Course AZ-301T02-A: Designing a Data Platform Solution

About this course
Learn to Compare and contrast various database options on Azure, identify data streaming options for large-scale data ingest, and identify longer-term data storage options.

Course Outline

Module 1: Backing Azure Solutions with Azure Storage

This module describes how many Azure services use the Azure Storage service as a backing store for other application solution in Azure. The module dives into critical considerations when using Azure Storage as a supplemental service for an all-up Azure solution.

After completing this module, students will be able to:
- Determine the ideal pricing option for Azure Storage based on a solution's requirements.

- Identify performance thresholds for the Azure Storage service.

- Determine the type of Storage blobs to use for specific solution components.

- Use the Azure Files service for SMB operations.

- Identify solutions that could benefit from the use of StorSimple physical or virtual devices.

Module 2: Comparing Database Options in Azure
This module compares the various relational and non-relational data storage options available in Azure. Options are explored as groups such as relational databases (Azure SQL Database, MySQL, and PostgreSQL on Azure), non-relational (Azure Cosmos DB, Storage Tables), streaming (Stream Analytics) and storage (Data Factory, Data Warehouse, Data Lake).

Lab : Deploying Database Instances in Azure

After completing this module, students will be able to:
- Compare and contrast monitoring services for applications, the Azure platform, and networking.

- Identify data streaming options for large-scale data ingest.

- Identify longer-term data storage options.

Module 3: Monitoring & Automating Azure Solutions

This module covers the monitoring and automation solutions available after an Azure solution has been architected, designed and possibly deployed. The module reviews services that are used to monitor individual applications, the Azure platform, and networked components. This module also covers automation and backup options to enable business-continuity scenarios for solutions hosted in Azure.

Lab : Deploying Configuration Management Solutions to Azure

After completing this module, students will be able to:
- Compare and contrast monitoring services for applications, the Azure platform, and networking.

- Design an alert scheme for a solution hosted in Azure.

- Select the appropriate backup option for infrastructure and data hosted in Azure.
  Automate the deployment of future resources for backup recovery or scaling purposes.