

AZ-104: Microsoft Azure Administrator

Course Overview

This course teaches students about being a Microsoft Azure Administrator. Topics covered include management tools and processes, storage, networking, compute, backup, and monitoring.

Chapter 1 - Azure Identity Management Solutions

1h 52m

Instructor Introduction

Course Introduction

Azure Identity Management Solutions

Topic A: Introduction to Azure AD

What is Azure Active Directory

AAD Terminology

Demo - Examining Azure AD

Other Identity Solutions

Demo - Azure AD Licensing

Eliminating AD DS

AD Connect

Demo - AD Connect and SSPR

Topic B: Managing Users and Groups

Azure AD Management

Creating Users

Demo - Working with Users

Groups

Demo - Managing Groups

Additional Directories

Topic C: Azure AD Management

Subscriptions

Resource Tags

Understanding Azure Costs

Demo - Subscription Access Control

Demo - Cost Management

Role-Based Access Control

Understanding Roles

Azure Built-In Roles

Demo - Role-Based Access Control in Azure and Azure AD

Topic D: Working with Azure Policies

Azure Policy

Management Groups

Policy Definitions

Chapter 1 Review

Chapter 2 - Azure Management Tools and Processes

1h 21m

Azure Management Tools and Processes
Topic A: Management Tools
Azure Management Tools
Azure Management Portal
Demo - Overview of Azure Management Portal
Azure Cloud Shell
Demo - Azure Cloud Shell
Command Line Management
PowerShell Fundamentals
Demo - Examining Command Line Tools
Additional Tools
Topic B: Azure Resource Manager
Introduction to ARM
ARM Terms
Resource Groups
Demo - Using Resource Groups
Topic C: Using Templates
ARM Templates
Template Fundamentals
Demo - Using Templates
Chapter 2 Review

Chapter 3 - Azure Storage

1h 18m

Azure Storage
Topic A: Overview of Azure Storage
Overview of Azure Storage
Storage Uses
Storage Account Types
Storage Account Types
Azure Storage Replication
Storage Services
Demo - Creating Storage Accounts
Topic B: Azure Storage Types
Overview of Blob Storage
Additional Blob Storage Options
Demo - Working with Blob Storage
Overview of Azure Files
Demo - Working with Azure File Shares
Azure File Sync
File Sync Terminology
Demo - Configuring Azure File Sync
Topic C: Managing Azure Storage
Storage Explorer
Demo - Azure Storage Explorer
Moving Data to Azure
Topic D: Securing Azure Storage
Overview of Storage Security
Authorization to Azure Storage
Demo - Controlling Access to Azure Storage

Storage Service Encryption
Best Practices
Chapter 3 Review

Chapter 4 - Azure Networking

1h 46m

Azure Networking
Topic A: Virtual Networking Fundamentals
Introduction to Virtual Networking
Virtual Networks
Network Components
Demo - Working with VNets
Azure DNS
Demo - Adding a Custom Domain
Azure DNS Components
Demo - Configure Azure DNS
Topic B: Connecting Virtual Networks
Virtual Network Connection Types
VNet Peering
Demo - Configure VNet Peering
Topic C: Securing Virtual Networks
Network Security in Azure
Network Security Groups
Configuring NSGs
Demo - Creating NSG Rules
Azure Firewall
Firewall Rules
Demo - Azure Firewall
Topic D: Managing Remote Connections
Connecting Remote Networks
Introduction to VPN Gateways
Site-to-Site Connections
Demo - Configuring a VPN Gateway
ExpressRoute
Topic E: Controlling Network Traffic
Network Routing
Routing Tables
Demo - Creating Custom Routing Tables
Azure Load Balancer
Demo - Azure Load Balancer
Azure Application Gateway
Application Gateway Routing
Configuring the Application Gateway
Chapter 4 Review

Chapter 5 - Azure Compute

2h

Azure Compute
Topic A: Designing and Planning for Azure Virtual Machines
Designing and Planning Virtual Machines
Designing Virtual Machines
Designing Virtual Machines (cont.)

Demo - View Sizing Chart and Pricing Options for VMs
Topic B: Creating Virtual Machines
Creating Virtual Machines
Demo - Creating and Connecting to Windows VMs
Demo - Creating and Connecting to Linux VMs
Topic C: Configuring Availability
Understanding Availability Options
Availability Sets
Additional Options
Availability Zones
Scalability
Demo - Implementing Availability and Scaling
Topic D: Advanced Virtual Machine Management
VM Extensions
Custom Script Extensions
Desired State Configuration
Demo - Custom Script Extensions
Topic E: Azure App Services and Service Plans
Introduction to PaaS
App Service Plans
Demo - Working with App Service Plans
App Services
Benefits to App Services
Demo - Create an App Service
Deployment Slots
Managing App Services
Topic F: Additional PaaS Options
Containers
Container Fundamentals
Docker
Kubernetes Service
Kubernetes Fundamentals
Kubernetes Fundamentals (cont.)
Chapter 5 Review

Chapter 6 - Azure Backup and Monitoring

48m

Azure Backup and Monitoring
Topic A: Disaster Recovery for Data Files
Disaster Recovery
Azure Backup
Recovery Services Vault
Demo - Creating a Recovery Services Vault
On-Premises Backups
Azure Backup Server
Topic B: Disaster Recovery for Virtual Machines
Disaster Recovery for Virtual Machines
Demo - Backing up Azure VMs
Demo - Configuring Azure Site Recovery
Topic C: Using Azure Monitor and Alerts
Proactive Monitoring

Azure Monitor Service
Demo - Using Azure Monitor Service
Using Alerts
Using Alert Rules
Demo - Using Alerts
Chapter 6 Review
Course Closure

Total Duration: 9h 6m