Juniper Session Smart SD-WAN

Juniper Networks | Education Services

COURSE OVERVIEW

This course teaches network engineers and architects how to configure and manage the Session Smart Routers. Juniper Session Smart SD-WAN teaches students how to configure and use a Session Smart Router and Conductor. It starts with an introduction to the product and data model, and then moves on to an introduction to the PCLI and GUI. After that, students will use the GUI to deploy and configure their Session Smart Routers. Students will build multiple paths between three Session Smart Routers with one Session Smart Conductor. Students then learn the tools they can use within their Session Smart Conductors and routers to monitor and maintain their Session Smart deployments.

COURSE LEVEL

Intermediate

AUDIENCE

Individuals responsible for implementing Session Smart Routing

PREREQUISITES

- Basic networking knowledge
- Basic TCP/IP skills
- Familiarity with Linux

CONTACT YOUR REGIONAL EDUCATION SERVICES TEAM:

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OBJECTIVES

- Install a Session Smart Router and Session Smart Conductor.
- Access Session Smart Routers with both the PCLI and the GUI.
- Describe how traffic flows through a Session Smart Router.
- Use the PCLI and GUI to operate and maintain their Session Smart Routers.
- Route traffic to a data center using Session Smart Routers.
- Configure an HA pair of Session Smart Routers.
- Configure Session Smart Router to interoperate with BGP Peers.
- Explain how the Session Smart Router can perform traffic engineering.
- List the useful commands and tools to troubleshoot Session Smart Routers.
- Describe resources to find more information on APIs.
- Describe the benefits of WAN Assurance.

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COURSE CONTENTS

DAY 1

1 Course Introduction

2 Intro to Session Smart Routing

- Introduction to Session Smart Routing
- Review of the Session Smart Routing Data Model

3 Intro to the PCLI

- Navigating the Session Smart Router with the PCLI

Lab 1: Introduction to the PCLI

4 Intro to the GUI

- Navigating the Session Smart Router with the GUI

Lab 2: Introduction to the GUI

5 Backups

- Navigating the Session Smart Router with the GUI
- Types of Configurations (Candidate vs. Running)
- Validate and Commit
- Exporting and Importing configurations

Lab 3: Configuration Backup and Restore

DAY 2

6 Conductor

- Introduction to the Conductor
- Install Conductor using the Session Smart Routing installer
- Authority
- Services
- Tenants

Lab 4: Conductor

7 Data Center Router

- Deploy a data center router using Zero Touch Provisioning (ZTP)
- Router
- Node
- Device Interface
- Network Interface

Lab 5: Data Center Router

8 Branch Router

- Configuration Templates
- Deploy a branch router using Zero Touch Provisioning (ZTP)
- Peer
- Adjacency
- Neighborhood

Lab 6: Branch Router

9 Routing

- FIB, RIB, Service
- Service routes

Lab 7: Routing

10 Security Policies

- Security Policies

Lab 8: Security Policies

Continued on the next page.

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COURSE CONTENTS (continued)

DAY 3

11 Upgrades

- Upgrades

12 Multiple WAN Links

- Service Policies
- Service Route Redundancy and Vectors
- Configure and apply multiple paths from branch to data center

Lab 9: Multiple WAN Links

13 High Availability

- Conductor HA
- VRRP
- Dual Node
- Dual Router

Lab 10: High Availability

14 Traditional Routing

- Peering with a BGP Neighbor
- BGP over SVR

Lab 11: Traditional Routing

DAY 4

15 Troubleshooting Using the GUI

- Alarms and Events
- API

Lab 12: Troubleshooting Using the GUI

16 Packet Captures and Session Captures

- Packet Capture
- Session Capture

Lab 13: Packet Captures and Session Captures

17 Logs

- Service Architecture
- Conductor Logs
- Router Logs
- Retrieving Logs
- Save Tech-Support-Info

Lab 14: Logs

18 Troubleshooting Peer Paths

- Review of Peers, Adjacencies, and Neighborhoods
- BFD
- NAT

Lab 15: Troubleshooting Peer Paths

19 Troubleshooting Salt Connectivity

- Review of ZTP
- Review of Salt

Lab 16: Troubleshooting Salt Connectivity

A Appendix: Troubleshooting Applications

B Appendix: NAT

C Appendix: WAN Assurance

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