

JNCIE-ENT Exam Objectives (Exam: JPR-943)

This list is intended to provide a general view of the skill sets required to successfully complete the JNCIE-ENT exam. Topics listed are subject to change.

System Services and Security

- System Services
 - o NTP
 - o Syslog
 - o sFlow
 - o Authentication and authorization
 - o Configuring archival
 - o RPM
 - o PoE
- Securing the Control Plane
 - o Stateless firewall configuration

Interfaces

- Implementation of Interfaces
 - o Aggregated Ethernet
 - o VRRP
 - o Ethernet OAM
 - o GRE tunnels
 - o BFD
 - o Logical tunnel interfaces

Ethernet Switching

- Spanning Tree Protocol
 - o Multiple CIST
 - o MSTP/VSTP/RSTP
 - o xSTP interoperability
 - o Multiple topologies
 - o Optimization
- VLANs
 - o VLAN switching and trunking
 - o Q-in-Q

- o IP Telephony
- o Private VLANs
- o Voice VLANs
- Virtual Chassis
- o Master determination
- o Add/remove members
- o VCP and VCEP interfaces
- o Split detection
- Security features
- o Port security features
- o Dynamic ARP inspection with DHCP snooping
- o Layer 2 firewall filters
- o MAC table filtering

IGPs

- OSPF
- o Multi-area OSPF topologies
- o Filter and summarize routes
- o Network and link types
- o Route selection process
- o BFD
- o Redistribution
- o IPv6

BGP

- Implementation and Troubleshooting
- o Routing policy
- o Route selection
- o 2-byte and 4-byte AS
- o Multi-homed stub-AS
- o BFD

Protocol-Independent Routing

- Load Balancing
- o Hash key
- o Per flow
- Filter-based Forwarding
- o Based on Layer 4
- o Based on IFL

- Configuring Routes
- o Aggregate
- o Static
- o Generated
- o Policies

Multicast

- Implementation of Multicast
- o Shared tree and source tree
- o Designated router
- o RPF table manipulation
- SSM
- o Extend the group range
- o SSM mapping
- RP Redundancy
- o Anycast RP (PIM and MSDP)
- o BSR

Class of Service

- Implementation
- o Loss priority
- o Rewrite rules
- o Shaping and policing
- o Scheduling
- o BA and MF classification
- o Drop profiles