

Developing Microsoft Azure Solutions

Course Prerequisites

- A general understanding of ASP.NET and C# concepts

Upon Completion of this Course, you will accomplish following:

- Compare the services available in the Azure platform.
- Build and deploy web applications.
- Produce Azure Web Apps from the gallery.
- Install and monitoring Azure Web Apps.
- Generate and configuring Azure Virtual Machines.
- Generate and manage a storage account.
- Organize blobs and containers in a storage account.
- Produce, Set up and connect to a SQL Databases instance.
- Determine the implications of importing a SQL standalone database.
- Organize users, groups and subscriptions in an Azure Active Directory instance.
- Generate a virtual network.
- Execute a point-to-site network.

Overview of Cloud Computing and Microsoft Azure

- Summarize Cloud and its features
- Relate different Cloud Models
- Classify different Cloud Services
- Categorize the Cloud vendors
- Overview on Regions and Datacentre
- List the features of Azure
- Azure Services
- Azure Management Portals

Building Application Infrastructure in Azure using Virtual Machines

- Azure Virtual Machines setup
- Migration of Azure Virtual Machine Instances
- Import virtual hard disks to Azure
- Deploy workloads using Terraform
- Scaling ARM Virtual Machines

Hosting Web applications on Azure Platform

- Azure Web Apps
- Azure Logic and Function Apps
- Configure an Azure Web App
- Publish an Azure Web App
- Monitor and Analyze Azure Web app

- Supplemental Services

SQL Data Storage in Azure

- Azure SQL Database overview
- Different SQL Database tiers in Azure
- Azure SQL Database management tools
- Secure and Recover an Azure SQL Database Instance
- Migrate data to Azure SQL Database
- Scale Azure SQL databases
- Additional Managed Database Services

Designing Resilient Cloud Applications

- High Availability for Azure Applications
- Application Design Practices for Highly Available Applications
- Application Analytics
- Build High-Performance Applications by Using ASP.NET
- Common Cloud Application Patterns
- Caching Application Data

Storing unstructured data in Azure

- Azure Storage Overview
- Azure Storage Tables Overview
- Table Entity Transactions
- Azure Redis Cache
- Azure Search
- Azure Cosmos DB

Storing and Consuming files from Azure Storage

- Azure Storage Blobs
- Control Access to Storage Blobs and Containers
- Monitor Storage Blobs
- Configure Azure Storage Accounts
- Azure Files
- Upload and Migrate Storage data.

Designing the communication Strategy using Ques and Service Bus

- Queue mechanisms in Azure
- Azure Storage Queues
- Handle Storage Queues Messages
- Azure Service Bus
- Azure Service Bus Queues
- Azure Service Bus Relay
- Azure Service Bus Notifications Hubs

Automating Integration with Azure Resources

- Create Scripts using Azure PowerShell
- Create Scripts using Azure CLI
- Azure REST Interface
- Azure Resource Manager
- Identify workloads to deploy
- Run the workloads
- Azure Cloud Shell

Azure Web applications Security

- Azure Active Directory
- Introduction to Identity Providers
- Azure AD Directories
- Azure AD Multi-Factor Authentication
- Azure Role-Based Access Control
- Azure AD Offerings
- Azure Key Vault

Devops in Azure

- Introduction to Azure Service Fabric
- What are Reliable Services?
- What are Reliable Actors?
- What is a Stateless and Stateful service?
- Create Service Fabric Application
- Deploy Service Fabric Application to Azure
- Continuous Integration
- Azure DevTest Labs
- Azure Resource Manager Templates
- Managed Solution Hosting
- Monitor and manage Service Fabric Application

Microsoft Azure 70-533 Certification Training

Course Prerequisites:

- Understanding of virtual machines, networking and hard disks
- Understanding of DNS, TCP/IP, encryption and firewall
- Basic understanding of AD concepts, including Kerberos and LDAP
- Basic knowledge of SQL Server, databases and SQL
- Understanding of disaster recovery and resilience

Upon Completion of this Course, you will accomplish following:-

- Specify the components of Azure architecture, tools and portals
- Connect to the on-premises environments by implementing and managing virtual networking within Microsoft Azure environment
- Create virtual machines in Azure
- Configure, deploy and manage storage solutions, SQL database based data services and website configuration
- Configure and deploy cloud services
- Use CDNs and Media Services to publish content and videos respectively
- On-premise integration of Windows Ad with Azure AD
- Use PowerShell run books for Azure management operations automation

Introduction to Azure

- Overview of Azure
- List of Azure Services
- Managing Azure with the Azure portal
- Managing Azure with Windows PowerShell
- Overview of Azure Resource Manager
- Cost analysis of Azure resources based on Solution
- Azure Management Services

Implement and Manage Azure Networking

- Overview of Azure Networking
- Implement Virtual Networks
- Load-Balancer
- Application Gateway
- Modify Network configurations
- Multi-site or Hybrid Network
- Overview of Azure Classic Networks

Implementing MS Azure Resource Manager VMs

- Overview of Azure Resource Manager Virtual Machines
- Planning for Virtual Machines
- Creating and Connecting Azure Resource Manager Virtual Machines
- Desired State Configuration (DSC)
- ARM VM configuration using Management tools
- Overview of Azure Classic VMs

Managing and Monitoring ARM Virtual Machines

- ARM Virtual Machine Storage
- Monitoring ARM Virtual Machines
- Managing ARM Virtual Machines for High Availability
- Scaling ARM VMs

Implementing Azure App Services

- Introduction to Azure App Service
- Planning App deployment in Azure
- Implementing and maintaining Web Apps
- Configuring Web Apps
- Monitoring Web Apps and Endpoints
- Traffic Manager

Planning and Implementing Azure Storage Services

- Azure Storage Services
- Implementation of Azure Blobs and Azure Files
- Azure Content Delivery Network (CDN)
- Access Management for Azure Storage
- Diagnostics
- Monitoring and Analytics

Implementing Azure SQL Server Database

- Plan and implement Azure SQL Database Service
- Managing Azure SQL Database Security
- Business Continuity and Disaster Recovery (BCDR) in Azure
- Design a Scaling strategy, Recovery Services

Implementing AAD (Azure Active Directory)

- Overview of Azure Active Directory (AAD)
- Azure AD Connect and Single Sign-On (SSO)
- Azure AD Setup and Custom Domains
- Monitor Azure AD
- Configure Application Access

Managing AAD and Implementing AAD B2C and B2B

- Integrate an App with Azure AD
- Graph API
- Azure AD B2C
- Multi-Factor Authentication
- Azure B2B collaboration

Designing and Deploying ARM Templates

- Azure Resource Manager (ARM) Templates
- ARM template deployment using different techniques
- Control Access / Authentication
- Role-Based Access Control (RBAC)

Implementing Azure Based management and Automation

- Microsoft Operations Management Suite (OMS)

- Azure Automation
- Automation Runbooks
- Managing Azure Automation