

# Microsoft Azure Administrator

## Course Curriculum

### Introduction to Azure

- Overview of Azure
- Cloud technology overview
- Azure Regions
- Managing Azure with the Azure portal
- Managing Azure with Windows PowerShell
- Overview of Azure Resource Manager
- Azure management services

### Managing Microsoft Azure

- Creating Azure Account
- Types of Administrator
- Use the Azure portals
- Use Azure Resource Manager features via the Azure portal.
- Use Azure PowerShell, Visual Studio, Azure Cloud Shell
- Overview of Azure Resources and Resource Group
- Creating and Managing Azure Resources and Resource Group

### Implementing and managing Azure networking

- Overview of Azure networking
- Overview of Azure networking Components
- Overview of Azure Virtual Network Gateways
- Overview of Azure Point to Site, Site to Site and Express Route VPN
- Implementing and managing Azure virtual networks (Vnet)
- Configuring Azure virtual networks and Managing IP and Subnet
- Configuring Azure virtual network connectivity
- Configuring Azure Vnet Peering

### Using a deployment template to implement Azure virtual networks

- Creating an Azure virtual network by using a deployment template
- Creating a virtual network by using PowerShell
- Configure virtual networks

### Configuring connectivity Azure Resource Manager virtual networks

- Using a PowerShell script to connect a classic VNet and an Azure Resource Manager VNet
- Configuring Azure Virtual Network Gateways – Point to Site VPN
- Validating virtual network connectivity

### Implementing virtual machines

- Overview of Azure Resource Manager Virtual Machines
- Planning for Azure virtual machines
- Deploying Azure Resource Manager Virtual Machines
- Authoring Azure Resource Manager templates
- Overview of classic virtual machines

### Creating Azure Resource Manager virtual machines in Azure

- Creating virtual machines by using the Azure portal and Azure PowerShell
- Validating virtual machine creation

### Deploying Azure Resource Manager virtual machines by using

#### Azure Resource Manager templates

- Using Visual Studio and an Azure Resource Manager template to deploy virtual machines
- Using Azure PowerShell and an Azure Resource Manager template to deploy virtual machines

### Managing Azure virtual machines

- Configuring virtual machines
- Configuring virtual machine disks
- Managing and monitoring Azure virtual machines
- Managing classic virtual machines
- Configuring Availability Set and Availability Zone

- Configuring VMSS
- Implementing desired state configuration (DSC)
- Implementing storage space-based volumes.

### Implement and Managing Azure load balance

- Overview Azure Load Balancer
- Types Of Azure Load Balancers
- Configuring Azure Load Balancer and Azure Traffic Manager Load Balancer

### Planning and implementing storage, backup, and recovery services

- Planning storage, creating and configuring storage account
- Implementing and Managing Storage
- implement Azure storage Account Kind and Replication
- Managing access keys and generate shared access signature Keys
- Implementing Azure Content Delivery Networks
- Implementing Azure Backup
- Planning for and implementing Azure Site Recovery
- Creating and configuring Azure storage
- Using Azure file storage
- Protecting data with Microsoft Azure Backup

### Implementing Network Security Group (NSG)

- Create security rule
- Associate NSG to a subnet or network interface
- Identify required ports
- Evaluate effective security rules

### Azure name resolution - DNS

- Configure Azure DNS
- Configure custom DNS settings
- Configure private and public DNS zones

### Azure App Service

- Overview Azure App Service
- Configuring and Managing Website's
- Pushing Webpages
- Configuring Custom Domain

### Azure Media Service

- Overview Azure Media Service
- Media Services Accounts
- Storage Accounts
- Stream on demand, Uploading Videos
- Packaging and Publishing Videos
- Player Client

### Implementing Azure Active Directory and Manage Hybrid Identities

- Creating and managing Azure AD tenants
- Creating and managing Azure AD Users and Groups
- Configuring application and resource access with Azure AD Users
- Overview of Azure AD Premium
- Administering Active AD
- Configuring SSO
- Configuring Multi-Factor Authentication and enable MFA by using bulk update
- Configuring SSO from a Windows 10-based computer that is joined to Azure AD
- Manage Azure AD Connect
- Install Azure AD Connect, including password hash and pass-through synchronization
- Use Azure AD Connect to configure with on-premises Active Directory Domain Services (AD DS)