Section 3: Data Platform Solution
Preparation Course for Exam AZ-301
Microsoft Azure Architect Design

Design a data platform solution (15-20%)

Design a Data Management Strategy

Choose between managed and unmanaged data store; choose between relational and non-relational databases; design data auditing and caching strategies; identify data attributes (e.g., relevancy, structure, frequency, size, durability, etc.); recommend Database Transaction Unit (DTU) sizing; design a data retention policy; design for data availability, consistency, and durability; design a data warehouse strategy

- Azure Application Architecture Guide

- Introduction to Azure managed disks

- Databases: Fully managed intelligent database services

- Azure Strategy and Implementation Guide

- Get started with SQL database auditing

- Caching

- Service tiers in the DTU-based purchase model

- Store Azure SQL Database backups for up to 10 years

- What is Azure SQL Data Warehouse?

- Azure SQL Data Warehouse - Massively parallel processing (MPP) architecture

- Best practices for Azure SQL Data Warehouse

Design a Data Protection Strategy

Recommend geographic data storage; design an encryption strategy for data at rest, for data in transmission, and for data in use; design a scalability strategy for data; design secure access to data; design a data loss prevention (DLP) policy

- Define data protection strategy for your hybrid identity solution

- Geo-redundant storage (GRS): Cross-regional replication for Azure Storage

- Azure Data Encryption-at-Rest

- Azure data security and encryption best practices

- [Create, test, and tune a DLP policy](#)

Design and Document Data Flows

Identify data flow requirements; create a data flow diagram; design a data flow to meet business requirements; design a data import and export strategy

- [Azure Data Explorer Documentation](#)

- [Azure Data Factory Mapping Data Flow Select Transformation](#)

- [What is Azure Import/Export service?](#)

Design a Monitoring Strategy for the Data Platform

Design for alert notifications; design an alert and metrics strategy

- [Sources of monitoring data for Azure Monitor](#)

- [Monitoring and diagnostics](#)