

AZ-103 Microsoft Azure Administrator

Course Summary

Description

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

Topics

- Azure Administration
- Governance and Compliance
- Securing Identities
- Azure Active Directory
- Network Traffic Management
- Data Protection
- Monitoring
- Intersite Connectivity
- Virtual Networking
- Azure Storage
- Azure Virtual Machines
- Data Services

Audience

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

Prerequisites

- Understanding of on-premises virtualization technologies, including: VMs, virtual networking, and virtual hard disks.
- Understanding of network configuration, including TCP/IP, Domain Name System (DNS), virtual private networks (VPNs), firewalls, and encryption technologies.
- Understanding of Active Directory concepts, including domains, forests, domain controllers, replication, Kerberos protocol, and Lightweight Directory Access Protocol (LDAP).
- Understanding of resilience and disaster recovery, including backup and restore operations.

Duration

Four Days

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Course Outline

I. *Azure Administration*

In this module, you'll learn about tooling Azure Administrator uses to manage their infrastructure. This includes the Azure Portal, Cloud Shell, Azure PowerShell, CLI, Resource Manager, and Resource Manager Templates. The demonstrations in this module will ensure you are successful in the course labs.

- A. Azure Portal and Cloud Shell
- B. Azure PowerShell and CLI
- C. Resource Manager
- D. ARM Templates

II. *Azure Virtual Machines*

In this module, you'll learn about Azure virtual machines including planning, creating, availability and extensions.

- A. Virtual Machine Planning
- B. Creating Virtual Machines
- C. Virtual Machine Availability
- D. Virtual Machine Extensions
 - Lab : Deploy and Manage Virtual Machines
 - Lab : Virtual Machines and Scale Sets

III. *Azure Storage*

In this module, you'll learn about basic storage features including storage accounts, blob storage, Azure files, and storage security

- A. Storage Accounts
- B. Azure Blobs
- C. Azure Files
- D. Storage Security
 - Lab : Implement and Manage Storage

IV. *Virtual Networking*

In this module, you'll learn about basic virtual networking concepts like virtual

networks, IP addressing, Azure DNS, and network security groups.

- A. Virtual Networks
- B. IP Addressing and Endpoints
- C. Azure DNS
- D. Network Security Groups
 - Lab : Configure Azure DNS

V. *Intersite Connectivity*

In this module, you'll learn about intersite connectivity features including VNet Peering, VNet-to-VNet connections, Site-to-Site Connections, and ExpressRoute.

- A. VNet Peering
- B. VNet-to-VNet Connections
- C. ExpressRoute Connections
 - Lab : VNet Peering and Service Chaining

VI. *Monitoring*

In this module, you'll learn about monitoring your Azure infrastructure including Azure Monitor, alerting, log analytics, and Network Watcher.

- A. Azure Monitor
- B. Azure Alerts
- C. Log Analytics
- D. Network Watcher
 - Lab : Network Watcher

VII. *Data Protection*

In this module, you'll learn about data replication strategies, backing up files and folders, and virtual machine backups.

- A. Data Replication
- B. File and Folder Backups
- C. Virtual Machine Backups
 - Lab : Azure Site Recovery Between Regions

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Course Outline(cont.)

VIII. *Network Traffic Management*

In this module, you'll learn about network traffic strategies including service endpoints, network routing, Azure Load Balancer, and Azure Traffic Manager.

- A. Network Routing
- B. Azure Load Balancer
- C. Azure Traffic Manager
 - Lab : Load Balancer and Traffic Manager

IX. *Azure Active Directory*

In this module, you'll learn about Azure Active Directory (AD) including Azure AD Connect and Azure AD Join.

- A. Azure Active Directory
- B. Azure AD Connect
- C. Azure AD Join
 - Lab : Implement Directory Synchronization

X. *Securing Identities*

In this module, you'll learn how to secure identities including Multi-Factor Authentication, Azure AD Identity Protection, and Self-Service Password Reset.

- A. Multi-Factor Authentication
- B. Azure AD Identity Protection
- C. Self-Service Password Reset
 - Lab : Azure AD Identity Protection
 - Lab : Self-Service Password Reset

XI. *Governance and Compliance*

In this module, you'll learn about managing your subscriptions and accounts including role-based access control, users and groups, and Azure policy.

- A. Subscriptions and Accounts
- B. Role-Based Access Control (RBAC)
- C. Users and Groups

D. Azure Policy

- Lab : Role-Based Access Control
- Lab : Governance and Compliance

XII. *Data Services*

In this module, you'll learn how to effectively share data using Import and Export service, Data Box, Content Delivery Network, and File Sync.

- A. Content Delivery Network
- B. File Sync
- C. Import and Export Service
- D. Data Box
 - Lab : File Sync