Microsoft

DP-200T01: Implementing an Azure Data Solution

Agenda

- About this course
- Course agenda
- Audience
- Prerequisites

About this course

In this course, the students will implement various data platform technologies into solutions that are in line with business and technical requirements including on-premises, cloud, and hybrid data scenarios incorporating both relational and No-SQL data. They will also learn how to process data using a range of technologies and languages for both streaming and batch data.

The students will also explore how to implement data security including authentication, authorization, data policies and standards. They will also define and implement data solution monitoring for both the data storage and data processing activities. Finally, they will manage and troubleshoot Azure data solutions which includes the optimization and disaster recovery of big data, batch processing and streaming data solutions.

Course Agenda

- Module 1
- Azure for the Data Engineer
  - L01 - Explain the evolving world of data
  - L02 - Survey the services in the Azure Data Platform
  - L03 - Identify the tasks that are performed by a Data Engineer
  - L04 - Describe the use cases for the cloud in a case study

- Module 2
- Working with Data Storage
  - L01 - Choose a data storage approach in Azure
  - L02 - Create an Azure Storage Account
  - L03 - Explain Azure Data Lake Storage
  - L04 - Upload data into Azure Data Lake

Course Agenda (*continued #1*)

- Module 3
- Enabling Team Based Data Science with Azure Databricks
  - L01 - Explain Azure Databricks
  - L02 - Work with Azure Databricks
  - L03 - Read data with Azure Databricks
  - L04 - Perform transformations with Azure Databricks

- Module 4
- Building Globally Distributed Databases with Cosmos DB
  - L01 - Create an Azure Cosmos DB database built to scale
  - L02 - Insert and query data in your Azure Cosmos DB database
  - L03 - Build a .NET Core app for Azure Cosmos DB in Visual Studio Code
  - L04 - Distribute your data globally with Azure Cosmos DB

Course Agenda (*continued #2*)

- Module 5
- Working with Relational Data Stores in the Cloud
  - L01 - Explain SQL Database
  - L02 - Explain SQL Data Warehouse
  - L03 - Provision and load data in Azure SQL Data Warehouse
  - L04 - Import data into Azure SQL Data Warehouse using PolyBase

- Module 6
- Performing Real-Time Analytics with Stream Analytics
  - L01 - Explain data streams and event processing
  - L02 - Data Ingestion with Event Hubs
  - L03 - Processing Data with Stream Analytics Jobs

Course Agenda (*continued #3*)

- Module 7
- Orchestrating Data Movement with Azure Data Factory
  - L01 - Explain how Azure Data Factory works
  - L02 - Create Linked Services and Datasets
  - L03 - Create Pipelines and Activities
  - L04 - Azure Data Factory pipeline execution and triggers

- Module 8
- Securing Azure Data Platforms
  - L01 - Introduction to Security
  - L02 - Key Security Components
  - L03 - Securing Storage Accounts and Data Lake Storage
  - L04 - Security Data Stores
  - L05 - Securing Streaming Data

Course Agenda (*continued #4*)

- Module 9
- Monitoring and Troubleshooting Data Storage and Processing
  - L01 - Explain the monitoring capabilities that are available
  - L02 - Troubleshoot common data storage issues
  - L03 - Troubleshoot common data processing issues
  - L04 - Manage disaster recovery

Audience

Primary audience

The audience for this course are data professionals, data architects, and business intelligence professionals who want to learn about the data platform technologies that exist on Microsoft Azure.

Secondary audience

The secondary audience for this course are individuals who develop applications that deliver content from the data platform technologies that exist on Microsoft Azure.

Prerequisites

In addition to their professional experience, students who take this training should have technical knowledge equivalent to the following courses:

Azure fundamentals