



## COURSE OVERVIEW

Juniper Networks' JNCIE-SP Certification Self-Study Bundle is a hands-on guide to validate your skills needed to pass the official JNCIE-SP lab exam. The guide is based on the official JNCIE-SP exam blueprint. Each chapter covers several technologies with expert-level configuration tasks and detailed answers. In this workbook you will find several technology introductions and theoretical knowledge about the JNCIE-SP lab exam blueprint topics. However, do not expect a full explanation about OSPF, IS-IS, BGP MPLS, and other advanced VPN services since there are other resources available for prerequisite knowledge. The guide contains two full practice exams to simulate a real JNCIE-SP lab exam. This guide is targeted at JNCIP-SP certified engineers who are studying for the expert-level certification and need extra help preparing for the exam.

With the purchase of this self-study bundle, you will be provided with access to the course materials via Online Secure PDF, a secure PDF workbook of technology-specific lessons and exercises and two JNCIE-SP practice exams (Super Labs), and one year of lab access with up to 10 hours of lab access per reservation (maximum of 50 reservations, default reservation is 4 hours).

### COURSE LEVEL

JNCIE-SP Certification Self-Study Bundle is an advanced level course.

### AUDIENCE

This bundle benefits individuals who have already honed their skills on Service Provider technologies and could use some practice and tips in preparation for the JNCIE-SP exam.

### PREREQUISITES

Students should have passed the Juniper Networks Certified Internet Professional—Service Provider (JNCIP-SP) written exam or achieved an equal level of expertise through Education Services courseware and hands-on experience.

### OBJECTIVES

After successfully completing this course, you should:

- Be better prepared for success in taking the actual JNCIE-SP exam.
- Be well-versed in exam topics, environment, and conditions.

### SELF-STUDY BUNDLE CONTENTS

**1**

#### General System Features

- Initial System Settings
- SNMP Configuration
- Firewall Filters
- Interface Configuration
- Scripting

**2**

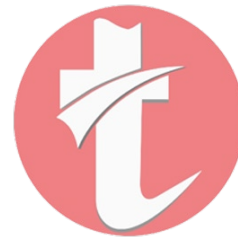
#### IGP Configuration and Troubleshooting

- OSPF Troubleshooting
- IS-IS Troubleshooting
- IGP Rollout

**3**

#### BGP and Routing Policy

- IBGP and Confederation
- EBGp Configuration
- Routing Policies
- IBGP and Route Reflection
- LDP Configuration
- RSVP Configuration
- RSVP Protection
- IPv6 Tunnelling with 6PE



## COURSE CONTENTS (contd.)

5

### Layer 3 VPN Configurations

- Layer 3 VPN Configuration
- Multicast in Layer 3 VPNs
- IPv6 Tunnelling with 6PE

6

### Layer 2 VPN Services

- Layer 2 VPN Configuration
- VPLS Configuration
- EVPN Configuration

#### Super Lab 1:

- Initial System Configuration
- Building the Network
- IGP Configuration
- BGP Configuration
- MPLS Configuration
- VPN Configuration
- Class of Service Configuration

#### Super Lab 2:

- System Features
- Troubleshooting and Configuring IGP
- Troubleshooting and Configuring BGP
- MPLS Configuration
- IPv6 Configuration
- MPLS VPNs Configuration

#### Appendix – Additional Theory

- OSPF Adjacency Troubleshooting
- BGP Adjacency Troubleshooting
- BGP IPv6 NLRI over IPv4 Peering
- Troubleshooting Multicast Traffic Engineering Using RIB-groups
- Advanced Firewall Filtering

#### Mist Campus Fabric Operations

- Describe the campus architectures supported by mist
- Provision an EVPN-Multihoming collapsed-core using Mist

#### Appendix – Topology Diagrams

#### Appendix – Chapter 1: General System Features

- Initial System Settings
- SNMP Configuration
- Firewall Filters
- Interface Configuration
- Scripting

#### Appendix – Chapter 2: IGP Configuration and Troubleshooting

- OSPF Troubleshooting
- IS-IS Troubleshooting
- IGP Rollout

#### Appendix – Chapter 3: BGP and Routing Policy

- IBGP and Confederation
- EBGP Configuration
- Routing Policies
- IBGP and Route Reflection

#### Appendix – Chapter 4: MPLS Configuration

- LDP Configuration
- RSVP Configuration
- RSVP Protection
- IPv6 Tunnelling with 6PE

#### Appendix – Chapter 5: Layer 3 VPN Configurations

- Layer 3 VPN Configuration
- Multicast in Layer 3 VPNs
- IPv6 Tunnelling with 6PE

#### Appendix – Chapter 6: Layer 2 VPN Services

- Layer 2 VPN Configuration
- VPLS Configuration
- EVPN Configuration

#### Appendix – Chapter 7: Inter-Provider VPN Configuration

- Inter-Provider VPN Option B
- Inter-Provider VPN Option C



## COURSE CONTENTS (contd.)

### Appendix – Chapter 8: Class of Service

- Forwarding Classes, Queues, and Schedulers
- Classification, Policing, and Marking

### Appendix – Super Lab 1:

- Initial System Configuration
- Building the Network
- IGP Configuration
- BGP Configuration
- MPLS Configuration
- VPN Configuration
- Class of Service Configuration

### Appendix – Super Lab 2:

- System Features
- Troubleshooting and Configuring IGP
- Troubleshooting and Configuring BGP
- MPLS Configuration
- IPv6 Configuration
- MPLS VPNs Configuration