Overview

In this training, you will learn, configure and implement various Azure resources and services, like Azure Virtual Machines, Storage Accounts, Azure Active Directory, Virtual Network, Network Gateways, and so on. The focus is on knowing and managing several Azure components so that you become a successful Azure Administrator.

AUDIENCE PROFILE

This training is intended for both IT and Non-IT professionals who want to build/switch their career in Azure Cloud infrastructure domain and want to learn more about Azure and Azure services as described in the "<u>Course curriculum</u>". Those attending this training could also be experienced in other non-Microsoft cloud technologies and want to cross-train on Azure.

Azure Mastery course curriculum

Module 1: Introduction to Azure

- What is Cloud Computing
- Understanding Data Center and virtualization
- What is Application & Functions
- What is Serverless computing?
- Introduction to Containers & Kubernetes
- Create Microsoft account

Module 2: Types and Benefits of cloud computing

- Benefits of Cloud Computing
- Elasticity, Scaling- Horizontal and Vertical
- 🕹 Capex vs Opex
- Cloud deployment models
- Cloud Service Models- IaaS, PaaS & SaaS
- How to choose the best cloud model for your environment
- Tour of Azure services

Module 3: Azure Architecture

- Introduction
- Understanding Azure regions & Availability Zone
- Azure Geography & Region pairing
- Understanding Azure Subscription, Billing and SLA
- ♣ Azure pricing calculator
- Budget and Cost analysis
- Support Plans

Module 4: Azure Management

- Introduction
- Azure Portal
- Azure Power shell
- Azure Cloud Shell
- Azure CLI
- Tagging
- Resource Groups
- Resource Locks

Module 5: VM availability

- ✤ What is availability in the cloud
- Improve Infrastructure redundancy
- Understanding what Fault domain is
- ✤ Understanding what Update domain is
- What is Availability Sets
- Implement Availability sets with Fault domain and Update domain
- Virtual machine Scale Sets

Module 6: Virtual Machines

- Virtualization and Virtual Machine
- Create Virtual machine
- ♣ RDP to Virtual machine
- What is Azure Resource Manager
- Benefits of ARM Templates
- Quick start template Gallery
- Types of Disks and various disk roles
- ✤ VM Image Sizes

Module 7: Azure Cloud Storage

- Types of Data
- Understanding the concept of Storage
- Different storage options available in Azure
- Create and manage Storage Account
- Enable redundancy for Storage Account
- Understand LRS, ZRS, GRS and RA-GRS
- Storing and accessing the data using File service and Blob Service
- What is Azure storage explorer
- Accessing cloud data using ASE

- Azure File Sync
- Securing your Storage

Module 8: Azure Active Directory

- Introduction to Azure AD
- Azure AD licensing
- Activating AD licenses
- Permission and Roles and in Azure AD
- Create, add & delete users in Azure AD
- Create groups and manage users in Azure AD
- Dynamic Groups

Module 9: Azure AD Advanced concepts and Implementation

- ✤ What is Azure AD connect
- Password Hash Synchronization
- Pass-through Authentication
- ♣ B2B and B2C model
- Self-service password reset
- What is Role-Based Access Control (RBAC)
- Security Principal, Role Definition and Scope

Module 10: Networking in Azure

- Basics of IP addressing and subnets
- Understanding Azure Virtual network
- Creating and configuring Virtual network
- Understand and Implement V-net Peering
- Load balancer vs Azure load balancer
- DNS & Azure Traffic Manager
- Network Security Groups (NSG)
- Azure Virtual Network Gateway and VPN Gateway
- Express Route

Module 11: Monitoring and Backups

- Holistic Monitoring
- Azure Monitor
- Azure Advisor
- Azure Security Center
- Azure Application Insights
- Azure Backup
- Azure Backup Policies

- Recovery Services Vault
- Disaster Recovery (DR)
- Azure Site Recovery

Labs Instructions:

For Hands-on experience, lab environment will be provided which can be used for an unlimited number of hours <u>without</u> the need for a credit card, billing, or purchases.

* Few labs may need Azure pay-as-you-go subscription which may incur charges. Consult trainer for more details.

** Please contact us if you need the course content modified in any way.