

Section 2: Identity and Security

Preparation Course for Exam AZ-301 Microsoft Azure Architect Design

Design for identity and security (20-25%)

Design Identity Management

Choose an identity management approach; design an identity delegation strategy, identity repository (including directory, application, systems, etc.); design self-service identity management and user and persona provisioning; define personas and roles; recommend appropriate access control strategy (e.g., attribute-based, discretionary access, history-based, identity-based, mandatory, organization-based, role-based, rule-based, responsibility-based)

- <u>Microsoft Cloud Adoption Framework for Azure</u>
- Azure security best practices and patterns

Design Authentication

Choose an authentication approach; design a single-sign on approach; design for IPSec, logon, multi-factor, network access, and remote authentication

- <u>Authenticate using Azure AD and OpenID Connect</u>
- <u>Azure Active Directory Seamless Single Sign-On</u>
- Azure Active Directory Seamless Single Sign-On: Technical deep dive
- User Privacy and Azure AD Seamless Single Sign-On
- <u>Azure Active Directory Seamless Single Sign-On: Quick start</u>
- Design for security in Azure

Design Authorization

Choose an authorization approach; define access permissions and privileges; design secure delegated access (e.g., oAuth, OpenID, etc.); recommend when and how to use API Keys

- Security best practices for Azure solutions
- <u>Choose the right authentication method for your Azure Active Directory hybrid identity</u>
 <u>solution</u>
- <u>Azure security best practices and patterns</u>
- <u>Role-based and resource-based authorization</u>



- Ensure that proper authorization is in place and principle of least privileges is followed
- About API Management
- How to secure back-end services using client certificate authentication in Azure API
 Management

Design for Risk Prevention for Identity

Design a risk assessment strategy (e.g., access reviews, RBAC policies, physical access); evaluate agreements involving services or products from vendors and contractors; update solution design to address and mitigate changes to existing security policies, standards, guidelines and procedures

• Choose a solution for integrating on-premises Active Directory with Azure

Design a Monitoring Strategy for Identity and Security

Design for alert notifications; design an alert and metrics strategy; recommend authentication monitors

- Overview of alerts in Microsoft Azure
- Metrics in Azure Monitor
- What is Azure Active Directory monitoring?