

HCIP-Datacom-Advanced Routing & Switching Technology

Training Content:

1. Advanced IGP Features

- Advanced IGP Features: OSPF fast convergence, OSPF Route Control, Other OSPF Features, Advanced IS-IS Features

2. Advanced BGP Features

- Advanced BGP Features: BGP route control, Introduction to BGP Features, Networking of BGP RRs

3. IPv6 Routing

- IPv6 Routing: IPv6 static route, OSPFv3 Principles and Configuration, IS-IS (IPv6) Principles and Configuration, BGP4+ Principles and Configuration

4. Advanced Ethernet Technologies

- Advanced VLAN Technology: Super-VLAN, MUX-VLAN, QinQ
- Ethernet Switching Security: Port Isolation , MAC Table Security, Port security , MAC Address Flapping Prevention and Detection , MACsec , Switch traffic control , DHCP Snooping , IP Source Guard

5. MPLS Technology

- MPLS Principles and Configuration: MPLS Overview, MPLS Forwarding, Static LSP
- MPLS LDP Principles and Configuration: Basic Concepts of LDP, Working Principle of LDP, Basic LDP Configurations
- MPLS VPN Principles and Configuration: MPLS VPN Overview, MPLS VPN route exchange, MPLS VPN packet forwarding, MPLS VPN Configuration and Implementation
- MPLS VPN Deployment and Application: MPLS VPN Application and Networking Overview, Typical Application Scenarios and Deployment of MPLS VPN, OSPF VPN expansion

6. Network O&M

- Network O&M: Routine Maintenance, Information collection tool

7. Troubleshooting

- Troubleshooting: Structured troubleshooting process, Core Ideas and Methods of Network Troubleshooting, Troubleshooting Common Network Faults

8. Network Migration

- Network Migration: Basic Concepts of Migration, Migration Process