Updated 03/15/2024

Sign up

Windows Server 2022 training

3 days (21 hours)

Presentation

Windows Server 2022 is the ideal operating system if you opt for hybrid hosting.

Designed for sysops and system administrators, this program features advanced multi-layer security and hybrid compatibility with Azure. Thanks to its connection with Azure Arc, server management becomes more fluid and efficient.

This new version of Windows Server includes new features such as the ability to update virtual machines (VMs). The system is secured by a faster, more secure https protocol, with support for the Server Message Block (SMB) protocol.

Windows Server is also renowned for its flexibility: container image sizes have been reduced by 40%, and containers support Microsoft Distributed Transaction Control (MSDTC) and Microsoft Message Queuing (MSMQ).

Our Windows Server training course will introduce you to the installation, configuration and administration of the latest version of Windows Server. You'll discover how to deploy the Active Directory Domain, and learn about best practices in security and troubleshooting.

As always, we'll be teaching you the latest version of the tool, Windows Server OS Build 20348.1070.

Objectives

- Installing Windows Server the right way
- Configuring Windows Server 2022
- Understand best practices for monitoring and tracking performance
- Good safety practices

- Master the main administration tasks

Target audience

- System administrator
- Cloud administrator
- Azure Administrator
- Safety engineer

Prerequisites

- Knowledge of hosting and cloud computing
- Basic knowledge of Windows Server

Windows Server 2022 Training Program

Introduction

- Microsoft Cloud ecosystem overview
- Introduction to Windows Server 2022
- Active Directory domains
- The advantages of RAS, DMZ and virtualization

Getting started

- Creating a virtual machine for the lab
- Installing Windows Server as a virtual machine
- Using boot diagnostics
  - Boot diagnostics presentation
  - Advanced options
  - Memory test and prompt command
- Update Windows
- Windows deployment services
- Understanding drivers
- Understanding registries

Configuration

- Good configuration practices
- Setting up server roles
- Configuring server hardware and parameters
- Setting up the server with the domain controller
- Group policy
- Virtualization

- Data storage

Active Directory Domain (ADDS) deployment

- The concepts of Domains, Trees and Forests
- Active Directory partitions
- Installing an Active Directory Domain Controller
- Deploy the domain controller to the domain
- FSMO (Flexible Single Master Operations) roles
- RODC (Read-Only Domain Controller) deployment
- Using PowerShell to administer servers remotely
- Integrated Scripting Environment (ISE)

Administration

- DNS and DHCP management
- Detailed presentation of hardware components
- How can I monitor Windows Server performance?
- Determining standard performance
- Using logs and alerts
  - Access logs
  - Creating logs
  - Setting alerts
- Command lines
  - Configuration
  - Variable creation
  - Understanding symbols
- PowerShell
  - Setting up PowerShell
  - Using a script profile
  - Setting variables
  - Understanding PowerShell syntax

Security

- Good safety practices
- Files and folders
- Creating a local safety policy

Updating and troubleshooting

- Update
  - Windows Update
  - Updating Microsoft programs
  - Updating third-party programs
  - Driver upgrade
- The debugging process
- ITIL

- Best practices for maintaining good performance and minimizing errors

Complementary module (intra-company only) : Clustering and P2V

- Concept of system and application clusters.
- Hyper-v cluster
  - Benefits and operation
  - Hyper-V cluster operation
  - Deploying a Hyper-v cluster
- P2V test environment and migration
  - Creating a test environment
  - Time service and synchronization
  - storage and optimization
- Network Load balancing
- Cluster maintenance and troubleshooting

Companies concerned

This training course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.