the effects of these failures on demand routing across the WAN.
- Analyze and manage network information using the Report Manager interface.
- Perform hardware inventory using the NorthStar Planner interface.

### Course Content

- Introduction to Subscriber Management
- Access Management
- Subscriber Interfaces and Dynamic Profiles
- Dynamic PPPoE for Subscriber Access
- Layer 3 and Layer 2 Wholesale Services
- Layer 2 Tunneling Protocol (L2TP)
- Pseudowire Head-End Termination (PHT)
- Subscriber Class of Service
- Dynamic Firewall Services
- Dynamic Multicast Services
- Carrier Services

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## Training Centres worldwide



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