

# uCertify

## Course Outline

**Mastering Windows Server® 2022 with Azure Cloud  
Services IaaS, PaaS, and SaaS**



21 May 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

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Chapter 2: Understanding Windows Server 2022

Chapter 3: Understanding Virtualization

Chapter 4: Installing and Configuring Hyper-V

Chapter 5: Installing Windows Server 2022

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Chapter 7: Implementing DNS

Chapter 8: Understanding Active Directory

Chapter 9: Administering Active Directory

Chapter 10: Configuring DHCP

Chapter 11: Building Group Policies

Chapter 12: Advanced Group Policy Options

Chapter 13: Understanding Cloud Concepts

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Chapter 15: Understanding Azure Active Directory

Chapter 16: Creating a Hybrid Network

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Here's what you get

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## 1. Course Objective

Microsoft Windows Server 2022 is the newest version of Microsoft's server operating system software. Microsoft has taken the best of their previous Windows Server versions and combined them into the latest creation, Windows Server 2022. The course Mastering Windows Server® 2022 with Azure Cloud Services IaaS, PaaS, and SaaS takes you through all the ins and outs of Windows Server 2022, including installation, configuration, Group Policy objects, auditing, backups, the cloud, and so much more. It is intended for individuals who want to learn about Windows Server 2022 and connecting that network to the cloud. It contains interactive lessons with knowledge checks, quizzes, and live labs to provide you with a hands-on experience with Microsoft Windows Server 2022.

## 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.

**179**  
EXERCISES

## 4. 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.

**150**

**QUIZ**

## 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

- Who Should Read This Course?
- What's Inside?
- Recommended Home Lab Setup



- How to Contact Sybex or the Author
- How to Contact the Publisher

## Chapter 2: Understanding Windows Server 2022

- Features and Advantages of Windows Server 2022
- Deciding Which Windows Server 2022 Version to Use
- Removed Features
- The Bottom Line

## Chapter 3: Understanding Virtualization

- Introduction to Virtualization
- The Bottom Line

## Chapter 4: Installing and Configuring Hyper-V

- Hyper-V Installation and Configuration
- Configuring Virtual Machines
- PowerShell Commands
- The Bottom Line

## Chapter 5: Installing Windows Server 2022

- Installing the Windows Server 2022 OS
- Activating and Servicing Windows
- Configuring Windows Server Updates
- Understanding Features On Demand
- The Bottom Line

## Chapter 6: Understanding IP

- Understanding TCP/IP
- Understanding IP Addressing
- Subnetting a Network
- Understanding IPv6
- The Bottom Line

## Chapter 7: Implementing DNS

- Introducing DNS
- Introducing DNS Database Zones
- Advantages of DNS in Windows Server 2022

- Introducing DNS Record Types
- Configuring DNS
- DNS PowerShell Commands
- The Bottom Line

## Chapter 8: Understanding Active Directory

- Verifying the File System
- Verifying Network Connectivity
- Understanding Active Directory
- 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
- The Bottom Line

## Chapter 9: Administering Active Directory

- Active Directory Overview

- An Overview of OUs
- Planning the OU Structure
- Creating OUs
- Managing OUs
- Creating and Managing Active Directory Objects
- Publishing Active Directory Objects
- PowerShell for Active Directory
- The Bottom Line

## Chapter 10: Configuring DHCP

- Understanding DHCP
- Installing and Authorizing DHCP
- Creating and Managing DHCP Scopes
- Working with Advanced DHCP Configuration Options
- PowerShell Commands
- The Bottom Line

## Chapter 11: Building Group Policies

- Introducing Group Policy
- Planning a Group Policy Strategy
- Implementing Group Policy
- Managing Group Policy
- The Bottom Line

## Chapter 12: Advanced Group Policy Options

- Deploying Software Through a GPO
- Implementing Software Deployment
- Configuring Software Deployment Settings
- Troubleshooting Group Policies
- The Bottom Line

## Chapter 13: Understanding Cloud Concepts

- Understand Cloud Concepts
- Understanding the Difference between IaaS, PaaS, and SaaS
- The Bottom Line

## Chapter 14: Configuring Azure

- Understanding Azure Benefits
- Understanding the Azure Dashboards
- The Bottom Line

## Chapter 15: Understanding Azure Active Directory

- Azure Active Directory
- The Bottom Line

## Chapter 16: Creating a Hybrid Network

- Creating a Hybrid Network
- Implement Active Directory Federation Services
- Planning Azure AD Authentication Options
- Creating an Azure Recovery Policy
- The Bottom Line

## Chapter 17: Understanding Microsoft Endpoint

- Using Microsoft Endpoint Manager
- Understanding AutoPilot
- Planning for Secure Applications Data on Devices

- The Bottom Line

## Chapter 18: Configuring Security

- Managing Windows Security
- Configuring Windows Firewall
- Managing Security
- The Bottom Line

## Chapter 19: Creating Azure Policies

- Azure Devices and Policies
- PowerShell Commands
- The Bottom Line

## 12. Practice Test

**Here's what you get**

**60**

**PRE-ASSESSMENTS QUESTIONS**

**60**

**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 Hyper-V**

- Creating a Differencing Hard Disk
- Creating an Internal Virtual Network
- Installing Hyper-V in Full Installation Mode
- Creating a New Virtual Machine

## **Installing Windows Server 2022**

- Installing a WSUS Server

## **Implementing DNS**

- Configuring a Zone for Dynamic Updates
- Creating a Delegated DNS Zone
- Manually Creating DNS Records
- Installing the DNS Service

## **Understanding Active Directory**

- Viewing and Modifying the Disk Configurations
- Promoting a Domain Controller
- Installing AD DS using PowerShell
- Creating an RODC Server

## **Administering Active Directory**

- Creating an OU Structure
- Using the Delegation of Control Wizard
- Delegating Custom Tasks
- Creating Active Directory Objects
- Creating a User Template

- Creating and Resetting a Computer Account
- Moving Active Directory Objects
- Creating and Publishing a Printer
- Creating and Publishing a Shared Folder

### **Configuring DHCP**

- Installing the DHCP Server
- Creating a New Scope
- Configuring User Class Options
- Creating a Superscope
- Creating a New Multicast Scope
- Enabling DHCP-DNS Integration
- Creating and Activating a New DHCPv6 Scope
- Enabling DHCP Name Protection
- Configuring DHCP Filtering

### **Building Group Policies**

- Linking Existing GPOs to Active Directory
- Creating a Group Policy Object Using the GPMC
- Filtering Group Policy Using Security Groups
- Configuring Automatic Certificate Enrollment in Group Policy
- Delegating Administrative Control of Group Policy
- Configuring Folder Redirection in Group Policy

### **Configuring Azure**

- Creating and Sharing a Custom Dashboard
- Cloning and Sharing a Custom Dashboard

### **Creating a Hybrid Network**

- Creating a Site-to-Site VPN Connection
- Creating a Local Network Gateway
- Installing the AD FS Role

### Configuring Security

- Running a Quick Scan
- Creating a New Inbound Rule

## Here's what you get

**44**

LIVE LABS

**47**

VIDEO TUTORIALS

**01:29**

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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