

uCertify

Course Outline

**Administering Windows Server Hybrid Core
Infrastructure**



24 May 2025

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2. Exercises, Quizzes, Flashcards & Glossary
Number of Questions
3. Expert Instructor-Led Training
4. ADA Compliant & JAWS Compatible Platform
5. State of the Art Educator Tools
6. Award Winning Learning Platform (LMS)
7. Chapter & Lessons
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1. 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.

2. 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.

198
EXERCISES

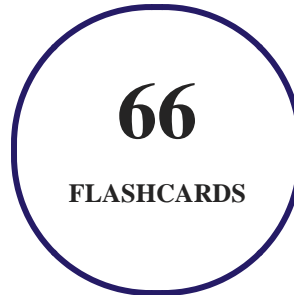
3. Quiz

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.

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QUIZ

4. 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.



5. 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.



6. 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.

7. 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.

8. 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.

9. 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

10. 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: Preface

- Who is this course for
- What this course covers
- To get the most out of this course
- Conventions used

Chapter 2: Implementing and Managing Active Directory Domain Services

- What is Active Directory?

- What is Active Directory Domain Services?
- Active Directory Domain Services components
- Creating Active Directory Domain Services
- Managing Active Directory Domain Services
- Hands-on exercise
- Summary
- Further reading
- Skills check

Chapter 3: Implementing and Managing Azure Active Directory Domain Services

- What is Azure AD?
- What is Azure AD DS?
- Creating an Azure AD DS managed domain
- Managing an Azure AD DS managed domain
- Hands-on exercise
- Summary
- Further reading
- Skills check

Chapter 4: Managing Users and Computers with Group Policy

- What is Group Policy?
- What is a GPO?
- GPO components
- GPO administrative templates
- GPO scope
- The order of processing for GPOs
- GPOs in Azure AD DS
- GPO management and troubleshooting tools
- Hands-on exercise
- Summary
- Further reading
- Skills check

Chapter 5: Implementing and Managing Hybrid Identities

- What is a hybrid identity?
- Azure AD Connect
- Hybrid identity authentication methods

- Hands-on exercise
- Summary
- Further reading
- Skills check

Chapter 6: Implementing and Managing On-Premises Network Infrastructure

- Implementing and managing Windows Server DNS
- Implementing and managing DHCP
- Implementing and managing IPAM
- Implementing and managing remote access
- Hands-on exercises
- Summary
- Further reading
- Skills check

Chapter 7: Implementing and Managing Azure Network Infrastructure

- Introduction to Azure network services
- Implementing VNets in Azure

- Implementing network connectivity in Azure
- Implementing network protection in Azure
- Implementing name resolution in Azure
- Hands-on exercises
- Summary
- Further reading
- Skills check

Chapter 8: Implementing Windows Server Storage Services

- Managing Windows Server file servers
- Implementing Windows Server iSCSI
- Implementing Storage Spaces and Storage Spaces Direct
- Implementing Windows Server Data Deduplication
- Implementing Windows Server Storage Replica
- Hands-on exercise
- Summary
- Further reading
- Skills check

Chapter 9: Implementing a Hybrid File Server Infrastructure

- Introduction to Azure Storage services
- Implementing Azure Files
- Introduction to Azure File Sync
- Hands-on exercises
- Summary
- Further reading
- Skills check

Chapter 10: Implementing and Managing Hyper-V on Windows Server

- Introduction to virtualization and Hyper-V
- Implementing and managing Hyper-V
- Creating and managing Hyper-V virtual machines
- Securing Hyper-V workloads with Guarded Fabric
- Hands-on exercises
- Summary
- Further reading
- Skills check

Chapter 11: Implementing and Managing Windows Server Containers

- Introduction to containers
- Introduction to Docker
- Securing Windows Server containers
- Networking for Windows Server containers
- Creating Windows Server container images
- Managing Windows Server container images
- Hands-on exercises
- Summary
- Further reading
- Skills check

Chapter 12: Managing Windows Server Azure Virtual Machines

- Managing Azure VM data disks
- Resizing Azure VMs
- Configuring continuous delivery for an Azure VM
- Configuring connections to VMs

- Hands-on exercise
- Summary
- Further reading
- Skills check

Chapter 13: Managing Windows Server in a Hybrid Environment

- Deploying a WAC gateway server
- Deploying WAC within the Azure portal
- PowerShell remoting
- Hands-on exercise
- Summary
- Further reading
- Skills check

Chapter 14: Managing Windows Servers Using Azure Services

- Managing access for Windows Server VMs in Azure
- Implementing Azure Arc for hybrid Windows servers
- Implementing Azure Automation for hybrid Windows servers
- Implementing Microsoft Defender for Cloud for hybrid Windows servers

- Hands-on exercises
- Summary
- Further reading
- Skills check

11. Practice Test

Here's what you get

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PRE-ASSESSMENTS QUESTIONS

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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.

12. 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

Implementing and Managing Active Directory Domain Services

- Creating an RODC Server
- Creating an AD Trust
- Creating an AD DS Security Group

Implementing and Managing Azure Active Directory Domain Services

- Creating an AD to Manage Domain User Accounts

Managing Users and Computers with Group Policy

- Creating a GPO Using GPMC
- Forcing the Group Policy Update
- Creating a GPO to Restrict Access to the Control Panel

Implementing and Managing Hybrid Identities

- Installing AD FS
- Preparing a Non-Routable Domain for AD Connect Directory Synchronization

Implementing and Managing On-Premises Network Infrastructure

- Installing an IPAM Server
- Configuring a VPN
- Examining PKI Certificates
- Installing WAP
- Creating a DHCP Scope
- Installing a DHCP Role
- Creating a DNS Record
- Installing a DNS Role

Implementing and Managing Azure Network Infrastructure

- Creating a VNet Peering
- Creating a VNet-to-VNet VPN
- Creating a Virtual WAN
- Creating an ExpressRoute
- Creating a Site-to-Site VPN Connection
- Creating a Point-to-Site VPN
- Creating an Azure Firewall
- Adding an Outbound Rule to Deny Internet Access
- Adding an Inbound Rule for RDP Access
- Associating an NSG with a Subnet

Implementing Windows Server Storage Services

- Using iSCSI
- Creating a Storage Pool
- Implementing DFS
- Configuring Data Deduplication

Implementing a Hybrid File Server Infrastructure

- Implementing SAS in Azure Storage Account
- Creating an Azure File Share

Implementing and Managing Hyper-V on Windows Server

- Installing the Hyper-V Role Using Server Manager
- Installing the Hyper-V Role Using PowerShell

Managing Windows Server in a Hybrid Environment

- Using PowerShell One-to-One Remoting
- Managing a Data Disk Using the Azure Portal
- Implementing WAC in Azure

Managing Windows Servers Using Azure Services

- Setting Up Microsoft Sentinel
- Setting Up Microsoft Defender for Cloud

Here's what you get

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LIVE LABS

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VIDEO TUTORIALS

52

MINUTES

13. 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.

You can't stay away! Get



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