

## CCNA Discovery - Designing and Supporting Computer Networks v4.0 – Structura cursului (Course Outline)

**Cerinte preliminare:** CCNA Discovery - Introducing Routing and Switching in the Enterprise

Chapter 1. Introducing Network Design Concepts

Chapter 2. Gathering Network Requirements

Chapter 3. Characterizing the Existing Network

Chapter 4. Identifying Application Impacts on Network Design

Chapter 5. Creating the Network Design

Chapter 6. Using IP Addressing in the Network Design

Chapter 7. Prototyping the Campus Network

Chapter 8. Prototyping the WAN

Chapter 9. Preparing the Proposal

Chapter 10. Course Summary

### Chapter 1. Introducing Network Design Concepts

1.0 Chapter Introduction

1.1 Discovering Network Design Basics

1.2 Investigating Core Layer Design Considerations

1.3 Investigating Distribution Layer Considerations

1.4 Investigating Access Layer Design Considerations

1.5 Investigating Server Farms and Security

1.6 Investigating Wireless Network Considerations

1.7 Supporting WANs and Remote Workers

1.8 Chapter Summary

## **Chapter 2. Gathering Network Requirements**

- 2.0 Chapter Introduction
- 2.1 Introducing Cisco Lifecycle Services
- 2.2 Explaining the Sales Process
- 2.3 Preparing for the Design Process
- 2.4 Identifying Technical Requirements and Constraints
- 2.5 Identifying Manageability Design Considerations
- 2.6 Chapter Summary

## **Chapter 3. Characterizing the Existing Network**

- 3.0 Chapter Introduction
- 3.1 Documenting the Existing Network
- 3.2 Updating the Existing Cisco IOS
- 3.3 Upgrading Existing Hardware
- 3.4 Performing a Wireless Site Survey
- 3.5 Documenting Network Design Requirements
- 3.6 Chapter Summary

## **Chapter 4. Identifying Application Impacts on Network Design**

- 4.0 Chapter Introduction
- 4.1 Characterizing Network Applications
- 4.2 Explaining Common Network Applications
- 4.3 Introducing Quality of Service (QoS)
- 4.4 Examining Voice and Video Options
- 4.5 Documenting Applications and Traffic Flows
- 4.6 Chapter Summary

## **Chapter 5. Creating the Network Design**

- 5.0 Chapter Introduction
- 5.1 Analyzing the Requirements
- 5.2 Selecting the Appropriate LAN Topology
- 5.3 Designing the WAN and Remote Worker Support
- 5.4 Designing Wireless Networks
- 5.5 Incorporating Security
- 5.6 Chapter Summary

## **Chapter 6. Using IP Addressing in the Network Design**

- 6.0 Chapter Introduction
- 6.1 Creating an Appropriate IP Addressing Design
- 6.2 Creating the IP Address and Naming Scheme
- 6.3 Describing IPv4 and IPv6
- 6.4 Chapter Summary

## **Chapter 7. Prototyping the Campus Network**

- 7.0 Chapter Introduction
- 7.1 Building a Prototype to Validate a Design
- 7.2 Prototyping the LAN
- 7.3 Prototyping the Server Farm
- 7.4 Chapter Summary

## **Chapter 8. Prototyping the WAN**

- 8.0 Chapter Introduction
- 8.1 Prototyping Remote Connectivity
- 8.2 Prototyping WAN Connectivity
- 8.3 Prototyping Remote Worker Support
- 8.4 Chapter Summary

**Chapter 9. Preparing the Proposal**

- 9.0 Chapter Introduction
- 9.1 Assembling the Existing Proposal Information
- 9.2 Developing the Implementation Plan
- 9.3 Planning for the Installation
- 9.4 Creating and Presenting the Proposal
- 9.5 Chapter Summary

**Chapter 10. Course Summary**

- 10.0 Putting It All Together