ENARSI

Implementing Cisco Enterprise Advanced Routing and Services

Description:

On this course you gain the knowledge you need to install, configure, operate, and troubleshoot an enterprise network and qualify for professional-level job roles in advance routing and services. This course will help you prepare for the Implementing Cisco Enterprise Advanced Routing and Services (300-410 ENARSI) exam.

Students will be able to:

Configure classic Enhanced Interior Gateway Routing Protocol (EIGRP) and named EIGRP for IPv4 and IPv6
Optimize classic EIGRP and named EIGRP for IPv4 and IPv6
Troubleshoot classic EIGRP and named EIGRP for IPv4 and IPv6
Configure Open Shortest Path First (OSPF)v2 and OSPFv3 in IPv4 and IPv6 environments
Optimize OSPFv2 and OSPFv3 behavior
Troubleshoot OSPFv2 for IPv4 and OSPFv3 for IPv4 and IPv6
Implement route redistribution using filtering mechanisms
Troubleshoot redistribution
Implement path control using Policy-Based Routing (PBR) and IP service level agreement (SLA)
Configure Multiprotocol-Border Gateway Protocol (MP-BGP) in IPv4 and IPv6 environments
Optimize MP-BGP in IPv4 and IPv6 environments
Troubleshoot MP-BGP for IPv4 and IPv6
Describe the features of Multiprotocol Label Switching (MPLS)
Describe the major architectural components of an MPLS VPN
Identify the routing and packet forwarding functionalities for MPLS VPNs
Explain how packets are forwarded in an MPLS VPN environment
Implement Cisco Internetwork Operating System (IOS®) Dynamic Multipoint VPNs (DMVPNs)
Implement Dynamic Host Configuration Protocol (DHCP)
Describe the tools available to secure the IPV6 first hop
Troubleshoot Cisco router security features
Troubleshoot infrastructure security and services

Course requirements:

Participation in courses CCNA and ENCOR, or adequate knowledge.

This course is intended for:

Enterprise network engineers
System engineers
System administrators
Network administrators

Literature:

All participants will get original Cisco student and lab guides.

Hardware:

Labs are practised on Cisco delivered Virtual lab environment. Classrooms are equipped with high-performance computers with Internet access and the possibility of wireless connection.

Syllabus:

Implementing EIGRP
Optimizing EIGRP
Troubleshooting EIGRP
Implementing OSPF
Optimizing OSPF
Troubleshooting OSPF
Implementing Internal Border Gateway Protocol (IBGP)
Optimizing BGP
Implementing MP-BGP
Troubleshooting BGP
Configuring Redistribution
Troubleshooting Redistribution
Implementing Path Control
Exploring MPLS
Introducing MPLS L3 VPN Architecture
Introducing MPLS L3 VPN Routing
Configuring Virtual Routing and Forwarding (VRF)-Lite
Implementing DMVPN
Implementing DHCP
Troubleshooting DHCP
Introducing IPv6 First Hop Security
Securing Cisco Routers
Troubleshooting Infrastructure Security and Services
