

DCCOR

Implementing and Operating Cisco Data Center Core Technologies

In diesem Training werden die Fähigkeiten und Technologien vermittelt, die Sie für die Implementierung von Rechenzentrums-, LAN- und SAN-Infrastrukturen benötigen. Außerdem lernen Sie die Grundlagen der Automatisierung und Sicherheit in Rechenzentren. Sie erhalten praxisorientierte Kenntnisse über die Bereitstellung, Sicherung, den Betrieb und die Wartung der Cisco Data Center Infrastruktur, einschließlich Cisco MDS Switches und Cisco Nexus Switches; Cisco Unified Computing System™ (Cisco UCS®) B-Series Blade Server und Cisco UCS C-Series Rack Server.

Dieses Training, einschließlich des Materials zum Selbststudium, bereitet Sie auf das Examen Cisco Data Center Core Technologies (DCCOR) vor, welches zu den neuen CCNP Data Center, CCIE Data Center und den Cisco Certified Specialist - Data Center Core Zertifizierungen führt.

Kursinhalt

- Implementing Data Center Switching Protocols*
- Implementing First-Hop Redundancy Protocols*
- Implementing Routing in Data Center*
- Implementing Multicast in Data Center*
- Implementing Data Center Overlay Protocols
- Implementing Network Infrastructure Security*
- Describing Cisco Application-Centric Infrastructure
- Describing Cisco ACI Building Blocks and VMM Domain Integration
- Describing Packet Flow in Data Center Network*
- Describing Cisco Cloud Service and Deployment Models*
- Describing Data Center Network Infrastructure Management, Maintenance, and Operations*
- Explaining Cisco Network Assurance Concepts*
- Implementing Fibre Channel Fabric
- Implementing Storage Infrastructure Services
- Implementing FCoE Unified Fabric
- Implementing Storage Infrastructure Security*
- Describing Data Center Storage Infrastructure Maintenance and Operations*
- Describing Cisco UCS Server Form Factors*
- Implementing Cisco Unified Computing Network Connectivity
- Implementing Cisco Unified Computing Server Abstraction
- Implementing Cisco Unified Computing SAN Connectivity
- Implementing Unified Computing Security
- Introducing Cisco HyperFlex Systems*
- Describing Data Center Unified Computing Management, Maintenance, and Operations*
- Implementing Cisco Data Center Automation and Scripting Tools*
- Describing Cisco Integration with Automation and Orchestration Software Platforms
- Describing Cisco Data Center Automation and Orchestration Technologies*

* Dies ist ein Modul mit Materialien zum Selbststudium, das in Ihrem eigenen Tempo nach dem vom Trainer geleiteten Teil des Kurses durchgeführt werden kann.

Zielgruppe

- Network designers
- Network administrators
- Network engineers
- Systems engineers
- Data center engineers
- Consulting systems engineers
- Technical solutions architects
- Field engineers
- Cisco integrators and partners
- Server administrator

Voraussetzungen

Um von diesem Kurs voll profitieren zu können, sollten Sie über die folgenden Kenntnisse und Fähigkeiten verfügen:

- Vertrautheit mit Ethernet und TCP/IP-Netzwerken
- Vertrautheit mit SANs
- Vertrautheit mit dem Fibre Channel-Protokoll
- Identifizierung von Produkten in den Cisco Data Center Nexus- und Cisco MDS-Familien
- Verständnis der Cisco Enterprise Data Center Architektur
- Verständnis des Designs und der Architektur von Serversystemen
- Vertrautheit mit Hypervisor-Technologien (z.B.VMware)

Um grundlegende Kenntnisse und Fähigkeiten zu erwerben, die Sie benötigen, um Cisco® Data Center-Technologien zu konfigurieren, empfehlen wir Neueinsteigern in das Thema vorab den Kurs DCFNDU - Understanding Cisco Data Center Foundations.

Bearbeitungszeit

ca. 30 Stunden

Dieser Kurs im Web



Alle tagesaktuellen Informationen und Möglichkeiten zur Bestellung finden Sie unter dem folgenden Link: www.experteach.ch/go/DCCO

Vormerkung

Sie können auf unserer Website einen Platz kostenlos und unverbindlich für 7 Tage reservieren. Dies geht auch telefonisch unter 06074 4868-0.

Garantierte Kurstermine

Für Ihre Planungssicherheit bieten wir stets eine große Auswahl garantierter Kurstermine an.

Ihr Kurs maßgeschneidert

Diesen Kurs können wir für Ihr Projekt exakt an Ihre Anforderungen anpassen.

Cisco Digital Learning & Cisco U.

Die multimodalen Schulungen der Cisco Digital Learning Library beinhalten referenzgeführte HD-Videos mit hinterlegtem durchsuchbarem Text und Untertiteln, Übungen, Labs und erklärenden Text sowie Grafiken. Das Angebot stellen wir Ihnen über unser Lernportal myExperTeach zur Verfügung. Der Zugriff auf die Kurse steht ab der Freischaltung für einen Zeitraum von sechs Monaten zur Verfügung. Bei Paketen (Cisco U.) beträgt dieser Zeitraum zwölf Monate.

Cisco Digital Learning & Cisco U. Preise zzgl. MwSt.

6 Monate Freischaltung **CHF 1.655,-**

Training Preise zzgl. MwSt.

Termine in Deutschland 5 Tage CHF 3.955,-

Termine in Österreich 5 Tage CHF 3.955,-

Online Training 5 Tage CHF 3.955,-

Termin/Kursort Kurssprache Deutsch

13.05.-17.05.24	Online	26.08.-30.08.24	Online
13.05.-17.05.24	Wien	30.09.-04.10.24	Online
17.06.-21.06.24	Düsseldorf	30.09.-04.10.24	Wien
17.06.-21.06.24	Online	18.11.-22.11.24	Hamburg
22.07.-26.07.24	München	18.11.-22.11.24	Online
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DCCOR – Implementing and Operating Cisco Data Center Core Technologies

Section 1: Implementing Data Center Switching Protocols*

Objectives

- Implement spanning tree protocol, port channels, and virtual port-channels in data center.

This lesson includes these topics:

- Spanning Tree Protocol
- Port Channels Overview
- Virtual Port Channels Overview

Section 2: Implementing First-Hop Redundancy Protocols*

Objectives

- Implement first-hop redundancy protocols in data center using HSRP, VRRP, GLBP, and FHRP for IPv6

This lesson includes these topics:

- HSRP Overview
- VRRP Overview

Section 3: Implementing Routing in Data Center*

Objectives

- Implement routing in the data center by using OSPFv2, OSPFv3, and BGP.

This lesson includes these topics:

- OSPFv2 and OSPFv3
- Border Gateway Protocol

Section 4: Implementing Multicast in Data Center*

Objectives

- Implement multicast functionality in the data center on Cisco Nexus switches.

This lesson includes these topics:

- IP Multicast in Data Center Networks
- IGMP and MLD
- Multicast Distribution Trees and Routing Protocols
- IP Multicast on Cisco Nexus Switches

Section 5: Implementing Data Center Overlay Protocols

Objectives

- Implement overlay networks in data center by VXLAN.

This lesson includes these topics:

- Virtual Extensible LAN

Section 6: Implementing Network Infrastructure Security*

Objectives

- Implement network infrastructure security features on Cisco Nexus switches.

This lesson includes these topics:

- User Accounts and RBAC
- AAA and SSH on Cisco NX-OS
- Keychain Authentication
- First Hop Security
- MAC Security
- Control Plane Policing

Section 7: Describing Cisco Application-Centric Infrastructure

Objectives

- Introduce high-level Cisco ACI concepts and describe various fabric discovery parameters.

This lesson includes these topics:

- Cisco ACI Overview, Initialization, and Discovery
- Cisco Nexus Dashboard Overview
- Cisco Cloud ACI Overview
- Cisco ACI Management
- Cisco ACI Fabric Access Policies

Section 8: Describing Cisco ACI Building Blocks and VMM Domain Integration

Objectives

- Describe Cisco ACI building blocks and VMM domain integration.

This lesson includes these topics:

- Tenant-Based Components
- Cisco ACI Endpoints and Endpoint Groups
- Controlling Traffic Flow with Contracts
- Virtual Switches and Cisco ACI VMM Domains
- VMM Domain EPG Association
- Cisco ACI Integration with Hypervisor Solutions

Section 9: Describing Packet Flow in Data Center Network*

Objectives

- Describe packet flow for various traffic types (unicast, multicast and broadcast) in the data center.

This lesson includes these topics:

- Data Center Traffic Flows

- Packet Flow in Cisco Nexus Switches

- Packet Flow in Cisco ACI Fabric

Section 10: Describing Cisco Cloud Service and Deployment Models*

Objectives

- Describe Cisco Cloud Service and deployment models.

This lesson includes these topics:

- Cloud Architectures
- Cloud Deployment Models

Section 11: Describing Data Center Network Infrastructure Management*

Objectives

- Implement network configuration management, describe software updates and their impacts, and implement network infrastructure monitoring

This lesson includes these topics:

- Time Synchronization
- Network Configuration Management
- Software Updates
- Network Infrastructure Monitoring

Section 12: Explaining Cisco Network Assurance Concepts*

Objectives

- Describe Cisco network assurance concepts such as Cisco Streaming Telemetry

This lesson includes these topics:

- Need for Network Assurance
- Cisco Streaming Telemetry Overview

Section 13: Implementing Fibre Channel Fabric

Objectives

- Implement Fibre Channel fabric

This lesson includes these topics:

- Fibre Channel Basics
- VSAN Overview
- SAN Port Channels Overview
- Fibre Channel Domain Configuration Process

Section 14: Implementing Storage Infrastructure Services

Objectives

- Implement storage infrastructure services in data center such as distributed device aliases, zoning, NPV, and FCIP

This lesson includes these topics:

- Distributed Device Aliases
- Zoning
- NPV and NPV
- Fibre Channel Over IP
- NAS Concepts
- SAN Design Options

Section 15: Implementing FCoE Unified Fabric

Objectives

- Implement FCoE unified fabric

This lesson includes these topics:

- Fibre Channel Over Ethernet
- Describing FCoE
- FCoE Topology Options
- FCoE Implementation

Section 16: Implementing Storage Infrastructure Security*

Objectives

- Implement storage infrastructure security features in data center

This lesson includes these topics:

- User Accounts and RBAC
- Authentication, Authorization, and Accounting
- Fibre Channel Port Security and Fabric Binding

Section 17: Describing Data Center Storage Infrastructure Maintenance and Operations*

Objectives

- Describe storage infrastructure software updates and their impacts, and implement infrastructure monitoring

This lesson includes these topics:

- Time Synchronization
- Software Installation and Upgrade
- Storage Infrastructure Monitoring

Section 18: Describing Cisco UCS Server Form Factors*

Objectives

- Describe Cisco UCS Server form factors

This lesson includes these topics:

- Cisco UCS B-Series Blade Servers

- Cisco UCS C-Series Rack Servers

Section 19: Implementing Cisco Unified Computing Network Connectivity

Objectives

- Implement Cisco UCS Fabric Interconnect and establish network connectivity for the Cisco UCS B-Series Blade Servers and Cisco UCS C-Series Rack Servers

This lesson includes these topics:

- Cisco UCS Fabric Interconnect
- Cisco UCS B-Series Connectivity
- Cisco UCS C-Series Integration

Section 20: Implementing Cisco Unified Computing Server Abstraction

Objectives

- Implement Cisco Unified Computing Server abstraction

This lesson includes these topics:

- Identity Abstraction
- Service Profile Templates

Section 21: Implementing Cisco Unified Computing SAN Connectivity

Objectives

- Implement SAN connectivity for Cisco UCS

This lesson includes these topics:

- Cisco Unified Computing Storage Connectivity Options
- iSCSI Overview
- Fibre Channel Overview
- Implementing FCoE

Section 22: Implementing Cisco Unified Computing System Security

Objectives

- Implement Cisco UCS security features in data center

This lesson includes these topics:

- User Accounts and RBAC
- Options for Authentication
- Key Management

Section 23: Introducing Cisco HyperFlex Systems*

Objectives

- Describe Cisco HyperFlex infrastructure concepts and benefits

This lesson includes these topics:

- Hyperconverged and Integrated Systems Overview
- Cisco HyperFlex Solution
- Cisco HyperFlex Scalability and Robustness

Section 24: Describing Data Center Unified Computing Management, Maintenance, and Operations*

Objectives

- Implement Cisco UCS configuration management, describe software updates and their impacts, and implement infrastructure monitoring

This lesson includes these topics:

- Compute Configuration Management
- Software Updates
- Infrastructure Monitoring
- Cisco Intersight

Section 25: Implementing Cisco Data Center Automation and Scripting Tools*

Objectives

- Implement Cisco automation and scripting tools in data center

This lesson includes these topics:

- Cisco NX-OS Programmability
- Scheduler Overview
- Cisco Embedded Event Manager Overview
- Open NX-OS Linux Network Architecture
- Bash Shell and Guest Shell for Cisco NX-OS
- Cisco Nexus API
- Cisco NX-OS Model-Driven Programmability
- Cisco NX-SDK

Section 26: Describing Cisco Integration with Automation and Orchestration Software Platforms

Objectives

- Describe and evaluate Cisco integration with automation and orchestration software platforms, such as Ansible, Puppet, and Python

This lesson includes these topics:

- Cisco and Ansible Integration Overview
- Python in Cisco NX-OS and Cisco UCS
- HashiCorp Terraform Overview
- Cisco Application-Centric Infrastructure Automation Options

