

uCertify

Course Outline

**Upgrading Your Skills to MCSA Win Server 2012
R2(70-417)**



24 Apr 2024

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5. ADA Compliant & JAWS Compatible Platform
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Chapter 3: Plan and Install Active Directory

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Chapter 8: Configure TCP/IP

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Here's what you get

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Here's what you get

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1. Course Objective

Prepare for the MCSA 70-417 certification exam with the Upgrading Your Skills to MCSA Windows Server 2012 R2 (70-417) course and lab. The lab is cloud-based, device-enabled, and can easily be integrated with an LMS. The Windows Server certification course and lab completely cover MCSA 70-417 exam objectives and will help you master the skills required to deploy, manage, and maintain servers; configure network services and access; configure a network policy server infrastructure 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.

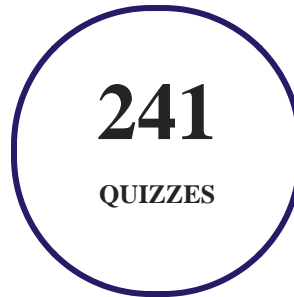
3. Exercises

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.

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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.



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.



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.



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: Install Windows Server 2012 R2

- Features and Advantages of Windows Server 2012 and Server 2012 R2
- Planning the Windows Server 2012 R2 Installation
- Understanding Features On Demand

- Storage in Windows Server 2012 R2
- Summary
- Exam Essentials

Chapter 2: Configure Network Services

- Introducing DNS
- Introducing DNS Database Zones
- Advantages of DNS in Windows Server 2012 R2
- Introducing DNS Record Types
- Configuring DNS
- Monitoring and Troubleshooting DNS
- Overview of DHCP
- Installing and Authorizing DHCP
- Creating and Managing DHCP Scopes
- Summary
- Exam Essentials

Chapter 3: Plan and Install Active Directory

- Verifying the File system
- Verifying Network Connectivity
- Understanding Domain and Forest Functionality
- Planning the Domain Structure
- Installing Active Directory
- Verifying Active Directory Installation
- Creating and Configuring Application Data Partitions
- Configuring DNS Integration with Active Directory
- Summary
- Exam Essentials

Chapter 4: Configure Windows Server 2012 R2

- Understanding File Servers
- Configuring File Servers
- Configuring Disk Quotas
- Configuring Print Services
- Configuring Remote Management
- Summary

- Exam Essentials

Chapter 5: Administer Active Directory

- An Overview of OUs
- Planning the OU Structure
- Creating OUs
- Managing OUs
- Troubleshooting OUs
- Creating and Managing Active Directory Objects
- Publishing Active Directory Objects
- Using the Command Prompt for Active Directory Configuration
- Summary
- Exam Essentials

Chapter 6: Manage GPOs

- Introducing Group Policy
- Planning a Group Policy Strategy
- Implementing Group Policy
- Managing Group Policy

- Deploying Software Through a GPO
- Implementing Software Deployment
- Configuring Software Deployment Settings
- Troubleshooting Group Policies
- Summary
- Exam Essentials

Chapter 7: Manage Security

- Managing Security
- Implementing an Audit Policy
- Configuring Windows Firewall Options
- Summary
- Exam Essentials

Chapter 8: Configure TCP/IP

- Understanding TCP/IP
- Understanding IP Addressing
- Subnetting a Network

- Understanding IPv6
- Summary
- Exam Essentials

Chapter 9: Use Virtualization in Windows Server 2012

- Hyper-V Overview
- Hyper-V Installation and Configuration
- Configuring Virtual Machines
- Summary
- Exam Essentials

Chapter 10: Manage and Maintain Servers

- Using Windows Deployment Services
- Configuring Windows Server Update Services
- Overview of Windows Server 2012 R2 Performance Monitoring
- Using Windows Server 2012 R2 Performance Tools
- Summary
- Exam Essentials

Chapter 11: Manage File Services

- Configuring File Server Resource Manager
- Configure File and Disk Encryption
- Configuring Distributed File System
- Implementing an Audit Policy
- Making Active Directory Objects Available to Users
- Summary
- Exam Essentials

Chapter 12: Configure DNS

- Introducing DNS
- Introducing DNS Database Zones
- Advantages of DNS in Windows Server 2012 R2
- Introducing DNS Record Types
- Configuring DNS
- Monitoring and Troubleshooting DNS
- Summary
- Exam Essentials

Chapter 13: Configure Routing and Remote Access

- Overview of Dial-Up Networking
- Overview of Virtual Private Networks
- Configuring Your Remote Access Server
- Understanding a VPN
- Configuring a VPN
- Managing Your Remote Access Server
- Configuring a VPN Client
- Configuring a Web Application Proxy
- Understanding DirectAccess
- Summary
- Exam Essentials

Chapter 14: Configure a Network Policy Server Infrastructure

- Overview of Wireless Access
- Remote Access Security
- Configuring User Access

- Configuring Security
- Summary
- Exam Essentials

Chapter 15: Configure and Manage Active Directory

- Active Directory Security Overview
- Implementing Active Directory Security
- Using Group Policy for Security
- Managing Multiple Domains
- Maintain Active Directory
- Summary
- Exam Essentials

Chapter 16: Configure and Manage Group Policy

- Introducing Group Policy Objects
- Planning a Group Policy Strategy
- Implementing Group Policy
- Managing Group Policy
- Deploying Software Through a GPO

- Implementing Software Deployment
- Configuring Software Deployment Settings
- Troubleshooting Group Policies
- Summary
- Exam Essentials

Chapter 17: Configure and Manage High Availability

- Components of High Availability
- Achieving High Availability
- Configure Network Load Balancing
- Achieving High Availability with Failover Clustering
- Windows Server 2012 R2 Clustering Features
- Summary
- Exam Essentials

Chapter 18: Configure File and Storage Solutions

- Configure Advanced File Services
- Implement Dynamic Access Control

- Configure and Optimize Storage
- Summary
- Exam Essentials

Chapter 19: Implement Business Continuity and Disaster Recovery

- Protecting the System
- Backup and Recovery of Active Directory
- Understanding Shadow Copies
- Using Advanced Boot Options
- Configure Site-Level Fault Tolerance
- Using the Startup Repair Tool
- Summary
- Exam Essentials

Chapter 20: Configure Advanced Network Services

- Working with Advanced DHCP Configuration Options
- The Ins and Outs of DNS
- IPAM Administration 101
- Summary

- Exam Essentials

Chapter 21: Configure the Active Directory Infrastructure

- Overview of Network Planning
- Overview of Active Directory Replication and Sites
- Implementing Sites and Subnets
- Configuring Replication
- Monitoring and Troubleshooting Active Directory Replication
- Reasons for Creating Multiple Domains
- Creating Domain Trees and Forests
- Demoting a Domain Controller
- Managing Multiple Domains
- Summary
- Exam Essentials

Chapter 22: Configure Access and Information Protection Solutions

- What's New in Windows Server 2012 R2 with Active Directory Certificate Services?
- Implement Active Directory Federation Services

- Workplace Join
- Active Directory Rights Management Services
- Summary
- Exam Essentials

Videos and How To

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

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VIDEOS

01:59

HOURS

12. Practice Test

Here's what you get

50

**PRE-ASSESSMENTS
QUESTIONS**

7

FULL LENGTH TESTS

61

**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. Performance Based Labs

uCertify's performance-based labs are simulators that provides virtual environment. Labs deliver hands on experience with minimal risk and thus replace expensive physical labs. uCertify Labs are cloud-based, device-enabled and can be easily integrated with an LMS. Features of uCertify labs:

- Provide hands-on experience in a safe, online environment
- Labs simulate real world, hardware, software & CLI environment
- Flexible and inexpensive alternative to physical Labs
- Comes with well-organized component library for every task
- Highly interactive - learn by doing
- Explanations and remediation available
- Videos on how to perform

Lab Tasks

- Installing Windows Server Migration Tools
- Converting the GUI interface to the Server Core interface
- Installing the FTP server under the Web Server role
- Installing the Group Policy Management Tools feature
- Starting the Windows PowerShell utility
- Initializing disk drives
- Converting a basic disk into a dynamic disk
- Configuring an iSCSI storage connection
- Configuring the iSNS feature
- Setting dynamic updates
- Creating DNS resource records
- Creating DNS domains
- Performing simple DNS tests
- Installing DHCP Server
- Configuring a DHCP Server
- Unauthorizing a DHCP Server
- Authorizing a DHCP Server
- Creating a new user class
- Configuring user class options
- Viewing disk configuration
- Installing the Active Directory Domain Services role
- Installing AD DS on server core
- Monitoring the routing status
- Configuring a shared network folder for offline access
- Creating a Share with Server Manager
- Configuring offline folder options
- Defining a new quota entry
- Configuring disk quotas
- Installation of the Print and Document Services Role
- Installing a new printer
- Scheduling Printer Access

- Deploying printers using Active Directory
- Adding and removing groups from a printer's properties
- Installing an Internet Printing client
- Installing the Windows Migration feature using PowerShell
- Creating an organizational unit using Active Directory Users and Computers
- Moving an organizational unit
- Delegating custom tasks
- Deleting an OU
- Creating a group using Active Directory Administrative Center
- Creating and publishing a shared folder
- Creating computer objects
- Creating a user template
- Creating a single user
- Resetting an existing computer account
- Resetting a password
- Managing group properties
- Creating a global security group
- Managing object properties
- Nesting objects
- Delegating administration
- Creating and publishing a shared folder
- Managing printers
- Creating an organizational unit using Windows PowerShell
- Deleting the web browsing history
- Adding a group to the GPO
- Creating and linking a new GPO to an OU
- Applying maximum security log size
- Configuring the Certificate Services Client - Auto Enrollment policy
- Creating group policy objects from Starter GPO
- Removing groups from GPOs
- Defining software restrictions policies
- Viewing auditing data
- Enabling audit logon events for success and failure
- Creating an inbound rule
- Allowing apps through the Windows Firewall Control Panel

- Enabling DHCP-DNS Integration
- Enabling DNS Recursive Name Server IPv6 Address List
- Creating a DHCPv4 Scope
- Locating the DHCPv4 Scope
- Installing IPAM Server
- Creating a virtual hard disk
- Installing the Hyper-V role
- Installing the Web Server IIS server role
- Editing a virtual hard disk file
- Creating a virtual switch
- Installing the Hyper-V Management Tools feature
- Creating a VM with an existing virtual hard disk
- Creating a Pass-through disk
- Creating a snapshot
- Applying a snapshot
- Configuring a dynamic memory
- Creating a virtual network
- Installing a WSUS server
- Configuring a WSUS server
- Configuring a GPO for WSUS
- Installing SNMP
- Configuring SNMP
- Enabling BitLocker
- Installing the DFS role services
- Enabling auditing of Active Directory objects
- Installing a DNS server
- Configuring a zone for dynamic updates
- Testing a DNS server
- Configuring an incoming connection
- Changing remote access logging settings
- Installing RRAS for IP routing
- Creating a VPN Network Access Policy
- Creating a Network Access Policy
- Restricting a user profile for dial-in access
- Applying security policies by using Group Policy

- Enabling an active desktop
- Prohibiting user access to Control Panel and PC
- Managing trust relationships
- Adding and removing a UPN suffix
- Managing global catalog servers
- Applying security policy settings
- Editing a new GPO
- Creating a Starter GPO
- Creating a GPO and linking it with the existing GPO
- Creating automatically generated executable rules
- Installing the Failover Clustering feature
- Creating a Network Load Balancing cluster
- Running the Validate a Configuration wizard
- Installing BranchCache
- Installing Windows Server Backup
- Backing up Active Directory
- Configuring a shadow copy on a volume
- Creating an IPv4 Superscope
- Creating a New Multicast Scope
- Creating a DHCPv6 Scope
- Creating sites
- Creating subnets
- Creating a server in a new site
- Configuring the site-licensing options in a created site
- Creating site links
- Creating site link bridges
- Moving server objects between sites
- Assigning single-master operations
- Managing universal group membership caching
- Installing Active Directory Certificate Services
- Configuring Active Directory Certificates
- Configuring certificate auto enrollment
- Modifying Authority Information Access (AIA)
- Backing up the Certification Authority server
- Revoking a certificate

- Installing Active Directory Federation Services
- Configuring the AD FS server
- Installing Active Directory Rights Management Services

Here's what you get

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PERFORMANCE BASED
LAB

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VIDEO TUTORIALS

02:50

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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