



# AZURE ADMINISTRATOR

## Skills Measured - Overview

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## Skills measured

- Manage Azure subscriptions and resources
- Implement and manage storage
- Deploy and manage virtual machines (VMs)
- Configure and manage virtual networks
- Manage identities

## Manage Azure subscriptions and resources (15-20%)

### Manage Azure subscriptions

- assign administrator permissions
- configure cost center quotas and tagging
- configure Azure subscription policies at Azure subscription level

### Analyze resource utilization and consumption

- configure diagnostic settings on resources
- create baseline for resources
- create and rest alerts
- analyze alerts across subscription
- analyze metrics across subscription
- create action groups
- monitor for unused resources
- monitor spend
- report on spend
- utilize Log Search query functions
- view alerts in Log Analytics

### Manage resource groups

- use Azure policies for resource groups
- configure resource locks
- configure resource policies
- identify auditing requirements
- implement and set tagging on resource groups
- move resources across resource groups
- remove resource groups



## Managed role based access control (RBAC)

- create a custom role
- configure access to Azure resources by assigning roles
- configure management access to Azure, troubleshoot RBAC, implement RBAC policies, assign RBAC Roles

## **Implement and manage storage (15-20%)**

### Create and configure storage accounts

- configure network access to the storage account
- create and configure storage account
- generate shared access signature
- install and use Azure Storage Explorer
- manage access keys
- monitor activity log by using Log Analytics
- implement Azure storage replication

### Import and export data to Azure

- create export from Azure job
- create import into Azure job
- Use Azure Data Box
- configure and use Azure blob storage
- configure Azure content delivery network (CDN) endpoints

### Configure Azure files

- create Azure file share
- create Azure File Sync service
- create Azure sync group
- troubleshoot Azure File Sync

### Implement Azure backup

- configure and review backup reports
- perform backup operation
- create Recovery Services Vault
- create and configure backup policy
- perform a restore operation

## **Deploy and manage virtual machines (VMs) (15-20%)**

Create and configure a VM for Windows and Linux

- configure high availability
- configure monitoring, networking, storage, and virtual machine size
- deploy and configure scale sets

Automate deployment of VMs

- modify Azure Resource Manager (ARM) template
- configure location of new VMs
- configure VHD template
- deploy from template
- save a deployment as an ARM template
- deploy Windows and Linux VMs

Manage Azure VM

- add data discs
- add network interfaces
- automate configuration management by using PowerShell Desired State Configuration (DSC) and VM Agent by using custom script extensions
- manage VM sizes; move VMs from one resource group to another
- redeploy VMs

Manage VM backups

- configure VM backup
- define backup policies
- implement backup policies
- perform VM restore
- Azure Site Recovery

## **Configure and manage virtual networks (30-35%)**

Create connectivity between virtual networks

- create and configure VNET peering
- create and configure VNET to VNET
- verify virtual network connectivity
- create virtual network gateway



## Implement and manage virtual networking

- 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 private and public DNS zones

## Create and configure a Network Security Group (NSG)

- create security rules
- associate NSG to a subnet or network interface
- identify required ports
- evaluate effective security rules

## Implement Azure load balancer

- configure internal load balancer, configure load balancing rules, configure public load balancer, troubleshoot load balancing

## Monitor and troubleshoot virtual networking

- monitor on-premises connectivity, use Network resource monitoring, use Network Watcher, troubleshoot external networking, troubleshoot virtual network connectivity

## Integrate on premises network with Azure virtual network

- create and configure Azure VPN Gateway, create and configure site to site VPN, configure Express Route, verify on premises connectivity, troubleshoot on premises connectivity with Azure

# Manage identities (15-20%)

## Manage Azure Active Directory (AD)

- add custom domains
- Azure AD Join
- configure self-service password reset
- manage multiple directories



## Manage Azure AD objects (users, groups, and devices)

- create users and groups
- manage user and group properties
- manage device settings
- perform bulk user updates
- manage guest accounts

## Implement and manage hybrid identities

- install Azure AD Connect, including password hash and pass-through synchronization
- use Azure AD Connect to configure federation with on-premises Active Directory Domain Services (AD DS)
- manage Azure AD Connect
- manage password sync and password writeback

## Implement multi-factor authentication (MFA)

- configure user accounts for MFA, enable MFA by using bulk update, configure fraud alerts, configure bypass options, configure Trusted IPs, configure verification methods