uCertify

Course Outline

Networking with Windows Server 2016 (70-741)

21 Apr 2024

1. Course Objective

2. Pre-Assessment

3. Exercises, Quizzes, Flashcards & Glossary

   Number of Questions

4. Expert Instructor-Led Training

5. ADA Compliant & JAWS Compatible Platform

6. State of the Art Educator Tools

7. Award Winning Learning Platform (LMS)

8. Chapter & Lessons

   Syllabus

   Chapter 1: Introduction

   Chapter 2: Installing and Configuring DNS Servers

   Chapter 3: Creating and Configuring DNS Zones and Records

   Chapter 4: Configuring and Managing DNS Policies

   Chapter 5: Understanding and Configuring DNSSEC

   Chapter 6: Understanding and Configuring DANE

   Chapter 7: Installing and Configuring Windows Server 2016 DHCP Server

   Chapter 8: Implementing Windows Server 2016 IPAM

   Chapter 9: Managing DNS and DHCP Using Windows Server 2016 IPAM

   Chapter 10: Windows Server 2016 IPAM Audit Changes and Events

   Chapter 11: Windows Server 2016 VPN and DirectAccess Solutions

   Chapter 12: Windows Server 2016 Network Policy Server

   Chapter 13: Implementing Windows Server 2016 IPv4 and IPv6 Addressing

   Chapter 14: Implementing Windows Server 2016 DFS and Branch Office Solutions

   Chapter 15: Implementing Windows Server 2016 High-Performance Network Solutions

   Videos and How To

9. Practice Test

   Here's what you get

1. 📖 Course Objective

Prepare for the MCSA 70-741 exam using the Networking with Windows Server 2016 (70-741) course and lab. The lab is cloud-based, device-enabled, and can easily be integrated with an LMS. The MCSA Windows Server 2016 course and lab cover all the MCSA 70-741 exam objectives and include topics such as installing and configuring DNS Servers, creating and configuring DNS zones and records, understanding and configuring DNSSEC, implementing Windows Server 2016 IPAM, and more.

2. 📋 Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

3. ⊕ Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.

96

EXERCISES

4. ⏱ Quizzes

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.

190
QUIZZES

5. ⚡ flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.

155
FLASHCARDS

6. 📖 Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.

155
GLOSSARY OF TERMS

7. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

8. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

9. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

10. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been

recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**
    1. Best Postsecondary Learning Solution

- **2015**
    1. Best Education Solution
    2. Best Virtual Learning Solution
    3. Best Student Assessment Solution
    4. Best Postsecondary Learning Solution
    5. Best Career and Workforce Readiness Solution
    6. Best Instructional Solution in Other Curriculum Areas
    7. Best Corporate Learning/Workforce Development Solution

- **2016**
    1. Best Virtual Learning Solution
    2. Best Education Cloud-based Solution
    3. Best College and Career Readiness Solution
    4. Best Corporate / Workforce Learning Solution
    5. Best Postsecondary Learning Content Solution
    6. Best Postsecondary LMS or Learning Platform
    7. Best Learning Relationship Management Solution

- **2017**
    1. Best Overall Education Solution
    2. Best Student Assessment Solution
    3. Best Corporate/Workforce Learning Solution
    4. Best Higher Education LMS or Learning Platform

- **2018**
    1. Best Higher Education LMS or Learning Platform

2. Best Instructional Solution in Other Curriculum Areas

3. Best Learning Relationship Management Solution

- **2019**

  1. Best Virtual Learning Solution

  2. Best Content Authoring Development or Curation Solution

  3. Best Higher Education Learning Management Solution (LMS)

- **2020**

  1. Best College and Career Readiness Solution

  2. Best Cross-Curricular Solution

  3. Best Virtual Learning Solution

11. ⚙ Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

Syllabus

Chapter 1: Introduction

- About the 70-741 Networking with Windows Server 2016 Exam

- 70-741 Exam Topics

- About the MCSA 70-741 Cert Guide

- Secondary Zones

- Stub Zones

- Primary Zones

- GlobalNames Zones

- DNSSEC

- Analyzing Zone-Level Statistics

- Zone Scavenging

- Record Options

- DNS Audit and Analytical Events

- Review All the Key Topics

Chapter 4: Configuring and Managing DNS Policies

- DHCP Options

- DHCP Name Protection

- Manage DNS Client Settings with PowerShell

- Manage DNS Server Settings with PowerShell

- Network Troubleshooting with PowerShell

- Understanding Routing

- Split DNS

- DNS Policies

- Review All the Key Topics

Chapter 5: Understanding and Configuring DNSSEC

- DNSSEC Planning

- Enabling DNSSEC

- DNSSEC Functionality

- DNSSEC Zone Signing Wizard

- DNSSEC Monitoring

- Trust Anchors

- ZSK/KSK Rollover Process

- DNSSEC Clients

- DNSSEC and Delegation

- Chain of Trust

- DNSSEC Record Types

- Review All the Key Topics

Chapter 6: Understanding and Configuring DANE

- DANE Overview

- DANE Security

- TLSA Records

- Configuring DANE

- Common DANE Failures

- Review All the Key Topics

Chapter 7: Installing and Configuring Windows Server 2016 DHCP Server

- DHCP Fundamentals

- DHCP Server Installation

- DHCP Scopes

- DHCP Options

- DHCP Relay Agent

- DHCP Security Options

- DHCP High Availability

- DHCP Policies

- Review All the Key Topics

Chapter 8: Implementing Windows Server 2016 IPAM

- IPAM Fundamentals

- IPAM Provisioning

- Create and Manage IP Blocks and Ranges

- Monitor Utilization of IP Address Spaces

- Configure IPAM Database Storage Using SQL Server

- IPAM and SCVMM

- Review All the Key Topics

Chapter 9: Managing DNS and DHCP Using Windows Server 2016 IPAM

- Manage DHCP Server Properties Using IPAM

- Configure DHCP Scopes and Options Using IPAM

- Configure DHCP Policies and Failover Using IPAM

- Configure DNS Server Properties Using IPAM

- Manage DNS Zones and Records Using IPAM

- Manage DNS and DHCP Servers in Multiple Active Directory Forests Using IPAM

- Using RBAC to Delegate DNS and DHCP Server Administration Using IPAM

- Review All the Key Topics

Chapter 10: Windows Server 2016 IPAM Audit Changes and Events

- Implementing RADIUS

- Registering the NPS Server in Active Directory

- Implementing RADIUS Proxy

- Implementing RADIUS Clients

- Configure NPS Templates

- Configure RADIUS Accounting

- Certificates

- Connection Request Policies

- Network Policies for VPN Wireless and Wired Clients

- Import and Export NPS Policies

- Review All the Key Topics

Chapter 13: Implementing Windows Server 2016 IPv4 and IPv6 Addressing

- Configure IPv4 Addresses and Options

- Determine and Configure Appropriate IPv6 Addresses

- Configure IPv4 and IPv6 Subnetting

- Implement IPv6 Stateless Addressing

- Configure Interoperability Between IPv4 and IPv6 by Using ISATAP, 6to4, and Teredo Scenarios

- Configure Border Gateway Protocol (BGP)

- Configure IPv4 and IPv6 Routing

- Review All the Key Topics

Chapter 14: Implementing Windows Server 2016 DFS and Branch Office Solutions

- Install and Configure DFS Namespaces

- Configure DFS Replication and DFSR Scheduling

- Configure Remote Differential Compression (RDC) Settings

- Configure Fault Tolerance

- Recover DFS Databases

- Optimize DFS Replication

- Install and Configure BranchCache

- Implement Distributed and Hosted Cache Modes

- Implement BranchCache for Web, File, and Application Servers

- Troubleshoot BranchCache

- Review All the Key Topics

- Implement NIC Teaming or the Switch Embedded Teaming (SET) Solution, and Identify When to Use Each

- Receive Side Scaling

- Quality of Service with Data Center Bridging

- SMB Direct on RDMA-Enabled Network Adapters

- SMB Multichannel

- Receive Side Scaling on a VMQ-Capable Network Adapter

- Virtual Machine Multi-Queue

- Single-Root I/O Virtualization on a Supported Network Adapter

- Software-Defined Networking

- Review All the Key Topics

Videos and How To

uCertify course includes videos to help understand concepts. It also includes How Tos that help learners in accomplishing certain tasks.

14	44
VIDEOS	**MINUTES**

12. ◎ Practice Test

Here's what you get

75	2	75
PRE-ASSESSMENTS QUESTIONS	**FULL LENGTH TESTS**	**POST-ASSESSMENTS QUESTIONS**

Features

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

Unlimited Practice

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

13. ⬡ Live Labs

The benefits of live-labs are:

- Exam based practical tasks
- Real equipment, absolutely no simulations
- Access to the latest industry technologies
- Available anytime, anywhere on any device
- Break and Reset functionality
- No hardware costs

Lab Tasks

Installing and Configuring DNS Servers

- Setting aging and scavenging properties
- Creating a zone delegation
- Installing AD DS with the Server Manager
- Configuring forwarders
- Configuring DNS Delegation with PowerShell
- Configuring Cache Locking
- Enabling debug logging on the DNS server

Creating and Configuring DNS Zones and Records

- Modifying zone transfer settings
- Creating the GlobalNames zone
- Managing a GlobalNames Zone with PowerShell
- Starting Scavenging process
- Enabling scavenging

Configuring and Managing DNS Policies

- Enabling DHCP Name Protection at the IPv6 Node Level
- Enabling DHCP name protection at the scope level
- Installing and Configuring DirectAccess
- Creating a Zone-Level Zone Transfer Policy

Understanding and Configuring DNSSEC

- Creating a New Zone
- Signing a Zone
- Adding a DNSKEY Trust Anchor

Installing and Configuring Windows Server 2016 DHCP Server

- Installing DHCP
- Unauthorizing a DHCP Server
- Installing DHCP using PowerShell
- Configuring DHCP server post-installation
- Authorizing a DHCP Server
- Creating an IPv4 Superscope
- Creating a Reservation in the DHCP Manager
- Enabling DHCP audit logging
- Enabling DHCP name protection
- Configuring DHCP Failover
- Creating and Configuring a DHCP Policy

Implementing Windows Server 2016 IPAM

- Installing IPAM server
- Creating and Exporting an IPAM Access Policy
- Adding DHCP Scopes to IPAM
- Finding and allocating IP addresses in IPAM

Managing DNS and DHCP Using Windows Server 2016 IPAM

- Filtering the view of DNS Server settings
- Adding a DNS Resource Record in the IPAM Configuration
- Filtering the view of DNS Resource Records

Windows Server 2016 IPAM Audit Changes and Events

- Configuring Logical Groups and Custom Fields with the IPAM Console

Windows Server 2016 VPN and DirectAccess Solutions

- Joining a DirectAccess Server to a Domain
- Adding a New Static Route Entry
- Updating Clients with the DirectAccess Configuration
- Configuring a Security Group for the DirectAccess Clients

Windows Server 2016 Network Policy Server

- Configuring the Windows Server 2016 DirectAccess Server
- Creating a New Connection Request Policy
- Creating a Network Policy for 802.1X
- Configuring a Network Policy for VLANs

Implementing Windows Server 2016 IPv4 and IPv6 Addressing

- Configuring IPv6 with DHCPv6
- Configuring Local IPv6 Settings

Implementing Windows Server 2016 DFS and Branch Office Solutions

- Installing and Configuring DFS Namespaces
- Configuring Windows Server 2016 DFSR with the GUI
- Configuring BranchCache Client Settings
- Enabling the BranchCache Mode through GPO

Implementing Windows Server 2016 High-Performance Network Solutions

- Adding a Hyper-V host to SCVMM

- Creating the management logical network
- Creating the IP address pool in the management logical network
- Creating a management logical switch
- Applying logical switch on Hyper-V Hosts
- Importing service template into the VMM library

Here's what you get

58	**52**	**01:13**
LIVE LABS	VIDEO TUTORIALS	HOURS

14. Post-Assessment

After completion of the uCertify course Post-Assessments are given to students and often used in conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.

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