Microsoft Azure Administrator (AZ-104T00-A)

Duration : 4 Days

Course Content

This course teaches IT Professionals how to manage their Azure subscriptions, secure identities, administer the infrastructure, configure virtual networking, connect Azure and on-premises sites, manage network traffic, implement storage solutions, create and scale virtual machines, implement web apps and containers, back up and share data, and monitor your solution.

Prerequisites

Successful Azure Administrators start this role with experience in virtualization, networking, identity, and storage.

- Understanding of on-premises virtualization technologies, including: VMs, virtual networking, and virtual hard disks.
- Understanding of network configurations, including TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies.
- Understanding of Active Directory concepts, including users, groups, and role-based access control.
- Understanding of resilience and disaster recovery, including backup and restore operations.

Who Should Attend

This course is for Azure Administrators. The Azure Administrator implements, manages, and monitors identity, governance, storage, compute, and virtual networks in a cloud environment. The Azure Administrator will provision, size, monitor, and adjust resources as appropriate.

Course Outline

- Module 1: Identity
  In this module, you will learn how to secure identities with Azure Active Directory, and implement users and groups. Lesson:
    o Azure Active Directory
    o Users and Groups
- Module 2: Governance and Compliance
  In this module, you will learn about managing your subscriptions and accounts, implementing Azure policies, and using Role-Based Access Control. Lesson:
    o Subscriptions and Accounts
    o Azure Policy
    o Role-based Access Control (RBAC)
- Module 3: Azure Administration
  In this module, you will learn about the tools an Azure Administrator uses to manage their infrastructure. This includes the Azure Portal, Cloud Shell, Azure PowerShell, CLI, and Resource Manager Templates. Lesson:
    o Azure Administrator Tools
    o ARM Templates
- Module 4: Virtual Networking
  In this module, you will learn about basic virtual networking concepts like virtual networks and subnetting, IP addressing, network security groups, Azure Firewall, and Azure DNS. Lesson:
    o Virtual Networks
    o Network Security groups
    o Azure Firewall
    o Azure DNS
- Module 5: Intersite Connectivity
  In this module, you will learn about intersite connectivity features including VNet Peering, Virtual Network Gateways, and Site-to-Site Connections. Lesson:
    o VNet Peering
    o VPN Gateway Connections
    o ExpressRoute and Virtual WAN
- Module 6: Network Traffic Management
  In this module, you will learn about network traffic strategies including network routing and service endpoints, Azure Load Balancer, and Azure Application Gateway. Lesson:
    o Network Routing and Endpoints
    o Azure Load Balancer
    o Azure Application Gateway
    o Network Watcher

- Module 7: Azure Storage
  In this module, you will learn about basic storage features including storage accounts, blob storage, Azure files and File Sync, storage security, and storage tools. Lesson:
  - Storage Accounts
  - Blob Storage
  - Storage Security
  - Azure Files and File Sync
  - Managing Storage
- Module 8: Azure Virtual Machines
  In this module, you will learn about Azure virtual machines including planning, creating, availability and extensions. Lesson:
  - Creating Virtual Machines
  - Virtual Machine Availability
  - Virtual Machine Extensions
- Module 9: PaaS Compute Options
  In this module, you will learn how to administer serverless computing features like Azure App Service, Azure Container Instances, and Kubernetes. Lesson:
  - Azure App Service Plans
  - Azure App Service
  - Container Services
  - Azure Kubernetes Service
- Module 10: Data Protection
  In this module, you will learn about backing up files and folders, and virtual machine backups. Lesson:
  - File and Folder Backups
  - Virtual Machine Backups
- Module 11: Monitoring
  In this module, you will learn about monitoring your Azure infrastructure including Azure Monitor, alerting, and log analytics. Lesson:
  - Azure Monitor
  - Azure Alerts
  - Log Analytics