

Microsoft Certified: Azure Fundamentals

(Exam AZ-900: Microsoft Azure Fundamentals)

(Microsoft Certification Mapped Curriculum)

Describe cloud concepts

Describe cloud computing

- define cloud computing
- describe the shared responsibility model
- define cloud models, including public, private, and hybrid
- identify appropriate use cases for each cloud model
- describe the consumption-based model
- compare cloud pricing models

Describe the benefits of using cloud services

- describe the benefits of high availability and scalability in the cloud
- describe the benefits of reliability and predictability in the cloud
- describe the benefits of security and governance in the cloud
- describe the benefits of manageability in the cloud

Describe cloud service types

- describe infrastructure as a service (IaaS)
- describe platform as a service (PaaS)
- describe software as a service (SaaS)
- identify appropriate use cases for each cloud service (IaaS, PaaS, SaaS)

Describe Azure architecture and services

Describe the core architectural components of Azure

- describe Azure regional, regional pairs, and sovereign regions
- describe availability zones
- describe Azure datacenters
- describe Azure resources and resource groups
- describe subscriptions
- describe management groups

- describe the hierarchy of resource groups, subscriptions, and management groups

Describe Azure compute and networking services

- compare compute types, including container instances, virtual machines (VMs), and functions
- describe VM options, including Azure Virtual Machines, Azure Virtual Machine Scale Sets, availability sets, and Azure Virtual Desktop
- describe resources required for virtual machines
- describe application hosting options, including the Web Apps feature of Azure App

Service, containers, and virtual machines

- describe virtual networking, including the purpose of Azure Virtual Networks, Azure virtual subnets

Describe Azure storage services

- compare Azure storage services
- describe storage tiers
- describe redundancy options
- describe storage account options and storage types
- identify options for moving files, including AzCopy, Azure Storage Explorer, and Azure

Describe Azure identity, access, and security

- describe directory services in Azure, including Azure Active Directory (Azure AD)

Azure Active Directory Domain Services (Azure AD DS)

- describe authentication methods in Azure, including single sign-on (SSO), multifactor
- authentication, and passwordless
- describe external identities and guest access in Azure
- describe Azure AD Conditional Access
- describe Azure role-based access control (RBAC)
- describe the purpose of the defense in depth model
- Describe the purpose of Microsoft Defender for Cloud

Describe Azure management and governance

Describe cost management in Azure

- describe factors that can affect costs in Azure
- compare the Pricing calculator and the Total Cost of Ownership (TCO) calculator
- describe the Azure Cost Management and Billing tool
- describe the purpose of tags

Describe features and tools in Azure for governance and compliance

- describe the purpose of Azure Blueprints
- describe the purpose of Azure Policy
- describe the purpose of resource locks
- describe the purpose of the Service Trust Portal

Describe features and tools for managing and deploying Azure resources

- describe the Azure portal
- describe Azure Cloud Shell, including Azure CLI and Azure PowerShell
- describe Azure Resource Manager and Azure Resource Manager templates (ARM templates)

Describe monitoring tools in Azure

- describe the purpose of Azure Advisor
- describe Azure Service Health
- describe Azure Monitor, including Log Analytics, Azure Monitor alerts and Application