IMPLEMENTING CISCO ENTERPRISE ADVANCED ROUTING AND SERVICES (ENARSI) v1.0

The Implementing Cisco Enterprise Advanced Routing and Services (ENARSI) v1.0 gives you the knowledge you need to install, configure, operate, and troubleshoot an enterprise network. This course covers advanced routing and infrastructure technologies, expanding on the topics covered in the Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR) v1.0 course.

This course helps prepare you to take the exam, Implementing Cisco Enterprise Advanced Routing and Services (300-410 ENARSI), which leads to the new CCNP® Enterprise and Cisco Certified Specialist – Enterprise Advanced Infrastructure Implementation certifications.

This course also earns you 40 Continuing Education (CE) credits towards recertification.

Why Attend with Current Technologies CLC

- Our Instructors are the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up-to-date code for all our courses

Objectives

Upon completing this course, the student will be able to meet these objectives:

- Configure classic 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 OSPFv2 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 PBR and IP SLA
- Configure MP-BGP in IPv4 and IPv6 environments
- Optimize MP-BGP in IPv4 and IPv6 environments

Course Duration

5 day

Course Price

$3,495.00

Methods of Delivery

- Instructor Led
- Virtual ILT

Certification Exam

300-410

Cisco CE Credits

40

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- Troubleshoot MP-BGP for IPv4 and IPv6
- Describe the features of 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 IOS DMVPNs
- Implement DHC
- Describe the tools available to secure the IPV6 first hop
- Troubleshoot Cisco router security features
- Troubleshoot infrastructure security and services

Who Should Attend

This course is designed for anyone seeking CCNA certification.

- The course also provides foundational knowledge for all support technicians involved in the basic installation, operation, and verification of Cisco networks.

The job roles best suited to the material in this course are:

- Enterprise Network Engineers
- System Engineers
- System Administrators
- Network Administrators

Perquisites

- General understanding of network fundamentals
- Basic knowledge of how to implement LANs
- General understanding of how to manage network devices
- General understanding of how to secure network devices

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- Basic knowledge of network automation

Course Outline

Module 1: Implementing EIGRP

Module 2: Optimizing EIGRP

Module 3: Troubleshooting EIGRP

Module 4: Implementing OSPF

Module 5: Understanding EIGRP

Module 6: Implementing OSPF

Module 7: Optimizing OSPF

Module 8: Troubleshooting OSPF

Module 9: Implementing BGP

Module 10: Optimizing BGP

Module 11: Implementing MP-BGP

Module 12: Troubleshooting BGP

Module 13: Configuring Redistribution

Module 14: Troubleshooting Redistribution

Module 15: Implementing Path Control

Module 16: Exploring MPLS

Module 17: Introducing MPLS L3 VPN Architecture

Module 18: Introducing MPLS L3 VPN Routing

Module 19: Configuring VRF-Lite

Module 20: Implementing DMVPN

Module 21: Implementing DHCP

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Module 22: Troubleshooting DHCP

Module 23: Introducing IPv6 First Hop Security

Module 24: Securing Cisco Routers

Module 25: Troubleshooting Infrastructure Security and Services

LAB OUTLINE

- Configure EIGRP Using Classic Mode and Named Mode for IPv4 and IPv6
- Verify the EIGRP Topology Table
- Configure EIGRP Stub Routing, Summarization, and Default Routing
- Configure EIGRP Load Balancing and Authentication
- LAB: Troubleshoot EIGRP Issues
- Configure OSPFv3 for IPv4 and IPv6
- Verify the Link-State Database
- Configure OSPF Stub Areas and Summarization
- Configure OSPF Authentication
- Troubleshoot OSPF
- Implement Routing Protocol Redistribution
- Manipulate Redistribution
- Manipulate Redistribution Using Route Maps
- Troubleshoot Redistribution Issues
- Implement PBR
- Configure IBGP and EBGP
- Implement BGP Path Selection
- Configure BGP Advanced Features
- Configure BGP Route Reflectors
- Configure MP-BGP for IPv4 and IPv6
- Troubleshoot BGP Issues
- Implement PBR
- Configure Routing with VRF-Lite
- Implement Cisco IOS DMVPN
- Obtain IPv6 Addresses Dynamically
- Troubleshoot DHCPv4 and DHCPv6 Issues
- Troubleshoot IPv4 and IPv6 ACL Issues
- Configure and Verify Control Plane Policing
- Configure and Verify uRPF

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- Troubleshoot Network Management Protocol Issues: Lab 1
- Troubleshoot Network Management Protocol Issues: Lab 2

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