

Designing for Cisco Internetwork Solutions (DESGN)

Duration 5 Days

COURSE CONTENT

In addition to general approaches and technologies for network design, this course promotes Cisco solutions in designing and implementing scalable internetworks. Among specific goals is the promotion of the modular approach to network design. The early modular approaches to network design divided networks into access, distribution and core layers only, separately for the campus and the WAN module. The Enterprise Composite Model facilitates designing, planning, implementing, operating and optimizing (PDIOO) networks by concentration on a certain module and on relations between the modules. Taking into account that most network solutions today (e.g. voice, video, storage networking, content networking) are typically overlay solutions spanning several modules, the composite modular approach seems even more relevant and is the main focus of this course. In addition, services virtualization and the SONA architecture are presented. The general course objectives remain the same, because ultimately - the tasks a designer must perform did not change, however, the products, technologies, services and solutions did change. There is also a lesson on SDN.

COURSE OBJECTIVE

Upon completing this course, you will be able to meet these objectives:

- Describe and apply network design methodologies
- Describe and apply network design concepts of modularity and hierarchy
- Design a resilient and scalable Campus network
- Design a resilient and scalable connectivity between parts of your Enterprise network
- Design connectivity to the Internet and internal routing for your network
- Integrate collaboration and wireless infrastructure into your core network
- Create scalable IPv4 and IPv6 addressing
- Describe what software defined networks are and describe example solutions

COURSE OUTLINE

- Course Introduction
- **Module 1:** Design Methodologies
- **Module 2:** Network Design Objectives
- **Module 3:** Campus Network
- **Module 4:** Enterprise Network Design
- **Module 5:** Design of Internal Routing and Connecting to the Internet
- **Module 6:** Expanding the Existing Network
- **Module 7:** IP Addressing Design

WHO SHOULD ATTEND

Channel Partners, Customers, Employees

PREREQUISITE

It is strongly recommended, but not required, that students have the following knowledge and skills:

- A Cisco CCNA Routing and Switching certification and practical experience with deploying and operating networks based on Cisco network devices and Cisco IOS software
- Implementing Cisco Wireless Network Fundamentals (WIFUND) level knowledge of wireless topics
- Complete the Implementing Cisco IP Switched Networks (SWITCH) course