

# Windows Server 2016

In today's rapidly changing IT marketplace, Microsoft Certifications are designed to help the IT professional to utilize advanced technologies, fine tune troubleshooting skills and improve job satisfaction. A certification from Microsoft also confirms your demonstrated experience and knowledge in using Microsoft products and solutions.

Over the last many years, the Training Academy at Zoom Technologies has been a center for training thousands of aspiring IT professionals in various Microsoft Certifications at our state-of-the-art facility in Hyderabad. The training will be given by Senior System / Network engineers with several years of field experience.

## Course Outline

- Microsoft Hyper-V & Active Directory Domain Services
- Organizational Unit & Distributed File System
- Structures of Active Directory
- Active Directory Trust
- Operation Masters & Group Policies
- Dynamic Host Configuration Protocol (DHCP)
- Domain Naming System (DNS) using IPv4 & IPv6
- Windows Deployment Services (WDS)
- Windows Server Update Services (WSUS)
- Storage Management
- Routing & Remote Access Services (RRAS)
- AD Federation Services (AD-FS) & AD Lightweight Directory Services (AD-LDS)
- AD Rights Management Services (AD-RMS) & AD Certificate Services (AD-CS)
- Failover Clustering, Containers, Dockers & Microsoft Passport

# Course Content

## Operating System

- Introduction to Server 2016 Operating System
- History of Server Operating System
- Editions of Windows Server 2016
- Requirements to install Windows Server 2016
- Installing Windows Server 2016 Operating System
- Upgrading Windows Server 2012 to Windows Server 2016
- Introduction to Nano Server

## Microsoft Hyper-V

- Introduction to Virtualization
- Types of Hypervisors
- Virtualization using Hyper-V
- Configuring Virtual Machines
- Configuring Virtual Hard Disks
- Configuring Virtual Switches

## Active Directory Domain Services

- IP Addressing (IPv4 & IPv6)
- Client/Server Architecture
- Introduction to Active Directory
- Features of Active Directory
- Installing Active Directory Domain Controller

## Clients, Member Servers, User Management

- Configuring Clients & Member Servers
- Creating Users in ADDS
- Password Policies
- Account Lockout Policies
- Allow Log On Locally
- User Properties
- Kerberos Policies

## Organizational Unit & Distributed File System

- Permissions (Security & Sharing)
- Creating Organizational Units
- Delegating Control to a User
- Groups
- DFS Namespaces
- Overview of DFS Replica
- Branch Cache

## Structures of Active Directory

- Configuring Additional Domain Controller
- Tree Structure – Child Domain
- Forest Structure – Tree Domain

## Operation Masters

- Transferring Operation Masters
- Seizing Operation Master
- Migrating Operation Masters from Windows 2012 DC to Windows 2016 DC

## Group Policies

- User & Computer Policies
- Scopes of Policies – OU, Domain & Sites
- Resultant Set of Policies (RSOP)
- Software Deployment
- Scripts, Folder Redirection
- Group Policy Preferences
- Auditing

## Active Directory Trust

- Introduction to Active Directory Trust Relationship
- Categories, Directions & Types of Trusts
- Functional Levels
- Configuring Forest Trusts
- Active Directory Recycle Bin

## Read Only Domain Controller & Sites

- Active Directory Partitions
- Configuring Global Catalog Servers
- Configuring Sites, Sitelinks
- Configuring RODC using Install from Media (IFM)

## Dynamic Host Configuration Protocol (DHCP)

- Installing DHCP Service
- Authorizing DHCP Server
- Creating Scopes (IPv4 & IPv6)
- Reservations
- DHCP Backup
- DHCP Failover on IPv4
- DHCP Migrations

## Domain Naming System (DNS) using IPv4 & IPv6

- Introduction to DNS
- DNS Naming Hierarchy
- Types of Lookups
- Types of Zones
- Types of DNS Records
- Forwarders
- Dynamic Updates
- DNS Policies
- DNS Security (DNSSEC)

## Windows Deployment Services (WDS)

- Introduction & Configuration of WDS Server
- Attended & Unattended Installation

## Windows Server Update Services (WSUS)

- Introduction & Configuration of WSUS
- Deploying Patches
- Windows Server Backup

## Storage Management

- Storage Types
- Introduction to Storage Spaces & Storage Pools
- Configuring Simple Volume (RAID-0)
- Configuring Mirrored Volume (RAID-1)
- Configuring Parity Volume (RAID-5)
- Introduction to ISNS (Internet Storage Name Service) & MPIO (Multipath Input/Output)

## Routing & Remote Access Services (RRAS)

- Configuring Static Routes on IPv4 & IPv6
- NAT, DHCP Relay Agent
- VPN & Direct Access

## AD Federation Services (AD-FS) & AD Lightweight Directory Services (AD-LDS)

## AD Rights Management Services (AD-RMS) & AD Certificate Services (AD-CS)

## Failover Clustering

- Configuring High Availability on Virtual Machines

## Containers, Dockers & Microsoft Passport