MERCURY

Installation, Storage, and Compute with
Windows Server 2016 Training

Installation, Storage, and Compute with Windows Server 2016 Training

Introduction:

The Windows Server 2016 training will equip you with the essential skills to install and manage Windows Server 2016 in a corporate environment. You will master the installation, managing storage, and computing processes with Windows Server 2016, ultimately helping you implement robust storage solutions using the latest Windows Server technology.

This comprehensive Microsoft Windows Server 2016 training course also delves into monitoring virtual machine installations, planning and configuring storage solutions, and managing failover clusters.

Mercury Training Center offers top-notch training facilities and experienced instructors to guide you through the complexities of installation, storage, and computing with Windows Server 2016, paving the way for successful certification.

Targeted Groups:

- Windows Server administrators are new to administration and technologies and aim to understand more about the storage and computing features of Windows Server 2016.
- IT professionals aspire to expand their knowledge of Windows Server, with a particular focus on storage and compute technologies in Windows Server 2016.

Course Objectives:

After this Windows Server 2016 installation, storage, and computing course, participants will be able to:

- Develop strategies for server upgrades or migrations.
- Prep and deploy Server Core installations and Nano Servers.
- Comprehend various storage options, including basic and dynamic disks, partition table formats, virtual hard disks, file systems, drive hardware, and effective storage disk and volume management.
- Implement and administer enterprise storage solutions, selecting the ideal solution for various scenarios.
- Utilize and uphold Data duplication and Storage Spaces.
- Configure and install Microsoft Hyper-V.
- Install and manage containers within Windows and Hyper-V.
- Understand and implement Windows Server 2016 disaster recovery and high availability.
- Plan, implement, and oversee failover clustering.
- Execute failover clustering for Hyper-V virtual machines.
- Design, configure, and manage a Network Load Balancing NLB cluster.
- Maintain and organize deployment images.
- Monitor and manage virtual machine installations.

Targeted Competencies:

After this Windows Server 2016 installation, storage, and computing Training, participants will be able to:

- Networking.
- Security best practices.
- AD DS concepts.
- Server Hardware.
- Experience in supporting and configuring Windows client operating systems.

Understanding Installation, Storage, and Compute with Windows Server 2016 Training:

The installation, storage, and compute with Windows Server 2016 training course is a comprehensive program designed to equip learners with the essential skills and knowledge to master Microsoft's powerful server platform.

Throughout this course, participants delve into the intricacies of Windows Server 2016, covering installation processes, storage management, and computational capabilities. With a focus on hands-on learning, students gain practical experience in setting up and configuring Windows Server 2016 environments, ensuring they can effectively deploy and manage this robust operating system within corporate infrastructures.

This installation, storage, and compute with Windows Server 2016 course offers a deep dive into the core concepts and functionalities essential for IT professionals seeking to optimize their organization's technological infrastructure, from understanding the fundamentals of installation to harnessing the advanced features of Windows Storage Server 2016.

Whether you're new to Windows Server or aiming to enhance your existing skills, this training provides a comprehensive foundation to excel in managing and leveraging the capabilities of Microsoft's premier server platform.

Course Content:

Unit 1: Installing, Upgrading, and Migrating Servers and Workloads:

- Introduction to Windows Server 2016.
- Installation of Nano Servers and Server Cores.
- Plan for upgrades and migrations.
- Migrate server roles and workloads.
- Understand Windows Server activation models.

Unit 2: Configuring Local Storage:

- Manage disks in Windows Server.
- Manage volumes in Windows Server.

Unit 3: Implementing Enterprise Storage Solutions:

- Comparing DAS, NAS, and SANs.
- Assess Fibre Channel, iSCSI, and FCoE.
- Understand iSNS, data center bridging, and MPIO.
- Set up sharing in Windows Server 2016.

Unit 4: Implementing Storage Spaces and Data Deduplication:

- Implementation of Storage Spaces.
- Management of Storage Spaces.
- Implementation of Data Deduplication.

Unit 5: Installing and Configuring Hyper-V and Virtual Machines:

- An overview of Hyper-V.
- Hyper-V installation.
- Configure storage on Hyper-V host servers.
- Network configurations on Hyper-V host servers.
- Set up Hyper-V virtual machines.
- Management of Hyper-V virtual machines.

Unit 6: Deploying and Managing Windows Server and Hyper-V Containers:

- Overview of containers in Windows Server 2016.
- Deploy of Windows Server and Hyper-V containers.
- Container management using Docker.

Unit 7: Overview of High Availability and Disaster Recovery:

- Define availability levels.
- Plan for high availability and disaster recovery with Hyper-V VMs.
- Backup and restore the Windows Server 2016 OS and data using Windows Server Backup.
- Learn about high availability with failover clustering in Windows Server 2016.

Unit 8: Implementing and Managing Failover Clustering:

- Failover cluster planning.
- Create and set up a new failover cluster.
- Maintenance of failover clusters.
- Failover cluster troubleshooting.
- High availability with stretch clustering.

Unit 9: Implementing Failover Clustering with Server 2016 Hyper-V:

- Integrate Hyper-V Server 2016 with failover clustering.
- Implement Hyper-V VMs on failover clusters.
- Key VM features in a clustered environment.

Unit 10: Implementing Network Load Balancing:

- An overview of NLB clusters.
- NLB cluster configurations.
- NLB implementation planning.

Unit 11: Creating and Managing Deployment Images:

- Introduction to deployment images.
- Deployment of image creation and management using MDT.
- VM environments for various workloads.

Unit 12: Managing, Monitoring, and Maintaining Virtual Machine Installations:

- WSUS overview and deployment.
- Update management with WSUS.
- Overview of PowerShell DSC.
- Monitor tools in Windows Server 2016.
- Performance Monitor utilization.
- Event Log monitoring.

Conclusion:

The installation, storage, and computing with Windows Server 2016 training course offers a comprehensive understanding of Microsoft's server platform. Participants gain installation, storage management, and computational functions expertise, including Windows Storage Server 2016. This course is ideal for IT professionals seeking to optimize corporate infrastructures and excel in Windows Server administration.