



Microsoft Azure Administrator

Duration: 4 Days **Course Code: M-AZ103**

Overview:

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.

Target 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.

Testing and Certification

Content:

Module 1: Azure Administration

In this module, you'll learn about the 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.

Lessons

- Azure Portal and Cloud Shell
- Azure PowerShell and CLI
- Resource Manager
- ARM Templates
- Virtual Machine Planning
- Creating Virtual Machines
- Virtual Machine Availability
- Virtual Machine Extensions
- Virtual Networks
- IP Addressing and Endpoints
- Azure DNS
- Network Security Groups
- VNet Peering
- VNet-to-VNet Connections
- ExpressRoute Connections
- Azure Monitor
- Azure Alerts
- Log Analytics
- Network Watcher
- Data Replication
- File and Folder Backups
- Virtual Machine Backups
- Network Routing
- Azure Load Balancer
- Azure Traffic Manager
- Azure Active Directory
- Azure AD Connect
- Azure AD Join
- Multi-Factor Authentication
- Azure AD Identity Protection
- Self-Service Password Reset
- Subscriptions and Accounts
- Role-Based Access Control (RBAC)
- Users and Groups
- Azure Policy
- Content Delivery Network
- File Sync
- Import and Export Service
- Data BoxLab : File Sync

Module 2: Azure Virtual Machines

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

Lessons

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

Lessons

- Azure Portal and Cloud Shell
- Azure PowerShell and CLI
- Resource Manager
- ARM Templates
- Virtual Machine Planning
- Creating Virtual Machines
- Virtual Machine Availability
- Virtual Machine Extensions
- Virtual Networks
- IP Addressing and Endpoints
- Azure DNS
- Network Security Groups
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- Import and Export Service
- Data BoxLab : File Sync

Lab : VNet Peering and Service Chaining

Module 6: Monitoring

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

Lessons

- Azure Portal and Cloud Shell
- Azure PowerShell and CLI

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

Lessons

- Azure Portal and Cloud Shell
- Azure PowerShell and CLI
- Resource Manager
- ARM Templates
- Virtual Machine Planning
- Creating Virtual Machines
- Virtual Machine Availability
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- IP Addressing and Endpoints
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- Azure Traffic Manager
- Azure Active Directory
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- Multi-Factor Authentication
- Azure AD Identity Protection
- Self-Service Password Reset
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- Azure Policy
- Content Delivery Network
- File Sync
- Import and Export Service
- Data BoxLab : File Sync

Lab : Implement Directory Synchronization

Module 10: 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.

Lessons

- Azure Portal and Cloud Shell
- Azure PowerShell and CLI
- Resource Manager

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Lab : Deploy and Manage Virtual Machines

Lab : Virtual Machines and Scale Sets

Module 3: Azure Storage

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

- Storage Accounts
- Azure Blobs
- Azure Files
- Storage Security

Lab : Implement and Manage Storage

Module 4: Virtual Networking

In this module, you'll learn about basic virtual

- Resource Manager
- ARM Templates
- Virtual Machine Planning
- Creating Virtual Machines
- Virtual Machine Availability
- Virtual Machine Extensions
- Virtual Networks
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Lab : Network Watcher

Module 7: Data Protection

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

Lessons

- Azure Portal and Cloud Shell
- Azure PowerShell and CLI
- Resource Manager
- ARM Templates
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- ARM Templates
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- Content Delivery Network
- File Sync
- Import and Export Service
- Data BoxLab : File Sync

Lab : Azure AD Identity Protection

Lab : Self-Service Password Reset

Module 11: 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.

Lessons

- Azure Portal and Cloud Shell
- Azure PowerShell and CLI
- Resource Manager
- ARM Templates
- Virtual Machine Planning
- Creating Virtual Machines
- Virtual Machine Availability
- Virtual Machine Extensions
- Virtual Networks
- IP Addressing and Endpoints
- Azure DNS
- Network Security Groups

networking concepts like virtual networks, IP addressing, Azure DNS, and network security groups.

Lessons

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- Azure PowerShell and CLI
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Lab : Configure Azure DNS

Module 5: Intersite Connectivity

- Azure Monitor
- Azure Alerts
- Log Analytics
- Network Watcher
- Data Replication
- File and Folder Backups
- Virtual Machine Backups
- Network Routing
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- Azure Traffic Manager
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Lab : Azure Site Recovery Between Regions

Module 8: 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.

Lessons

- Azure Portal and Cloud Shell
- Azure PowerShell and CLI
- Resource Manager
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- File Sync
- Import and Export Service
- Data BoxLab : File Sync

Lab : Role-Based Access Control

Lab : Governance and Compliance

Module 12: 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.

Lessons

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- Azure PowerShell and CLI
- Resource Manager
- ARM Templates
- Virtual Machine Planning
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- Self-Service Password Reset
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- Role-Based Access Control (RBAC)
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- Azure Policy
- Content Delivery Network
- File Sync
- Import and Export Service
- Data BoxLab : File Sync

Lab : Load Balancer and Traffic Manager

Module 9: Azure Active Directory

- Virtual Machine Backups
- Network Routing
- Azure Load Balancer
- Azure Traffic Manager
- Azure Active Directory
- Azure AD Connect
- Azure AD Join
- Multi-Factor Authentication
- Azure AD Identity Protection
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- Subscriptions and Accounts
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- Users and Groups
- Azure Policy
- Content Delivery Network
- File Sync
- Import and Export Service
- Data BoxLab : File Sync

Further Information:

For More information, or to book your course, please call us on

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