

6 Months Training Module in Server Infrastructure -Windows Server 2012



Module 1

Installing and Configuring Windows Server 2012

Installing and Managing Windows Server 2012

- Windows Server 2012 Overview
- Installing Windows Server 2012
- Post-Installation Configuration of Windows Server 2012

Understanding and Configuring IP

- Understanding and Configuring Network
- Understanding IP Version 4 (IPv4) Addressing
- Subnetting and Supernetting
- Configuring and Troubleshooting IPv4
- Understanding IP Version 4 (IPv4) Addressing

Configuring Name Resolution

- Installing a DNS Server
- Configuring DNS Client Settings

Configuring a DNS Zone Infrastructure

- Creating and Configuring Zones
- Creating Resource Records
- Configuring Zone Replication and Transfers
- Implementing Stub Zones

Creating a DHCP Infrastructure

- Installing a DHCP Server
- Configuring a DHCP Server
- Creating Address Exclusions
- Creating Reservations
- Adjusting Lease Durations
- Configuring Additional DHCP Options
- Implementing User Classes

Implementing Local Storage

- Managing Disks, Volumes, and Partitions
- Understanding Basic and Dynamic Disks
- Simple or basic volumes



- Spanned volumes
- Striped volumes
- Mirrored volumes
- Raid-5 volumes

Configuring IP Routing

- Routing Overview
- Routing Protocols
- Static Routing

Protecting Network Traffic with IPsec

- Configuring IPsec
- IPsec Policies
- Authentication Methods for IPsec
- Assigning a Predefined IPsec Policy

Configuring Network Address Translation

- NAT Concepts
- Configuring Internet Connection Sharing
- Configuring Network Address Translation Using Routing And Remote Access

Configuring Wireless Networks

- Wireless Networking Concepts
- Wireless Networking Standards
- Wireless Security Standards
- Infrastructure and Ad Hoc Wireless Networks

Connecting to Remote Networks

- Remote Access Overview
- Dial-up Connections
- Virtual Private Networks
- Point-to-Point Tunneling Protocol (PPTP)
- Layer Two Tunneling Protocol (L2TP)

Configuring Windows Firewall

- Firewall Profiles
- Filtering Inbound Traffic
- Filtering Outbound Traffic

Monitoring Computers

- Monitoring Event Logs
- Monitoring Performance and Reliability
- Performance Monitor
- Reliability Monitor



Managing Files

- Managing File Security
- Encrypting File System
- Sharing Folders
- Manage disk quotas.
- Configure backup and restore.
- Configure shadow copy services.

Managing Printers

- Installing Printers
- Sharing Printers
- Configuring Printer Permissions
- Configuring Printer Pooling and permissions
- Managing Internet Printing

Module 2

Configuring Windows Server 2012 Active Directory

Installation

- Components of an Active Directory Infrastructure
- Creating a Domain Controller
- Creating a Windows Server 2012 Forest

Administration

- Active Directory Administration Tools
- Creating a Custom Console with Active Directory Snap-ins
- Creating Objects in Active Directory
- Finding Objects in Active Directory

Users

- Automating the Creation of User Accounts
- Importing Users with CSVDE
- Importing Users with LDIFDE

Groups

- Understanding Group Types
- Understanding Group Scope
- Managing Group Membership
- Importing Groups with CSVDE
- Modifying Group Membership with LDIFDE
- Default Groups



Computers

- Understanding Workgroups, Domains, and Trusts
- Computers Container
- Creating OUs for Computers
- Joining a Computer to the Domain
- Moving a Computer

Group Policy Infrastructure

- Group Policy Objects
- Local GPOs
- Domain-Based GPOs
- Policy Settings
- GPO Links
- GPO Inheritance and Precedence
- Using Security Filtering to Modify GPO Scope
- Group Policy Processing
- Resultant Set of Policy
- Managing Software with Group Policy Software Installation

Authentication

- Understanding Password Policies
- Understanding Account Lockout Policies
- Auditing Authentication
- Read-Only Domain Controllers
- Password Replication Policy

Domain Controllers

- Installing Domain Controllers and Additional Domain Controllers
- Installing Child Domain
- Installing a New Domain Tree
- Removing a Domain Controller

Configuring Operations Masters

- Understanding Single Master Operations
- Forest-Wide Operations Master Roles
- Domain-Wide Operations Master Roles
- Transferring Operations Master Roles
- Seizing Operations Master Roles

Sites and Replication

- Understanding Sites
- Configuring Sites and Subnets
- Understanding the Global Catalog.
- Configuring Replication



- Understanding Active Directory Replication
- Connection Objects

Domains and Forests

- Understanding Domain and Forest Functional
- Raising the Forest Functional Level
- Understanding Trust Relationships
- Administering Trusts

Active Directory Optimization and Reliability

- Using Windows Server 2012 Performance Tools
- Backing Up Active Directory
- Restoring Active Directory

Module 3

Configuring Advanced Windows Server 2012 Services

Implementing Windows Deployment Infrastructure

- Windows Deployment Fundamentals
- Windows imaging Format
- Windows Preinstallation Environment (Windows PE)
- Windows Deployment Services
- Deploying Virtual Machines

Windows Server Update Services (WSUS)

- Overview of WSUS
- Deploying Updates with WSUS

Configuring High Availability in Windows Server 2012

- Failover Clustering overview
- Achieving High Availability with Network Load Balancing

Installing and Configuring Terminal Services

- Enabling Remote Desktop
- Understanding Terminal Services
- Configuring Terminal Services Client Settings
- Configuring Connection (RDP-Tcp) Properties
- Overview of TS RemoteApp
- Configuring a Server to Host RemoteApp Programs



Installing and Configuring Web Server

- Installing the Web Server (IIS) Role
- Creating and Configuring Web Sites
- Creating a Virtual Directory

Configuring FTP

- Installing the FTP Publishing Service
- Creating a New FTP Site
- Configuring FTP Site Properties

Implementing Server Virtualization with Hyper-V

- Overview of Virtualization Technologies
- Implementing Hyper-V
- Managing Virtual Machine Storage
- Managing Virtual Networks

Module 4: Project Work