

Exam AZ-900: Microsoft Certified Azure Fundamentals

Skills Measured

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.

Describe Cloud Concepts (20-25%)

Identify the benefits and considerations of using cloud services

- identify the benefits of cloud computing, such as High Availability, Scalability, Elasticity, Agility, and Disaster Recovery
- identify the differences between Capital Expenditure (CapEx) and Operational Expenditure (OpEx)
- describe the consumption-based model

Describe the differences between categories of cloud services

- describe the shared responsibility model
- describe Infrastructure-as-a-Service (IaaS),
- describe Platform-as-a-Service (PaaS)
- describe serverless computing
- describe Software-as-a-Service (SaaS)
- identify a service type based on a use case

Describe the differences between types of cloud computing

- define cloud computing
- describe Public cloud
- describe Private cloud
- describe Hybrid cloud
- compare and contrast the three types of cloud computing

Describe Core Azure Services (15-20%)

Describe the core Azure architectural components

- describe the benefits and usage of Regions and Region Pairs
- describe the benefits and usage of Availability Zones
- describe the benefits and usage of Resource Groups
- describe the benefits and usage of Subscriptions
- describe the benefits and usage of Management Groups

- describe the benefits and usage of Azure Resource Manager
- explain Azure resources

Describe core resources available in Azure

- describe the benefits and usage of Virtual Machines, Azure App Services, Azure Container Instances (ACI), Azure Kubernetes Service (AKS), and Windows Virtual Desktop
- describe the benefits and usage of Virtual Networks, VPN Gateway, Virtual Network peering, and ExpressRoute
- describe the benefits and usage of Container (Blob) Storage, Disk Storage, File Storage, and storage tiers
- describe the benefits and usage of Cosmos DB, Azure SQL Database, Azure Database for MySQL, Azure Database for PostgreSQL, and SQL Managed Instance
- describe the benefits and usage of Azure Marketplace

Describe core solutions and management tools on Azure (10-15%)

Describe core solutions available in Azure

- describe the benefits and usage of Internet of Things (IoT) Hub, IoT Central, and Azure Sphere
- describe the benefits and usage of Azure Synapse Analytics, HDInsight, and Azure Databricks
- describe the benefits and usage of Azure Machine Learning, Cognitive Services and

Azure Bot Service

- describe the benefits and usage of serverless computing solutions that include Azure Functions and Logic Apps
- describe the benefits and usage of Azure DevOps, GitHub, GitHub Actions, and Azure DevTest Labs

Describe Azure management tools

- describe the functionality and usage of the Azure Portal, Azure PowerShell, Azure CLI, Cloud Shell, and Azure Mobile App
- describe the functionality and usage of Azure Advisor
- describe the functionality and usage of Azure Resource Manager (ARM) templates
- describe the functionality and usage of Azure Monitor
- describe the functionality and usage of Azure Service Health

Describe general security and network security features (10-15%)

Describe Azure security features

- describe basic features of Azure Security Center, including policy compliance, security alerts, secure score, and resource hygiene
- describe the functionality and usage of Key Vault
- describe the functionality and usage of Azure Sentinel
- describe the functionality and usage of Azure Dedicated Hosts

Describe Azure network security

- describe the concept of defense in depth
- describe the functionality and usage of Network Security Groups (NSG)
- describe the functionality and usage of Azure Firewall
- describe the functionality and usage of Azure DDoS protection

Describe identity, governance, privacy, and compliance features (20-25%)

Describe core Azure identity services

- explain the difference between authentication and authorization
- define Azure Active Directory
- describe the functionality and usage of Azure Active Directory
- describe the functionality and usage of Conditional Access, Multi-Factor Authentication (MFA), and Single Sign-On (SSO)

Describe Azure governance features

- describe the functionality and usage of Role-Based Access Control (RBAC)
- describe the functionality and usage of resource locks
- describe the functionality and usage of tags
- describe the functionality and usage of Azure Policy
- describe the functionality and usage of Azure Blueprints
- describe the Cloud Adoption Framework for Azure

Describe privacy and compliance resources

- describe the Microsoft core tenets of Security, Privacy, and Compliance
- describe the purpose of the Microsoft Privacy Statement, Product Terms site, and Data Protection Addendum (DPA)
- describe the purpose of the Trust Center
- describe the purpose of the Azure compliance documentation

- describe the purpose of Azure Sovereign Regions (Azure Government cloud services and Azure China cloud services)

Describe Azure cost management and Service Level Agreements (10-15%)

Describe methods for planning and managing costs

- identify factors that can affect costs (resource types, services, locations, ingress and egress traffic)
- identify factors that can reduce costs (reserved instances, reserved capacity, hybrid use benefit, spot pricing)
- describe the functionality and usage of the Pricing calculator and the Total Cost of Ownership (TCO) calculator
- describe the functionality and usage of Azure Cost Management

Describe Azure Service Level Agreements (SLAs) and service lifecycles

- describe the purpose of an Azure Service Level Agreement (SLA)
- identify actions that can impact an SLA (i.e. Availability Zones)
- describe the service lifecycle in Azure (Public Preview and General Availability)