

Designing Cisco Data Center Infrastructure (DCID)

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The Designing Cisco Data Center Infrastructure (DCID) training focuses on data center design based on Cisco solutions and technologies. The training includes theoretical content and design-oriented case studies that are in the form of activities. The training includes information on designing data centers with Cisco components and technologies. It covers network designs with virtualization, Layer 2 and Layer 3 technologies and routing protocols, and data center interconnect design options. Also covered are device virtualization technologies such as virtualized network devices with virtual appliances, including virtual switches, virtual routers, and virtual firewalls. Storage and SAN design is covered, including an explanation of Fibre Channel networks. Design practices for the Cisco Unified Computing System (UCS) solution based on Cisco UCS B-Series and C-Series servers, Cisco UCS-X are covered. Management and orchestration topics feature Cisco UCS Manager, Nexus Dashboard Fabric Controller (NDFC), and Cisco Intersight, with additional emphasis on automation solutions such as programmability, Ansible, and Terraform. The training also addresses the integration of artificial intelligence, real-world use cases, and the design of AI-ready infrastructure.

This training prepares you for the 300-610 DCID v1.2 exam. If passed, you earn the Cisco Certified Specialist – Data Center Design certification and satisfy the concentration exam requirement for the Cisco Certified Network Professional (CCNP) Data Center certification. This training also earns you 40 Continuing Education (CE) credits toward recertification

How you'll benefit

This class will help you:

- Make design choices for optimal data center infrastructure performance, virtualization, security, and automation
- Gain the practical and theoretical knowledge necessary to design a scalable, reliable, and intelligent data center based on Cisco technologies
- Qualify for professional-level job roles in the high-demand area of enterprise-class data center environments
- Prepare for the 300-610 DCID v1.2 exam
- Earn 40 CE credits toward recertification

Why Attend with Current Technologies CLC

- Our Instructors are in 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 primary audience for this course is as follows:

- Network Designers
- Network Administrators

Course Duration

5 days

Course Price

\$4,095.00 or 41 CLCs

Methods of Delivery

- Instructor Led
- Virtual ILT
- On-Site

- Network Engineers
- Systems Engineers
- Data Center Engineers
- Consulting Systems Engineers
- Technical Solutions Architects
- Cisco Integrators and Partners
- Server Administrators
- Network Managers
- Storage Administrators
- Program Managers
- Project Managers

Prerequisites

Before taking this course, you should be able to:

- Implement data center networking, including Local Area Network (LAN) and Storage Area Network (SAN)
- Describe data center storage
- Implement data center virtualization
- Implement Cisco Unified Computing System
- Implement data center automation and orchestration with the focus on Cisco Application Centric Infrastructure (ACI), Cisco Nexus Dashboard, and Cisco Intersight
- Describe products in the Cisco Data Center Nexus and Multilayer Director Switch (MDS) families

OUTLINE

Module 1: Data Center Topologies

Module 2: Layer 1 Connectivity

Module 3: Data Center Redundancy

Module 4: Layer 2 Connectivity

Module 5: Layer 3 Connectivity

Module 6: Virtual Resources

Module 7: Overlay Networks

Module 8: Fabric Interconnect Connectivity

Module 9: Cisco Unified Computing System Server Options

Module 10: Cisco UCS Network Design

Module 11: Cisco Unified Computing System Server Design

Module 12: Cisco Unified Computing System Configuration

Module 13: Storage Options and Design

Module 14: Fibre Channel Networks

Module 15: Storage Virtualization

Module 16: Fibre Channel Topologies

Module 17: Hyperconverged and Integrated Systems

Module 18: Basic Data Center Security

Module 19: Advanced Data Center Security

- Module 20: Storage Security**
- Module 21: Cisco Unified Computing System Role-Based Access Control**
- Module 22: Fundamentals of AI**
- Module 23: Generative AI**
- Module 24: AI Use Cases**
- Module 25: AI-Enabling Hardware**
- Module 26: Key Network Challenges and Requirements for AI Workloads**
- Module 27: Application-Level Protocols**
- Module 28: AI Transport**
- Module 29: AI Compute Resources**
- Module 30: AI Sustainability**
- Module 31: Network and License Management**
- Module 32: Compute Management and Orchestration**
- Module 33: Network Orchestration**
- Module 34: Data Center Programmability and Automation**
- Module 35: Infrastructure as Code Automation**