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

JNCIE Service Provider Self-Study Bundle (JNCIE-

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