

Juniper Session Smart SD-WAN (JSSS)

COURSE OVERVIEW

This course is designed to teach network engineers and architects how to configure, manage, and troubleshoot Session Smart Routers.

Juniper Session Smart SD-WAN will teach students how to configure and use a Session Smart Router and Session Smart Conductor. It starts with an introduction to and then moves on to an introduction to the PCLI and GUI. After that, the students use the GUI to deploy and configure their Session Smart Routers. They will go from servers with just CentOS installed to a fully deployed network with multiple paths and three Session Smart Routers and one Session Smart Conductor.

Students will then learn how to enable and configure advanced features on their Session Smart Routers. These are features that are not necessary for a Session Smart Routing deployment, but when activated, can be very powerful.

Students will then learn the tools they can use within their Session Smart Conductors and routers to monitor and troubleshoot issues they may be facing. The students will learn useful commands and options in the GUI and the class will test the students' abilities to troubleshoot real-life Session Smart Routers issues.

COURSE LEVEL

Juniper Session Smart SD-WAN (JSSS) is an intermediate level course.

AUDIENCE

This course benefits individuals who want to implement Session Smart Routing.

PREREQUISITES

The following are the prerequisites for this course:

- Basic TCP/IP skills
- Familiarity with Linux

CONTACT YOUR REGIONAL EDUCATION SERVICES TEAM:

- Americas: training-amer@juniper.net
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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 datacenter using Session Smart Routers
- Configure an HA pair of Session Smart Routers
- Configure Session Smart Router to interoperate with BGP Peers
- Learn how the Session Smart Router can perform Traffic Engineering
- Know the useful commands and tools to troubleshoot Session Smart Routers
- Know where to go to find more information on APIs
- Know where to go for further resources

COURSE CONTENT

DAY 1

1	<p>Course Introduction</p> <ul style="list-style-type: none"> • Introduction to the course
2	<p>Intro to Session Smart Routing</p> <ul style="list-style-type: none"> • Introduction to Session Smart Routing • Review of the Session Smart Routing Data Model
3	<p>Intro to the PCLI</p> <ul style="list-style-type: none"> • Navigating the Session Smart Router with the PCLI <p>Lab 1: Introduction to the PCLI</p> <ul style="list-style-type: none"> •
4	<p>Intro to the GUI</p> <ul style="list-style-type: none"> • Navigating the Session Smart Router with the GUI <p>Lab 2: Introduction to the GUI</p>
5	<p>Backups</p> <ul style="list-style-type: none"> • Types of Configuration (Candidate vs. Running) • Validate and Commit • Exporting and Importing configurations > <p>Lab 3: Configuration Backup and Restore</p>

DAY 2

6	<p>Conductor</p> <ul style="list-style-type: none"> • Introduction to the Conductor • Install Conductor using the Session Smart Routing installer • Authority • Services • Tenants <p>Lab 4: Conductor</p>
7	<p>Data Center Router</p> <ul style="list-style-type: none"> • Deploy a data center router using Zero Touch Provisioning (ZTP) • Router • Node • Device Interface • Network Interface <p>Lab 5: Data Center Router</p>
8	<p>Branch Router</p> <ul style="list-style-type: none"> • Deploy a branch router using Zero Touch Provisioning (ZTP) • Peer • Adjacency • Neighborhood <p>Lab 6: Branch Router</p> <ul style="list-style-type: none"> •
9	<p>Routing</p> <ul style="list-style-type: none"> • Service routes <p>Lab 7: Routing</p>
10	<p>Security Policies</p> <ul style="list-style-type: none"> • Security Policies <p>Lab 8: Security Policies</p>

COURSE CONTENT (contd.)

DAY 3

- 11 Upgrades**
 - Upgrades
- 12 Multiple WAN**
 - Service Policies
 - Vectors
 - Configure and apply multiple paths from branch to data center

Lab 9: Multiple WAN Links
- 13 High Availability**
 - Theory of HA
 - Dual-Node HA
 - Redundancy groups

Lab 10: High Availability
- 14 Traditional Routing**
 - BGP
 - BGP over SVR
 - Appendix: Route Filters and Policies

Lab 11: Traditional Routing

DAY 4

- 15 Notification Interfaces**
 - Alarms and Events
 - SNMP
 - API

Lab 12: Notification Interfaces
- 16 Investigative Interfaces**
 - Monitoring Agent
 - Troubleshooting using the PCLI
 - Troubleshooting using the GUI
 - Packet Captures
 - Logs and Architectural Design

Lab 13: Investigative Interfaces