

# AZ-104T00-A: Microsoft Azure Administrator

## Course Overview

Embark on a journey to master cloud administration with our AZ-104T00-A: Microsoft Azure Administrator course. This comprehensive Azure 104 course equips you with the essentials of Azure Active Directory, governance, and Azure administration, ensuring you can manage identities, compliance, and resources effectively. Delve into virtual networking and intersite connectivity to maintain robust and secure network infrastructures. Learn to optimize network traffic and Azure storage solutions and gain hands-on experience managing Azure Virtual Machines. Explore serverless computing with Azure services and bolster your skills in data protection and monitoring. With our Azure 104 online training, you'll apply these concepts in real-world scenarios, preparing you for challenges in the Azure ecosystem.

## Audience profile

The AZ-104T00-A course is designed for professionals managing Azure environments, focusing on configuration, governance, and administration.

- Systems Administrators
- IT Professionals with Azure experience
- Cloud Solutions Architects
- DevOps Engineers
- Network Engineers
- Security Engineers
- Professionals preparing for the Microsoft Azure Administrator certification

## Course Syllabus

### Manage Azure Identities and Governance (20–25%)

#### Manage Microsoft Entra Users and Groups

- Create users and groups
- Manage user and group properties
- Manage licenses in Microsoft Entra ID
- Manage external users
- Configure self-service password reset (SSPR)

#### Manage Access to Azure Resources

- Manage built-in Azure roles
- Assign roles at different scopes
- Interpret access assignments

#### Manage Azure Subscriptions and Governance

- Implement and manage Azure Policy

- Configure resource locks
- Apply and manage tags on resources
- Manage resource groups
- Manage subscriptions
- Manage costs by using alerts, budgets, and Azure Advisor recommendations
- Configure management groups

## **Implement and Manage Storage (15–20%)**

### **Configure Access to Storage**

- Configure Azure Storage firewalls and virtual networks
- Create and use shared access signature (SAS) tokens
- Configure stored access policies
- Manage access keys
- Configure identity-based access for Azure Files

### **Configure and Manage Storage Accounts**

- Create and configure storage accounts
- Configure Azure Storage redundancy
- Configure object replication
- Configure storage account encryption
- Manage data by using Azure Storage Explorer and AzCopy

### **Configure Azure Files and Azure Blob Storage**

- Create and configure a file share in Azure Storage
- Create and configure a container in Blob Storage
- Configure storage tiers
- Configure snapshots and soft delete for Azure Files
- Configure blob lifecycle management
- Configure blob versioning

## **Deploy and Manage Azure Compute Resources (20–25%)**

### **Automate Deployment of Resources Using Azure Resource Manager (ARM) Templates or Bicep Files**

- Interpret an Azure Resource Manager template or a Bicep file
- Modify an existing Azure Resource Manager template
- Modify an existing Bicep file
- Deploy resources using an Azure Resource Manager template or a Bicep file
- Export a deployment as an Azure Resource Manager template or convert an Azure Resource Manager template to a Bicep file

### **Create and Configure Virtual Machines**

- Create a virtual machine
- Configure Azure Disk Encryption
- Move a virtual machine to another resource group, subscription, or region

- Manage virtual machine sizes
- Manage virtual machine disks
- Deploy virtual machines to availability zones and availability sets
- Deploy and configure Azure Virtual Machine Scale Sets

## **Provision and Manage Containers in the Azure Portal**

- Create and manage an Azure container registry
- Provision a container using Azure Container Instances
- Provision a container using Azure Container Apps
- Manage sizing and scaling for containers, including Azure Container Instances and Azure Container Apps

## **Create and Configure Azure App Service**

- Provision an App Service plan
- Configure scaling for an App Service plan
- Create an App Service
- Configure certificates and Transport Layer Security (TLS) for an App Service
- Map an existing custom DNS name to an App Service
- Configure backup for an App Service
- Configure networking settings for an App Service
- Configure deployment slots for an App Service

## **Implement and Manage Virtual Networking (15–20%)**

### **Configure and Manage Virtual Networks in Azure**

- Create and configure virtual networks and subnets
- Create and configure virtual network peering
- Configure public IP addresses
- Configure user-defined network routes
- Troubleshoot network connectivity

### **Configure Secure Access to Virtual Networks**

- Create and configure network security groups (NSGs) and application security groups
- Evaluate effective security rules in NSGs
- Implement Azure Bastion
- Configure service endpoints for Azure platform as a service (PaaS)
- Configure private endpoints for Azure PaaS

### **Configure Name Resolution and Load Balancing**

- Configure Azure DNS
- Configure an internal or public load balancer
- Troubleshoot load balancing

## **Monitor and Maintain Azure Resources (10–15%)**

### **Monitor Resources in Azure**

- Interpret metrics in Azure Monitor

- Configure log settings in Azure Monitor
- Query and analyze logs in Azure Monitor
- Set up alert rules, action groups, and alert processing rules in Azure Monitor
- Configure and interpret monitoring of virtual machines, storage accounts, and networks using Azure Monitor Insights
- Use Azure Network Watcher and Connection Monitor

## **Implement Backup and Recovery**

- Create a Recovery Services vault
- Create an Azure Backup vault
- Create and configure a backup policy
- Perform backup and restore operations using Azure Backup
- Configure Azure Site Recovery for Azure resources
- Perform a failover to a secondary region using Site Recovery
- Configure and interpret reports and alerts for backups