Microsoft Azure Architect Design (AZ301)

Duration: 4 days

Course Overview

This four day course is aligned to Azure Exam:AZ-301, Azure Solutions Architect-Design and contains the following:

1. **AZ-301T01: Designing for Identity and Security**
2. **AZ-301T02: Designing a Data Platform Solution**
3. **AZ-301T03: Design for Deployment, Migration, and Integration**
4. **AZ-301T04: Designing an Infrastructure Strategy**

Who should attend

Successful Cloud Solutions Architects begin this role with practical experience with operating systems, virtualization, cloud infrastructure, storage structures, billing, and networking.

Prerequisites

Students may find value in taking Azure Architect Technologies (AZ300) as a pre-requisite

Course Objectives

1. **After completing this course, students will be able to:**

2. **Integrate their existing solutions with external identity providers using Azure AD B2B or B2C.**
3. **Design a hybrid identity solution.**
4. **Determine when to use advanced features of Azure AD such as Managed Service Identity, MFA and Privileged Identity Management.**
5. **Secure application secrets using Key Vault.**
6. **Secure application data using SQL Database and Azure Storage features.**
7. **Detail the various APIs available in Cognitive Services.**
8. **Identify when to use the Face API, Speech API or Language Understanding (LUIS) service.**
9. **Describe the relationship to Bot Framework and Azure Bot Services.**
10. **Determine the ideal pricing option for Azure Storage based on a solution's requirements.**
11. **Identify performance thresholds for the Azure Storage service.**
12. **Determine the type of Storage blobs to use for specific solution components.**
13. **Use the Azure Files service for SMB operations.**
14. **Identify solutions that could benefit from the use of StorSimple physical or virtual devices.**

15. Compare and contrast monitoring services for applications, the Azure platform, and networking.
16. Design an alert scheme for a solution hosted in Azure.
17. Select the appropriate backup option for infrastructure and data hosted in Azure.
18. Automate the deployment of future resources for backup recovery or scaling purposes.
19. Create a resource group.
20. Add resources to a resource group.
21. Deploy an ARM template to a resource group Integrate an API or Logic App with the API Management service.
22. Design an App Service Plan or multi-region deployment for high performance and scale.
23. Integrate an API or Logic App with the API Management service.
24. Design an App Service Plan or multi-region deployment for high performance and scale.

Course Content

1. Managing Security & Identity for Azure Solutions
2. Integrating SaaS Services Available on the Azure Platform
3. Backing Azure Solutions with Azure Storage
4. Comparing Database Options in Azure
5. Monitoring & Automating Azure Solutions
6. Deploying Resources with Azure Resource Manager
7. Creating Managed Server Applications in Azure
8. Authoring Server less Applications in Azure
9. Application Architecture Patterns in Azure
10. Building Azure IaaS-Based Server Applications (ADSK)
11. Networking Azure Application Components
12. Integrating Azure Solution Components Using Messaging Services