TRAINING OFFERING

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Juniper Paragon Automation for the WAN (JPAW)

CODE:	LENGTH:	PRICE:
JUN_JPAW	32 Hours (4 days)	£3,400.00

Description

This 4-day course introduces Paragon Automation applications including Paragon Pathfinder, Paragon Planner, and Paragon Insights.

Through demonstrations and hands-on labs, students will learn the capabilities of these applications including WAN topology discovery, Segment Routed (SRTE) and RSVP signaled LSP management, Path Computation Element Protocol (PCEP) LSP discovery and provisioning, LSP optimization, LSP calendaring, maintenance scheduling, P2MP LSP management, failure simulation, reporting, network modeling, path demand placement, hardware inventory collection, network telemetry collection, and closed-loop automation.

Students learn to configure and monitor these features on a WAN consisting of vMX Series devices.

This course is based on Junos version 21.2R1.10 and Paragon Automation version 21.2.

Juniper Paragon Automation for the WAN (JPAW) is an advanced-level course.

Objectives

After successfully completing this course, you should be able to: • Describe various WAN domains
• Describe and configure Paragon Pathfinder for initial use • Describe and configure Paragon Pathfinder topology discovery
• Describe and configure various Label Switched Path (LSP) types • Describe primary, secondary, and standby LSPs
• Describe Point-to-Multipoint use cases • NETCONF configuration and maintenance scheduling with Paragon Pathfinder
• Network analytics with Paragon Insights • Describe and configure Paragon Automation Planner
• Model a network with Paragon Planner • Simulate and optimize network demands with Paragon Planner

Audience

This course benefits individuals who want to automate the management of service provider or large enterprise MPLS networks with Paragon Automation.

Prerequisites

The prerequisites for this course are: • Understanding of the OSI Model;
• Junos OS configuration experience—the Introduction to the Junos Operating System (IJOS) course or equivalent; and
• Advanced MPLS knowledge—the Junos MPLS Fundamentals (JMF) course or equivalent.

Programme

Day 1 Introduction WAN Automation • Describe WAN domains • Describe Paragon Pathfinder capabilities
• Describe Paragon Planner capabilities Paragon Pathfinder Architecture • Explain the Path Computation Element Protocol
• Explain LSP Signaling and the CSPF Algorithm • Describe Paragon Pathfinder Architecture • Configure the Network
Lab 1: Initial Setup Network Topology Discovery • Describe Paragon Pathfinder network topology discovery
• Configure Paragon Pathfinder network topology discovery Lab 2: Topology Discovery Day 2 Using Paragon Automation
• Examine the Paragon Automation interface • Examine the Paragon Planner Desktop interface Lab 3: Using Paragon Automation
Basic LSP Management • Describe and configure various Label Switched Path (LSP) types • Configure PCC-controlled LSPs
• Configure PCE-controlled LSPs • Configure PCE-initiated LSPs • Verify LSP status Lab 4: Basic LSP Management
Advanced LSP Management • Describe and configure primary, secondary, and standby LSPs
• Describe and configure symmetric pairs of LSPs • Describe and configure diversity groups
• Describe and configure MPLS LSP templates • Describe and configure LSP calendaring • Describe and configure inter-AS LSPs
• Describe and provision multiple LSPs • Describe and configure LSP optimization Lab 5: Advanced LSP management Day 3
Segment Routing • Describe Segment Routing • Configure Segment Routing
• Manage Segment Routed LSPs using Paragon Pathfinder Lab 6: Segment Routing P2MP LSPs
• Describe Point-to-Multipoint use cases • P2MP management with Paragon Pathfinder • P2MP monitoring with Paragon Pathfinder

• Describe Point to-Multipoint LSPs Maintenance Scheduling and NETCONF LSP Provisioning
• Configure scheduled maintenance events • Provision NETCONF LSPs
Lab 7: Maintenance Scheduling and NETCONF Provisioning Paragon Insights • Describe Paragon Insights capabilities
• Enable Paragon Insights monitoring • Integrate Paragon Insights and Paragon Pathfinder Lab 8: Paragon Insights Day 4
Troubleshooting Paragon Insights • Identify Paragon Automation services and processes • Log analysis with Paragon Insights
• Debugging with Paragon Insights Lab 9: Troubleshooting Paragon Insights Paragon Planner
• Explain the features and capabilities of Paragon Planner • Launch Paragon Planner Desktop and explore the interface
Lab 10: Paragon Planner Network Modeling • Load Paragon Planner network models • Explain network model data storage
• Modify network models Lab 11: Network Modeling Network Demands and Failure Simulation
• Improve network traffic demand forwarding • Simulate network failure Lab 12: Network Demands and Failure Simulation

Session Dates

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
08 Jul 2024	Virtual Training Class - TP	BST	English	Instructor Led Online		£3,400.00

Additional Information

This training is also available as onsite training. Please contact us to find out more.