FIREFLY

CISCO PARTNER Platinum Learning

Designing Cisco Enterprise Networks • ENSLD

DURATION: 5 DAYS | **PRICE:** USD 4095 | **CLCs:** 41 | **CE:** 40

COURSE CODE: ENSLD | **FORMAT:** Lecture & Lab

COURSE DESCRIPTION

The Designing Cisco Enterprise Networks (ENSLD) training deepens your knowledge of designing enterprise networks. Topics covered include enterprise network design, including protocols and media for wired and wireless networks, SD-Access, VPN, Quality of Service (QoS), I Pv6, and network programmability. This training earns you 40 Continuing Education (CE) credits towards recertification and helps prepare you to take the 300-420 Designing Cisco Enterprise Networks (ENSLD) exam, which is part of the CNP Enterprise, Cisco Certified Specialist - Enterprise Design certification.

This training will help you:
• Learn the skills, technologies, and best practices needed to design anenterprise network.
• Deepen your understanding of enterprise design including advanced addressing and routing solutions, advanced enterprise campus networks, WAN, security services, network services, and software defined access SDA.
• Validate your knowledge and prepare to take the 300-420 Designing Cisco Enterprise Networks (ENSLD) exam.

WHO YOU'LL ATTEND

• Network design engineers
• Network engineers
• System administrators

PREREQUISITES

Before taking th is offering, you should be familiar with the following:
• Understanding network fundamentals
• Implementing LANs
• Implementing LAN connectivity

CERTIFICATION

The ENSLD 300-420 exam certifies your knowledge of enterprise design including advanced addressing and routing solutions, adva need enterprise campus networks, WAN, security services, network services, and SDA.

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After you pass the ENSLD 300-420 exam:
• You earn the Cisco Certified Specialist - Email Content Security certification
• You will have satisfied the concentration exam requirement for the new CCNP Enterprise certification.
• To complete your CCNP Enterprise certification, you must pass the Implementing Cisco Enterprise Network Core Technologies (350-407 ENCOR) exam or its equivalent.

LEARNING OBJECTIVES

• Design Enhanced Interior Gateway Routing Protocol (EIGRP) internal routing for the enterprise network
• Design Open Shortest Path First (OSPF) internal routing for the enterprise network
• Design Intermediate System to Intermediate System (IS-IS) internal routing for the enterprise network
• Design a network based on customer requirements
• Design Border Gateway Protocol (BGP) routing for the enterprise network
• Describe the different types and uses of Multiprotocol BGP (MP-BGP) address families
• Describe BGP load sharing
• Design a BGP network based on customer requirements
• Decide where the L2/L3 boundary will be in your Campus network and make design decisions
• Describe Layer 2 design considerations for Enterprise Campus networks
• Design a LAN network based on customer requirements
• Describe Layer 3 design considerations in an Enterprise Campus network
• Examine Cisco SD-Access fundamental concepts
• Describe Cisco SD-Access Fabric Design
• Design a Software-Defined Access (SDAccess) Campus Fabric based on customer requirements
• Design service provider-managed VPNs
• Design enterprise-managed VPNs
• Design a resilient WAN
• Design a resilient WAN network based on customer requirements
• Examine the Cisco SD-WAN architecture
• Describe Cisco SD-WAN deployment options
• Understand Cisco SD-WAN - NAT and hybrid design considerations
• Design Cisco SD-WAN redundancy
• Explain the basic principles of Quality of Service (QoS)
• Design QoS for the WAN
• Design QoS for enterprise network based on customer requirements
• Explain the basic principles of multicast
• Explore multicast with PIM-SM
• Designing rendezvous point distribution solutions
• Describe high-level considerations when doing IP addressing design
• Create an IPv6 addressing plan
• Plan an IPv6 deployment in an existing enterprise IPv4
• nettwork
• Describe the challenges that you might encounter when transitioning to IPv6
• Design an IPv6 addressing plan based on customer requirements
• Describe NetworkAPIs and protocols
• Describe Yet Another Next Generation (YANG), Network Configuration Protocol (NETCONF), and Representational State Transfer Configuration Protocol (RESTCONF)

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COURSE OUTLINE

Module 1: Designing EIGRP routing
Module 2: Designing OSPF routing
Module 3: Designing IS-IS routing
Module 4: Designing BGP routing and redundancy
Module 5: Exploring BGP Address Families and Attributes
Module 6: Designing an Enterprise Campus LAN
Module 7: Designing Layer 2 Campus
Module 8: Designing a Layer 3 Campus
Module 9: Discovering the Cisco SD-Access Architecture
Module 10: Exploring Cisco SD-Access Fabric Design
Module 11: Exploring Cisco SD-Access Site Design Strategy and Considerations
Module 12: Discovering Service ProviderManaged VPNs
Module 13: Designing Enterprise-Managed VPNs
Module 14: Designing WAN Resiliency
Module 15: Examining Cisco SD-WAN Architectures
Module 16: Examining Cisco SD-WAN Deployment Design Considerations
Module 17: Examining Cisco SD-WAN-NAT and Hybrid Design Considerations
Module 18: Designing Cisco SD-WAN Routing and High Availability
Module 19: Exploring QoS
Module 20: Designing LAN and WAN QoS
Module 21: Introducing Multicast
Module 22: Exploring Multicast with PIM-SM
Module 23: Designing Rendezvous Point Distribution Solutions
Module 24: Designing an IPv4 Address Plan
Module 25: Exploring IPv6
Module 26: Deploying IPv6
Module 27: Introducing Network APIs and Protocols
Module 28: Exploring YANG, NETCONF, RESTCONF, and Model-Driven Telemetry

DISCOVERY LABS

1. Designing Enterprise Connectivity
2. Designing an Enterprise Network with BGP Internet Connectivity
3. Designing an Enterprise Campus LAN
4. Designing SD-Access in the Enterprise
5. Designing Resilient Enterprise WAN
6. Designing QoS in an Enterprise Network
7. Designing an Enterprise IPv6 Network

Instructor Led Training

To view the schedule and secure your site

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