

Exam AZ-104: Microsoft Azure Administrator

Course Outline

Skills Measured

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

NOTE: The bullets that appear below each of the skills measured are intended to illustrate how we are assessing that skill. This list is not definitive or exhaustive. NOTE: Most questions cover features that are General Availability (GA). The exam may contain questions on Preview features if those features are commonly used.

Manage Azure identities and governance (15-20%)

Manage Azure AD objects

- create users and groups
- manage user and group properties
- manage device settings
- perform bulk user updates
- manage guest accounts
- configure Azure AD Join
- configure self-service password reset

Manage role-based access control (RBAC)

- create a custom role
- provide access to Azure resources by assigning roles
- interpret access assignments
- manage multiple directories

Manage subscriptions and governance

- configure Azure policies
- configure resource locks
- apply tags
- create and manage resource groups
- manage subscriptions
- configure Cost Management
- configure management groups

Implement and manage storage (10-15%)

Manage storage accounts

- configure network access to storage accounts
- create and configure storage accounts
- generate shared access signature
- manage access keys
- implement Azure storage replication
- configure Azure AD Authentication for a storage account

Manage data in Azure Storage

- export from Azure job
- import into Azure job
- install and use Azure Storage Explorer
- copy data by using AZCopy

Configure Azure files and Azure blob storage

- create an Azure file share
- create and configure Azure File Sync service
- configure Azure blob storage
- configure storage tiers for Azure blobs
- configure blob lifecycle management
- configure blob object replication

Deploy and manage Azure compute resources (25-30%)

Configure VMs for high availability and scalability

- configure high availability
- deploy and configure scale sets

Automate deployment and configuration of VMs

- modify Azure Resource Manager (ARM) template
- configure VHD template
- deploy from template
- save a deployment as an ARM template

- automate configuration management by using custom script extensions

Create and configure VMs

- configure Azure Disk Encryption
- move VMs from one resource group to another
- manage VM sizes
- add data discs
- configure networking
- redeploy VMs

Create and configure containers

- create and configure Azure Kubernetes Service (AKS)
- create and configure Azure Container Instances (ACI)

Create and configure Web Apps

- create and configure App Service
- create and configure App Service Plans

Configure and manage virtual networking (30-35%)

Implement and manage virtual networking

- create and configure VNET peering
- configure private and public IP addresses, network routes, network interface, subnets,
- and virtual network

Configure name resolution

- configure Azure DNS
- configure custom DNS settings
- configure a private or public DNS zone

Secure access to virtual networks

- create security rules
- associate an NSG to a subnet or network interface
- evaluate effective security rules

- deploy and configure Azure Firewall
- deploy and configure Azure Bastion Service

Configure load balancing

- configure Application Gateway
- configure an internal load balancer
- configure load balancing rules
- configure a public load balancer
- troubleshoot load balancing

Monitor and troubleshoot virtual networking

- monitor on-premises connectivity
- use Network Performance Monitor
- use Network Watcher
- troubleshoot external networking
- troubleshoot virtual network connectivity

Integrate an on-premises network with an Azure virtual network

- create and configure Azure VPN Gateway
- create and configure VPNs
- configure ExpressRoute
- configure Azure Virtual WAN

Monitor and back up Azure resources (10-15%)

Monitor resources by using Azure Monitor

- configure and interpret metrics
 - analyze metrics across subscriptions
- configure Log Analytics
- query and analyze logs
- set up alerts and actions
- configure Application Insights

Implement backup and recovery

- configure and review backup reports
- perform backup and restore operations by using Azure Backup Service
- create a Recovery Services Vault
- create and configure backup policy
- perform site-to-site recovery by using Azure Site Recovery