

# **Exam AZ-103: Microsoft Azure Administrator – Skills Measured**

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

### **Manage Azure subscriptions**

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

### **Analyze resource utilization and consumption**

- configure diagnostic settings on resources
- create baseline for resources
- create and test alerts
- analyze alerts across subscription
- analyze metrics across subscription
- create action groups and action rules
- monitor for unused resources
- monitor spend
- report on spend
- utilize log queries in Azure Monitor
- view alerts in Azure Monitor

### **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 Monitor Logs
- implement Azure storage replication
- implement Azure AD authentication

### **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
- soft delete for Azure 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 connections
- 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