Microsoft Certified: Azure Solutions Architect Expert – Skills Measured

NOTE: The bullets that follow 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.

Exam AZ-305: Designing Microsoft Azure Infrastructure Solutions

Design Identity, Governance, and Monitoring Solutions (25-30%)

Design a solution for logging and monitoring

- design a log routing solution
- recommend an appropriate level of logging
- recommend monitoring tools for a solution

Design authentication and authorization solutions

- recommend a solution for securing resources with role-based access control
- recommend an identity management solution
- recommend a solution for securing identities

Design governance

- recommend an organizational and hierarchical structure for Azure resources
- recommend a solution for enforcing and auditing compliance

Design identities and access for applications

- recommend solutions to allow applications to access Azure resources
- recommend a solution that securely stores passwords and secrets
- recommend a solution for integrating applications into Azure Active Directory (Azure AD)
- recommend a user consent solution for applications

Design Data Storage Solutions (25-30%)

Design a data storage solution for relational data

- recommend database service tier sizing
- recommend a solution for database scalability
- recommend a solution for encrypting data at rest, data in transmission, and data in use

Design data integration

- recommend a solution for data integration
- recommend a solution for data analysis

Recommend a data storage solution

- recommend a solution for storing relational data
- recommend a solution for storing semi-structured data
- recommend a solution for storing non-relational data

Design a data storage solution for non-relational data

- recommend access control solutions to data storage
- recommend a data storage solution to balance features, performance, and cost
- design a data solution for protection and durability

Design Business Continuity Solutions (10-15%)

Design a solution for backup and disaster recovery

- recommend a recovery solution for Azure, hybrid, and on-premises workloads that meets recovery objectives (Recovery Time Objective [RTO], Recovery Level Objective [RLO], Recovery Point Objective [RPO])
- understand the recovery solutions for containers
- recommend a backup and recovery solution for compute
- recommend a backup and recovery solution for databases
- recommend a backup and recovery solution for unstructured data

Design for high availability

- identify the availability requirements of Azure resources
- recommend a high availability solution for compute
- recommend a high availability solution for non-relational data storage
- recommend a high availability solution for relational data storage

Design Infrastructure Solutions (25-30%)

Design a compute solution

- recommend a virtual machine-based compute solution
- recommend an appropriately sized compute solution based on workload requirements
- recommend a container-based compute solution
- recommend a serverless-based compute solution

Design an application architecture

- recommend a caching solution for applications
- recommend a messaging architecture
- recommend an event-driven architecture
- recommend an automated deployment solution for your applications
- recommend an application configuration management solution
- recommend a solution for API integration

Design migrations

- evaluate a migration solution that leverages the Cloud Adoption Framework for Azure
- assess and interpret on-premises servers, data, and applications for migration
- recommend a solution for migrating applications and virtual machines
- recommend a solution for migrating databases
- recommend a solution for migrating unstructured data

Design network solutions

- recommend a network architecture solution based on workload requirements
- recommend a connectivity solution that connects Azure resources to the internet
- recommend a connectivity solution that connects Azure resources to on-premises networks
- optimize network performance for applications
- recommend a solution to optimize network security
- recommend a load balancing and routing solution