

Service Provider Routing and Switching Specialist (JNCIS-SP)



Learn at your
own place.. 

Online Course



ZETLAN TECHNOLOGIES
www.zetlantech.com

Service Provider Routing and Switching Specialist (JNCIS-SP)

Course Modules

1. Concepts, operation of various protocol-independent routing components:

- Static, aggregate, and generated routes
- Multicast addresses
- Routing instances, including routing information base (RIB)
- Load balancing
- Filter-based forwarding

2. How to configure, monitor, or troubleshoot various protocol-independent

- Static, aggregate, and generated routes
- Load balancing
- Filter-based forwarding



3. Identify the concepts, operation, or functionality of OSPF:

- Link-state database
- OSPF packet types
- Router ID
- Adjacencies and neighbors
- Designated router and backup designated router
- OSPF area and router types
- Link-state advertisement (LSA) packet type



Service Provider Routing and Switching Specialist (JNCIS-SP)

4. Demonstrate knowledge of how to config, monitor, or troubleshoot OSPF:

- Areas, interfaces and neighbors
- Additional basic options
- Routing policy application
- Troubleshooting tools

5. Identify the concepts, operation, or functionality of IS-IS:

- Link-state database
- IS-IS protocol data units (PDUs)
- Type, length, values (TLVs)
- Adjacencies and neighbors
- Levels and areas
- Designated intermediate system (DIS)
- Metrics



Zetlan Technologies

6. Demonstrate knowledge of how to config, monitor, or troubleshoot IS-IS:

- Levels, interfaces and adjacencies
- Additional basic options
- Routing policy application
- Troubleshooting tools



ZETLAN TECHNOLOGIES

Service Provider Routing and Switching Specialist (JNCIS-SP)



7. Identify the concepts, operation, or functionality of BGP:

- BGP basic operation
- BGP message types
- Attributes
- Route/path selection process
- Internal and external BGP functionality & interaction

8. How to configure, monitor, or troubleshoot BGP:

- Groups and peers
- Additional basic options
- Routing policy application

9. Concepts, operation, or functionality of Layer 2 bridging

- Service provider switching platforms
- Bridging elements and terminology
- Frame processing
- Virtual Switches
- Provider bridging (Q-in-Q tunneling)

10. Identify the concepts, benefits, or functionality of VLANs:

- Port modes
- Tagging
- Integrated Routing and Bridging (IRB)/li>



Service Provider Routing and Switching Specialist (JNCIS-SP)

11. How to configure, monitor, or tshoot Layer 2 bridging /VLANs:

- Interfaces and ports
- VLANs
- IRB
- Provider bridging



12. Cncpts, benefits,opratrn of Spanng Tree Protocol & its variants:

- Spanning Tree Protocol (STP), (RSTP), (MSTP), and (VSTP) concepts
- Port roles and states
- Bridge Protocol Data Units (BPDUs)
- Convergence and reconvergence
- Spanning-tree security

13. How to configure, monitor, or tshoot STP and its variants:

- Spanning-tree protocols (STP, RSTP, MSTP, VSTP)
- BPDU, loop and root protection

14. Identify the concepts, operation, or functionality of MPLS:

- MPLS terminology
- MPLS packet header
- End-to-end packet flow and forwarding
- Labels and the label information base
- MPLS and routing tables
- RSVP



Service Provider Routing and Switching Specialist (JNCIS-SP)

15. Demonstrate knowledge of how to configure, monitor, MPLS:

- MPLS forwarding
- RSVP-signaled and LDP-signaled Label-Switched Paths (LSPs)

16. Identify the concepts, operation, or functionality of IPv6:

- IPv4 versus IPv6
- Address types, notation, and format
- Address scopes
- Autoconfiguration
- Tunneling



17. How to configure, monitor, or troubleshooting IPv6:

- Interfaces
- Static routes
- Dynamic routing (OSPFv3, IS-IS, BGP)
- IPv6 over IPv4 tunneling

18. Concepts, requirements, or functionality of IP tunneling:

- Tunneling applications and considerations
- Generic routing encapsulation (GRE)



Service Provider Routing and Switching Specialist (JNCIS-SP)

For Enquiry: +91 8680961847

19. Knowledge of how to configure, monitor, IP tunnels:

- GRE

20. Identify the concepts, benefits, applications, of high availability:

- Link aggregation groups (LAGs) and multichassis LAGs (MC- LAGs)
- Graceful restart (GR)
- Graceful Routing Engine switchover (GRES)
- Nonstop bridging (NSB)
- Nonstop active routing (NSR)
- Bidirectional Forwarding Detection (BFD)
- Virtual Router Redundancy Protocol (VRRP)
- Unified In-Service Software Upgrade (ISSU)



21. How to configure, monitor, high availability components:

- LAG
- Graceful restart, GRES, NSB, and NSR
- Virtual Router Redundancy Protocol (VRRP)

Free Advice: +91 9600579474

www.zetlantech.com



**LEARN
REMOTELY!!**

The efficiency of online learning in terms of time management, flexibility, and the ability to access resources anytime, anywhere can be compelling.



ZETLAN TECHNOLOGIES
www.zetlantech.com

**For contact: +91 8680961847
+91 9600579474**

