# **TechyEdz Solutions**

## **A Blended Learning Approach**



**Azure Administration (AZ-104)** 









## **Azure Administrator (AZ -104)**

#### Course Overview:

This course is for Azure Administrators. Azure Administrators manage the cloud services that span storage, networking and compute cloud capabilities, with a deep understanding of each service across the full IT lifecycle. They take end-user requests for new cloud applications and make recommendations on services to use for optimal performance and scale, as well as provision, size, monitor and adjust as appropriate. This role requires communicating and coordinating with vendors. Azure Administrators use the Azure Portal and as they become more proficient they use PowerShell and the Command Line Interface.

The AZ-104 exam replaces the AZ-103 exam, which will be retired on August 31, 2020. This exam is part of Microsoft's role-based certification program. Candidates who pass the AZ-104 exam will earn the Microsoft Certified: Azure Administrator Associate certification.

#### Course Outline:

## Manage Azure identities and governance

#### 1. Manage Azure AD objects

- create users and groups
- manage user and group properties
- manage device settings
- > perform bulk user updates
- manage guest accounts
- > configure Azure AD Join
- > configure self-service password reset
- > NOT: Azure AD Connect; PIM

#### 2. Manage role-based access control (RBAC)

- > create a custom role
- provide access to Azure resources by assigning roles
  - subscriptions
  - resource groups
  - resources (VM, disk, etc.)
- interpret access assignments

> manage multiple directories

#### 3. Manage subscriptions and governance

- > configure Azure policies
- > configure resource locks
- apply tags
- create and manage resource groups
  - move resources
  - o remove RGs
- > manage subscriptions
- > configure Cost Management
- > configure management groups

## Implement and manage storage

#### 1. Manage storage accounts

- > configure network access to storage accounts
- create and configure storage accounts
- > generate shared access signature
- manage access keys
- implement Azure storage replication
- > configure Azure AD Authentication for a storage account

#### 2. Manage data in Azure Storage

- export from Azure job
- > import into Azure job
- install and use Azure Storage Explorer
- copy data by using AZCopy

#### 3. Configure Azure files and Azure blob storage

- > create an Azure file share
- > create and configure Azure File Sync service
- > configure Azure blob storage
- > configure storage tiers for Azure blobs

**Deploy and manage Azure compute resources** 

#### 1. Configure VMs for high availability and scalability

- > configure high availability
- > deploy and configure scale sets

#### 2. Automate deployment and configuration of VMs

- > modify Azure Resource Manager (ARM) template
- > configure VHD template
- > deploy from template
- > save a deployment as an ARM template
- > automate configuration management by using custom script extensions

#### 3. Create and configure VMs

- > configure Azure Disk Encryption
- > move VMs from one resource group to another
- > manage VM sizes
- > add data discs
- > configure networking
- > redeploy VMs

#### 4. Create and configure containers

- create and configure Azure Kubernetes Service (AKS)
- create and configure Azure Container Instances (ACI)
- NOT: selecting an container solution architecture or product; container registry settings

#### 5. Create and configure Web Apps

- > create and configure App Service
- > create and configure App Service Plans
- > NOT: Azure Functions; Logic Apps; Event Grid

### Configure and manage virtual networking

#### 1. Implement and manage virtual networking

> create and configure VNET peering

configure private and public IP addresses, network routes, network interface, subnets, and virtual network

#### 2. Configure name resolution

- > configure Azure DNS
- > configure custom DNS settings
- > configure a private or public DNS zone

#### 3. Secure access to virtual networks

- > create security rules
- > associate an NSG to a subnet or network interface
- evaluate effective security rules
- > deploy and configure Azure Firewall
- > deploy and configure Azure Bastion Service
- NOT: Implement Application Security Groups; DDoS

#### 4. Configure load balancing

- > configure Application Gateway
- configure an internal load balancer
- > configure load balancing rules
- configure a public load balancer
- troubleshoot load balancing
- > NOT: Traffic Manager and FrontDoor and PrivateLink

#### 5. Monitor and troubleshoot virtual networking

- monitor on-premises connectivity
- > use Network Performance Monitor
- use Network Watcher
- troubleshoot external networking
- troubleshoot virtual network connectivity

#### 6. Integrate an on-premises network with an Azure virtual network

- create and configure Azure VPN Gateway
- > create and configure VPNs
- > configure ExpressRoute
- configure Azure Virtual WAN

## **Monitor and back up Azure resources**

#### 1. Monitor resources by using Azure Monitor

- > configure and interpret metrics
  - o analyze metrics across subscriptions
- > configure Log Analytics
  - o implement a Log Analytics workspace
  - configure diagnostic settings
- > query and analyze logs
  - o create a query
  - o save a query to the dashboard
  - interpret graphs
- > set up alerts and actions
  - create and test alerts
  - create action groups
  - o view alerts in Azure Monitor
  - o analyze alerts across subscriptions
- > configure Application Insights
- > NOT: Network monitoring

#### 2. Implement backup and recovery

- > configure and review backup reports
- > perform backup and restore operations by using Azure Backup Service
- > create a Recovery Services Vault
  - use soft delete to recover Azure VMs
- > create and configure backup policy
- perform site-to-site recovery by using Azure Site Recovery
- > NOT: SQL or HANA

#### Prerequisites:

- The Azure Administrator certification course requires professionals to be proficient in using PowerShell and the Command Line Interface.
- Should also have prior experience with Azure Portal, ARM templates, operating systems, virtualization, cloud infrastructure, storage structures, and networking.

#### Who Should Attend:

- Those who want to pursue the Azure Administrator certification
- Those who want to pass the Microsoft exam AZ-104
- The Azure Administrator course is best suited for Azure administrators and engineers, system administrators looking to expand into Azure, and IT professionals.
  - Number of Hours: 40hrs
  - Certification: AZ-104
  - **Key Features:**
  - One to One Training
  - ➤ Online Training
  - > Fastrack & Normal Track
  - Resume Modification
  - Mock Interviews
  - Video Tutorials
  - Materials
  - > Real Time Projects
  - Virtual Live Experience
  - Preparing for Certification