
Implementing Cisco Enterprise Advanced Routing and Services (ENARSI) V1.1

***WHERE GREAT TRAINING
HAPPENS EVERYDAY!***

Implementing Cisco Enterprise Advanced Routing and Services (ENARSI) V1.1

Course Duration

5 Days

Course Price

\$4,295.00

43 CLCs

Methods of Delivery

In-Person ILT

Virtual ILT

Onsite ILT

About this Class

The Implementing Cisco Enterprise Advanced Routing and Services (ENARSI) training gives you the knowledge and skills needed to install, configure, operate, and troubleshoot a dual stack enterprise network. This training covers advanced routing and infrastructure technologies, expanding on the topics covered in the Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR) training. This training prepares you for the 300-410 ENARSI v1.1 exam. If passed, you earn the Cisco Certified Specialist – Enterprise Advanced Infrastructure Implementation certification and satisfy the concentration exam requirement for the Cisco Certified Network Professional (CCNP) Enterprise certification. This training also earns you 40 Continuing Education (CE) credits towards recertification.

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How you will benefit

This class will help you:

- Gain the knowledge you need to install, configure, operate, and troubleshoot a dual stack enterprise network
- Qualify for professional-level job roles in advance routing and services
- Prepare for the 300-410 ENARSI 1.0 exam
- Earn 40 CE credits toward 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

Who Should Attend

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

- Entry-Level Network Engineers
- Network Administrators
- Network Support Technicians
- Help Desk Technicians

Prerequisites

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

- General understanding of network fundamentals
- Basic knowledge of local area network (LAN) implementation
- General understanding of network device management and security
- Basic knowledge of network automation
- General understanding of interior gateway protocol (IGP) routing, including EIGRP and OSPF
- General understanding of BGP
- General understanding of infrastructure security and services, including access control lists (ACLs), simple network management protocol (SNMP), DHCP, IP SLA, Syslog, authentication, authorization, and accounting (AAA), and control plane policing (CoPP)

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Objectives

After taking this course, you should be able to:

- Configure, optimize, and troubleshoot enhanced interior gateway routing protocol (EIGRP)
- Configure, optimize, and troubleshoot open shortest path first (OSPF)v2 and OSPFv3
- Implement and troubleshoot route redistribution using filtering mechanisms
- Implement path control using policy-based routing (PBR) and IP service level agreement (SLA)
- Configure, optimize, and troubleshoot border gateway protocol (BGP)
- Implement multiprotocol BGP (MP-BGP)
- Describe the features of multiprotocol label switching (MPLS)
- Describe the major architectural components of an MPLS virtual private network (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 and troubleshoot 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
- Troubleshoot network issues with Cisco DNA Center Assurance

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Course Outline

- Module 1: Implementing EIGRP
- Module 2: Optimizing EIGRP
- Module 3: Troubleshooting EIGRP
- Module 4: Implementing OSPF
- Module 5: Optimizing OSPF
- Module 6: Troubleshooting OSPF
- Module 7: Configuring Redistribution
- Module 8: Troubleshooting Redistribution
- Module 9: Implementing Path Control
- Module 10: Implementing IBGP
- Module 11: Optimizing BGP
- Module 12: Implementing MP-BGP
- Module 13: Troubleshooting BGP
- Module 14: Exploring MPLS
- Module 15: Introducing MPLS L3 VPN Architecture
- Module 16: Introducing MPLS L3 VPN Routing
- Module 17: Configuring VRF-Lite
- Module 18: Implementing DMVPN
- Module 19: Implementing DHCP
- Module 20: Introducing IPv6 First Hop Security
- Module 21: Securing Cisco Routers
- Module 22: Troubleshooting Infrastructure Security and Services
- Module 23: Troubleshooting with DNA Center Assurance

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Lab Outline

- Lab 1: Configure EIGRP Using Classic Mode and Named Mode for IPv4 and IPv6
- Lab 2: Verify the EIGRP Topology Table
- Lab 3: Configure EIGRP Stub Routing, Summarization, and Default Routing
- Lab 4: Configure EIGRP Load Balancing and Authentication
- Lab 5: Troubleshoot EIGRP Issues
- Lab 6: Configure OSPFv3 for IPv4 and IPv6
- Lab 7: Verify the Link-State Database
- Lab 8: Configure OSPF Stub Areas and Summarization
- Lab 9: Configure OSPF Authentication
- Lab 10: Troubleshoot OSPF Issues
- Lab 11: Implement Routing Protocol Redistribution
- Lab 12: Manipulate Redistribution
- Lab 13: Manipulate Redistribution Using Route Maps
- Lab 14: Troubleshoot Redistribution Issues
- Lab 15: Implement PBR
- Lab 16: Configure IBGP and EBGP

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Lab Outline Cont.

- Lab 17: Implement BGP Path Selection
- Lab 18: Configure BGP Advanced Features
- Lab 19: Configure BGP Route Reflectors
- Lab 20: Configure MP-BGP for IPv4 and IPv6
- Lab 21: Troubleshoot BGP Issues
- Lab 22: Configure Routing with VRF-Lite
- Lab 23: Implement Cisco IOS DMVPN
- Lab 24: Obtain IPv6 Addresses Dynamically
- Lab 25: Troubleshoot DHCPv4 and DHCPv6 Issues
- Lab 26: Troubleshoot IPv4 and IPv6 ACL Issues
- Lab 27: Configure and Verify uRPF
- Lab 28: Troubleshoot Network Management Protocol Issues: Lab 1
- Lab 29: Troubleshoot Network Management Protocol Issues: Lab 2