Microsoft Azure Administrator (AZ-104)

Description

We teach you how to manage the Microsoft Azure platform.

Microsoft Azure is Microsoft's cloud application platform, where it is possible to host applications, data, or services essential to businesses.

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

We prepare you for the AZ-104: Microsoft Azure Administrator exam.

This course supports and prepares you as best as possible to pass your AZ-104: Microsoft Azure Administrator exam. This exam certifies your understanding of the various essential concepts and features of this platform.

Course Content
Module 1 : Manage services with the Azure portal

- Explore the Azure portal features and services
- Customize your portal
- Navigate the portal
- Azure portal dashboards
- Access preview features

Module 2 : Introduction to Azure Cloud Shell

- Describe Microsoft Azure Cloud Shell
- Learn how it works
- Explore basic steps for its usage
- When should you use Azure Cloud Shell?

Module 3 : Introduction to Bash

- What is Bash?
- Bash fundamentals
- Bash commands and operators

Module 4 : Introduction to PowerShell

- What is PowerShell?
- Locate commands

Module 5 : Deploy Azure infrastructure by using JSON ARM templates

- Explore Azure Resource Manager template structure
- Add flexibility to your Azure Resource Manager template by using parameters and outputs

Module 6 : Understand Microsoft Entra ID

- Examine Microsoft Entra ID
- Compare Microsoft Entra ID and Active Directory Domain Services
- Examine Microsoft Entra ID as a directory service for cloud apps
- Compare Microsoft Entra ID P1 and P2 plans
- Examine Microsoft Entra Domain Services

Module 7 : Create, configure, and manage identities

- Create, configure, and manage users
- Create, configure, and manage groups
- Configure and manage device registration
- Manage licenses
- Create custom security attributes
- Explore automatic user creation

Module 8 : Describe the core architectural components of Azure

- What is Microsoft Azure
- Get started with Azure accounts
- Describe Azure physical infrastructure
- Describe Azure management infrastructure

Module 9 : Azure Policy initiatives

- Cloud Adoption Framework for Azure
- Azure Policy design principles
- Azure Policy resources
- Azure Policy definitions
- Evaluation of resources through Azure Policy

Module 10 : Secure your Azure resources with Azure role-based access control (Azure RBAC)

- What is Azure RBAC?

Module 11 : Allow users to reset their password with Microsoft Entra self-service password reset

- What is self-service password reset in Microsoft Entra ID?

- Implement Microsoft Entra self-service password reset

Module 12 : Configure virtual networks

- Plan virtual networks
- Create subnets
- Create virtual networks
- Plan IP addressing
- Create public IP addressing
- Associate public IP addresses
- Allocate or assign private IP addresses

Module 13 : Configure network security groups

- Implement network security groups
- Determine network security group rules
- Determine network security group effective rules
- Create network security group rules
- Implement application security groups

Module 14 : Host your domain on Azure DNS

- What is Azure DNS?
- Configure Azure DNS to host your domain
- Dynamically resolve resource name by using alias record

Module 15 : Configure Azure Virtual Network peering

- Determine Azure Virtual Network peering uses
- Determine gateway transit and connectivity
- Create virtual network peering
- Extend peering with user-defined routes and service chaining

Module 16 : Manage and control traffic flow in your Azure deployment with routes

- Identify routing capabilities of an Azure virtual network
- What is an NVA?

Module 17 : Introduction to Azure Load Balancer

- What is Azure Load Balancer?
- How Azure Load Balancer works
- When to use Azure Load Balancer

Module 18 : Introduction to Azure Application Gateway

- What is Azure Application Gateway?
- How Azure Application Gateway works
- When to use Azure Application Gateway

Module 19 : Introduction to Azure Network Watcher

- What is Azure Network Watcher?
- How Azure Network Watcher works

- When to use Azure Network Watcher

Module 20 : Configure storage accounts

- Implement Azure Storage
- Explore Azure Storage services
- Determine storage account types
- Determine replication strategies
- Access storage
- Secure storage endpoints

Module 21 : Configure Azure Blob Storage

- Implement Azure Blob Storage
- Create blob containers
- Assign blob access tiers
- Add blob lifecycle management rules
- Determine blob object replication
- Upload blobs
- Determine Blob Storage pricing

Module 22 : Configure Azure Storage security

- Review Azure Storage security strategies
- Create shared access signatures
- Identify URI and SAS parameters
- Determine Azure Storage encryption
- Create customer-managed keys
- Apply Azure Storage security best practices

Module 23 : Configure Azure Files

- Compare storage for file shares and blob data
- Manage Azure file shares
- Create file share snapshots
- Implement soft delete for Azure Files
- Use Azure Storage Explorer
- Consider Azure File Sync

Module 24 : Introduction to Azure virtual machines

- Compile a checklist for creating an Azure Virtual Machine
- Describe the options available to create and manage an Azure Virtual Machine
- Manage the availability of your Azure VMs
- Back up your virtual machines

Module 25 : Configure virtual machine availability

- Plan for maintenance and downtime
- Create availability sets
- Review update domains and fault domains
- Review availability zones
- Compare vertical and horizontal scaling

- Implement Azure Virtual Machine Scale Sets
- Create Virtual Machine Scale Sets
- Implement autoscale
- Configure autoscale

Module 26 : Configure Azure App Service plans

- Implement Azure App Service plans
- Determine Azure App Service plan pricing
- Scale up and scale out Azure App Service
- Configure Azure App Service autoscale

Module 27 : Configure Azure App Service

- Implement Azure App Service
- Create an app with App Service
- Explore continuous integration and deployment
- Create deployment slots
- Add deployment slots
- Secure your App Service app
- Create custom domain names
- Back up and restore your App Service app
- Use Azure Application Insights

Module 28 : Configure Azure Container Instances

- Compare containers to virtual machines
- Review Azure Container Instances
- Implement container groups
- Review Azure Container Apps

Module 29 : Introduction to Azure Backup

- What is Azure Backup?
- How Azure Backup works
- When to use Azure Backup

Module 30 : Protect your virtual machines by using Azure Backup

- Azure Backup features and scenarios
- Back up an Azure virtual machine by using Azure Backup
- Restore virtual machine data

Module 31 : Introduction to Azure Monitor

- Monitoring and Azure Monitor
- Metrics and Logs
- Azure Monitor Insights, visualizations, and actions

Module 32 : Improve incident response with Azure Monitor alerts

- Explore the different alert types that Azure Monitor supports
- Use metric alerts for alerts about performance issues in your Azure environment

- Use log search alerts to alert on events in your application
- Use activity log alerts to alert on events within your Azure infrastructure
- Use action groups and alert processing rules to send notifications when an alert is fired

Module 33 : Analyze your Azure infrastructure by using Azure Monitor logs

- Features of Azure Monitor logs
- Create basic Azure Monitor log queries to extract information from log data

Lab / Exercises

- This course provides you with exclusive access to the official Microsoft lab, enabling you to practice your skills in a professional environment.

Documentation

- Access to Microsoft Learn, Microsoft's online learning platform, offering interactive resources and educational content to deepen your knowledge and develop your technical skills.

Exam

- This course prepares for the certification AZ-104: Microsoft Azure Administrator

Participant profiles

- System and network administrators
- Cloud and DevOps engineers
- IT managers looking to migrate to Azure
- Cloud infrastructure consultants
- IT support technicians specializing in cloud

Prerequisites

- Understand the fundamentals of cloud computing
- Have basic knowledge of virtualization, networking, and storage
- Experience with Active Directory concepts and TCP/IP

Objectives

- Administer Azure subscriptions and resources
- Manage identities and access with Microsoft Entra ID
- Configure and monitor virtual networks
- Implement and manage Azure storage
- Deploy and manage compute resources
- Monitor and optimize the performance of Azure resources
- Implement cost management and governance in Azure
- Secure data and applications on Azure

Description
Microsoft Azure Administrator (AZ-104) Training
Niveau
Intermédiaire
Classroom Registration Price (CHF)
3200
Virtual Classroom Registration Price (CHF)

3000
Duration (in Days)
4
Reference
AZ-104T00