Designing Cisco Data Center Infrastructure (DCID)

ID DCID **Price** CHF 4,150.—(excl. VAT) **Duration** 5 days

Who should attend

IT professionals with five to eight years of experience in these roles:

- Data center engineers
- Network designers
- Network administrators
- Network engineers
- Systems engineers
- Consulting systems engineers
- Technical solutions architects
- Server administrators
- Network managers
- Cisco integrators or partners

This course is part of the following Certifications

Cisco Certified Network Professional Data Center (CCNP DATA CENTER)

Prerequisites

Before taking this offering, you should be able to:

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

To fully benefit from this course, you should have completed the following courses or obtained the equivalent level of knowledge:

- Understanding Cisco Data Center Foundations (DCFNDU) or and
- Implementing and Operating Cisco Data Center Core Technologies (DCCOR)

It is recommended, but not required, to have the following skills and knowledge before attending this course:

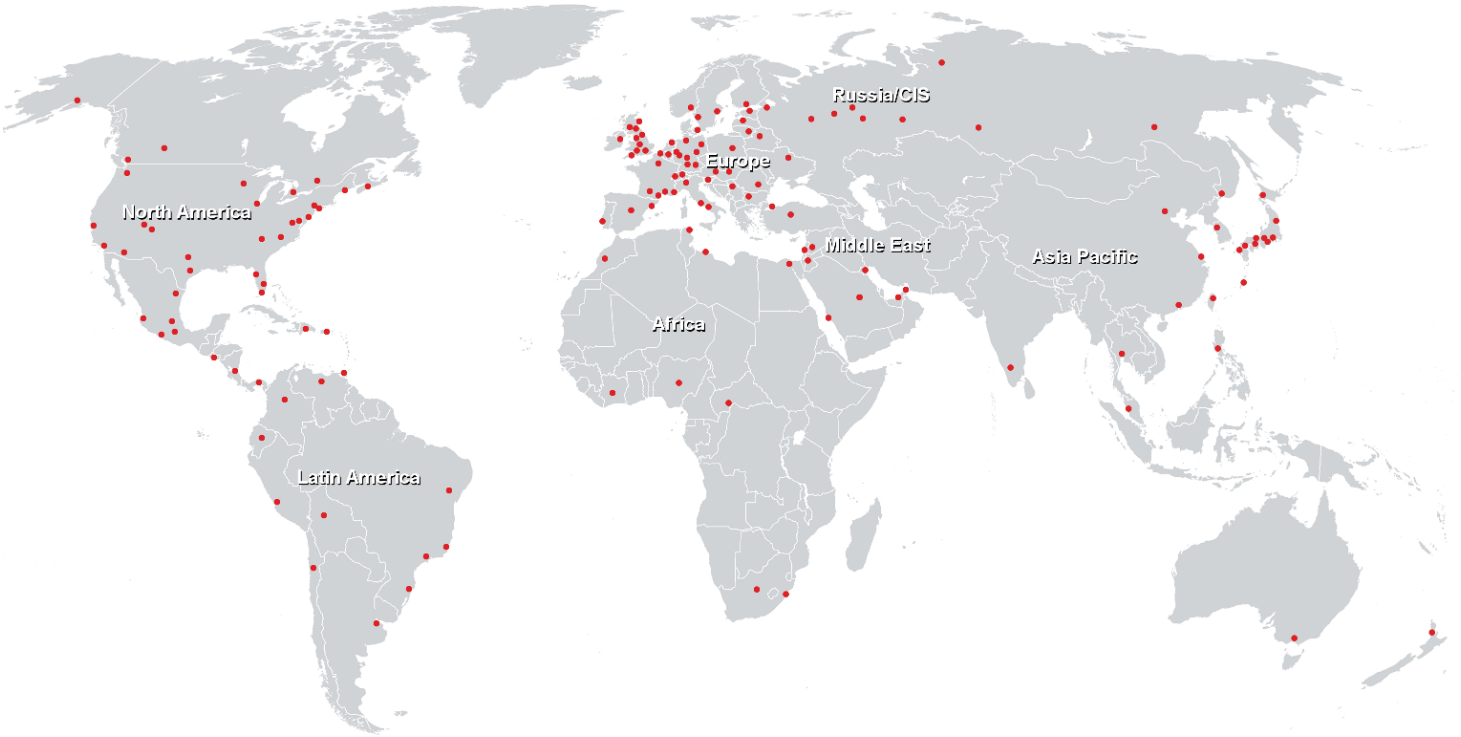
- Describe data center networking concepts
- Describe data center storage concepts
- Describe data center virtualization
- Describe Cisco UCS
- Describe data center automation and orchestration with a focus on Cisco ACI and Cisco UCS Director
- Identify products in the Cisco data center Nexus and Cisco MDS families
- Describe network fundamentals and build simple LANs, including switching and routing

Course Objectives

- Describe the Layer 2 and Layer 3 forwarding options and protocols used in a data center
- Describe the rack design options, traffic patterns, and data center switching layer access, aggregation, and core
- Describe Locator/ID separation protocol
- Design a solution that uses Virtual Extensible LAN (VXLAN) for traffic forwarding
- Describe the hardware redundancy options; how to virtualize the network, compute, and storage functions; and virtual networking in the data center
- Describe solutions that use fabric extenders and compare Cisco Adapter Fabric Extender (FEX) with single root input/output virtualization (SR-IOV)
- Describe security threats and solutions in the data center
- Describe advanced data center security technologies and best practices
- Describe device management and orchestration in the data center
- Describe the storage options for the compute function and the different Redundant Array of Independent Disks (RAID) levels from a high-availability and performance perspective
- Describe Fibre Channel concepts and architecture
- Describe Fibre Channel topologies and industry terms
- Describe Fibre Channel over Ethernet (FCoE)
- Describe security options in the storage network
- Describe the management and automation options for the storage networking infrastructure
- Describe Cisco UCS servers and use cases for various Cisco UCS platforms
- Explain the connectivity options for fabric interconnects for southbound and northbound connections

- Describe the hyperconverged solution and integrated systems
- Describe the systemwide parameters for setting up a Cisco UCS domain
- Describe role-based access control (RBAC) and integration with directory servers to control access rights on Cisco UCS Manager
- Describe the pools that may be used in service profiles or service profile templates on Cisco UCS Manager
- Describe the different policies in the service profile
- Describe the Ethernet and Fibre Channel interface policies and additional network technologies
- Describe the advantages of templates and the difference between initial and updated templates
- Describe data center automation tools

Training Centres worldwide



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