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Designing Cisco Network Service Architectures 2.1



The aim of this course is to enable learners to perform the conceptual, intermediate, and detailed design of a network infrastructure that supports desired network solutions over intelligent network services, in order to achieve effective performance, scalability, and availability. This course enables learners, by applying solid Cisco network solution models and recommended design practices, to provide viable, stable enterprise internetworking solutions.

The course presents concepts and examples that are necessary to design converged enterprise networks. Advanced network infrastructure technologies, such as virtual private networks (VPNs) and other security solutions, are also covered.

Course Contents

- Module 1: Cisco Network Architectures for the Enterprise
- Module 2: Enterprise Campus Network Design
- Module 3: Advanced Addressing and Routing Design
- Module 4: Advanced WAN Services Design Considerations
- Module 5: Enterprise Data Center Design
- Module 6: E-Commerce Module Design
- Module 7: SAN Design Considerations
- Module 8: Security Services Design
- Module 9: IPsec and SSL VPN Design
- Module 10: IP Multicast Design
- Module 11: Network Management Capabilities with Cisco IOS Software

Target Group

- Presales and postsales network engineers that are involved in network design, planning, and implementation
- Network administrators and designers that are responsible for designing and implementing the enterprise network
- Cisco CCDA, CCDP, and CCDE candidates

Knowledge Prerequisites

CCNA certification, ROUTE and SWITCH courses

Course Objectives

- Introduce the Cisco Network Architectures for the Enterprise and explain how this concept addresses enterprise network needs for performance, scalability, and availability
- Describe how the Cisco Network Architectures for the Enterprise can be used as a framework for designing enterprise networks
- Create conceptual, intermediate, and detailed enterprise campus network designs
- Create conceptual, intermediate, and detailed enterprise data center designs
- Create conceptual, intermediate, and detailed enterprise edge and remote infrastructure designs
- Create conceptual, intermediate, and detailed network service designs for security considerations
- Create conceptual, intermediate, and detailed VPN designs



Reservation and Registration

We will be glad to make a free and non-binding course reservation for you for the duration of two weeks. On www.experteach-training.com under *Registration*, you can conveniently make course reservations, registrations, and hotel reservations. Alternatively, call us under +49 6074 4868-0.

For closed groups of participants, we can modify the course contents according to your requirements. Do not hesitate to contact us!



5 days

€2,590 exclusive of V.A.T.

Course date (mm/dd/yy)/Location

02/27-03/02/12	Breda	08/27-08/31/12	Hamburg
03/12-03/16/12	Hamburg	10/08-10/12/12	Frankfurt
04/23-04/27/12	Frankfurt	11/12-11/16/12	München
05/21-05/25/12	Breda	11/12-11/16/12	Wien
06/18-06/22/12	Düsseldorf	12/10-12/14/12	Hamburg
07/16-07/20/12	München	01/21-01/25/13	Düsseldorf
07/16-07/20/12	Wien		

Up-to-date information: www.experteach-training.com ARCH

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Module 1: Introducing Cisco Network Service Architectures

Lesson 1-1: Introducing Cisco Network Service Architectures
 Lesson 1-2: Introducing the Enterprise Composite Model for Designing Networks
 Written Exercise: Matching Enterprise Needs to Cisco Design Models

Module 2: Designing Enterprise Campus Networks

Lesson 2-1: Reviewing the Campus Network Design Methodology
 Lesson 2-2: Designing Campus Switching and Routing Solutions
 Written Exercise: Identifying Requirements and Design Guidelines for Enterprise Campus Networks
 Lesson 2-3: Designing Server Farm Networks
 Case Study Exercise: Designing Enterprise Campus Network Infrastructures

Module 3: Designing Enterprise Edge Connectivity

Lesson 3-1: Reviewing the Enterprise Edge Network Design Methodology
 Lesson 3-2: Designing a Site-to-Site WAN
 Lesson 3-3: Designing Remote Access Solutions
 Lesson 3-4: Designing WANs Using Internet Connectivity
 Case Study Exercise: Designing Enterprise Edge Network Infrastructures

Module 4: Designing Network Management Solutions

Lesson 4-1: Developing an Enterprise Network Management Strategy
 Lesson 4-2: Designing a Cisco Network Management Architecture
 Case Study Exercise: Designing Network Management Solutions

Module 5: Designing High Availability Solutions

Lesson 5-1: Reviewing Cisco High Availability Features
 Lesson 5-2: Designing High Availability Enterprise Networks
 Case Study Exercise: Designing High Availability Solutions

Module 6: Designing Security Solutions

Lesson 6-1: Evaluating Network Security Policies
 Written Exercise: Identifying and Correcting Security Risks

Lesson 6-2: Reviewing Cisco Security Solutions
 Written Exercise: Identifying Cisco Security Solutions
 Lesson 6-3: Implementing Network Security Using the Cisco SAFE Security Blueprints
 Case Study Exercise: Designing Security Solutions

Module 7: Designing QoS Solutions

Lesson 7-1: Identifying Cisco QoS Mechanisms
 Written Exercise: Identifying Cisco QoS Solutions
 Lesson 7-2: Designing QoS for Enterprise Networks
 Case Study Exercise: Designing QoS Solutions

Module 8: Designing IP Multicast Solutions

Lesson 8-1: Implementing IP Multicast Services for Enhanced Network Utilization
 Lesson 8-2: Designing IP Multicast Solutions for Enterprise Networks
 Case Study Exercise: Designing IP Multicast Solutions

Module 9: Designing Virtual Private Networks

Lesson 9-1: Identifying VPN Solutions
 Written Exercise: Identifying VPN Solutions
 Lesson 9-2: Designing Site-to-Site VPN Solutions
 Lesson 9-3: Designing Remote Access VPN Solutions
 Case Study Exercise: Designing VPN Solutions

Module 10: Designing Enterprise Wireless Networks

Lesson 10-1: Reviewing the Cisco Wireless Solution
 Written Exercise: Identifying Cisco Wireless Solutions
 Lesson 10-2: Designing Wireless LANs for Enhanced Enterprise Communications
 Case Study Exercise: Designing Enterprise Wireless Network Infrastructures

Module 11: Designing IP Telephony Solutions

Lesson 11-1: Reviewing the Cisco IP Telephony Solution
 Written Exercise: Identifying Cisco IP Telephony Solutions
 Lesson 11-2: Designing the Network for Cisco IP Telephony
 Lesson 11-3: Designing IP Telephony Solutions for the Enterprise
 Case Study Exercise: Designing IP Telephony Solutions

Module 12: Designing Content Networking Solutions

Lesson 12-1: Reviewing the Cisco Content Networking Solution
 Written Exercise: Identifying Cisco Content Networking Solutions

Lesson 12-2: Designing Content Networking for E-Commerce and Web Content Delivery
 Lesson 12-3: Designing Content Networking for Streaming Services
 Case Study Exercise: Designing Content Networking Solutions

Module 13: Designing Storage Networking Solutions

Lesson 13-1: Reviewing the Cisco Storage Networking Solution
 Written Exercise: Identifying Cisco Storage Networking Solutions
 Lesson 13-2: Designing a Universal IP Access Storage Networking Architecture
 Case Study Exercise: Designing Storage Networking Solutions



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