



## JUNIPER JUNOS SERVICE PROVIDER ROUTING & SWITCHING



Juniper Networks Certified Internet Expert (JNCIE—SP)

JNCIE-SP – JNCIE-SP Bootcamp (5 days)

### JNCIE Service Provider Bootcamp (JNCIE-SP)

#### Course Overview

This five-day course is designed to serve as the ultimate preparation for the Juniper Networks Certified Internet Expert—Service Provider (JNCIE-SP) exam.

The course focuses on caveats and tips useful for potential test candidates and emphasizes hands-on practice through a series of timed lab simulations. On the final day of the course, students are given a six-hour lab simulation emulating the testing topics and environment from the real exam.

All labs in this course are facilitated by Junosphere virtual lab devices and are available after hours for additional practice time. This course is based on Junos OS Release 10.3.

#### 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.

#### Target Audience

This course 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.

#### Course Level

Advanced

#### 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.

#### Course Contents

##### Chapter 1: Course Introduction

##### Chapter 2: Exam Strategies

- Preparing for Your Exam
- The Testing Environment
- State of the Network
- Testing Tips
- Exam Completion

##### Chapter 3: Device Infrastructure

- High Availability
- Aggregated Ethernet Interfaces
- Secure and Monitor Junos Devices
- Basic Automation with OP, Event, and Commit Scripts
- Lab 1: Implementing Device Infrastructure

##### Chapter 4: IGP Implementation

- Implementing IS-IS
- Implementing OSPF v2 and OSPF v3
- Lab 2: IS-IS Implementation
- Lab 3: OSPF Implementation

##### Chapter 5: IGP Troubleshooting

- Troubleshooting Routing Loops in the IGP
- Troubleshooting IGP Adjacencies
- Lab 4: IS-IS Troubleshooting
- Lab 5: OSPF Troubleshooting



### Chapter 6: BGP Implementation

- BGP Configuration and Implementation
- BGP Routing Policy
- Lab 6: BGP Implementation

### Chapter 7: BGP Troubleshooting

- BGP Troubleshooting
- Lab 7: BGP Troubleshooting

### Chapter 8: Multicast Implementation

- PIM Sparse Mode Implementation
- MSDP Anycast-RP Implementation
- Lab 8: Multicast Implementation

### Chapter 9: Class of Service Implementation

- Inet-Precedence, DSCP, EXP, and 802.1p Markings
- Behavior Aggregate and Multifield Classification
- Drop Profiles
- Rewrite Rules
- Lab 9: Class of Service Implementation and Troubleshooting

### Chapter 10: MPLS Implementation

- MPLS Implementation
- Lab 10: MPLS Implementation and Troubleshooting

### Chapter 11: MPLS VPN Implementation

- MPLS VNP Implementation
- Lab 10: MPLS VPN Implementation and Troubleshooting

### Day 5

- JNCIE Full Lab Simulation

**Cost AUD \$4,399 inc. GST**

For Available Dates & Terms and Conditions see:  
[www.crystalecho.com](http://www.crystalecho.com)