DP-200T01 Implementing an Azure Data Solution

Register Online

Schedule

Class Length: 3 Days

G2R = “Guaranteed to Run” | OLL = “Online LIVE”
ILT = “Instructor-Led-Training”

06/28/21	G2R	9:00AM - 5:00PM	Ottawa, ON	OLL	$2,295.00

Overview

In this course, 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. 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.

Prerequisite Comments

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

Target Audience

The primary audience for this course is data professionals, data architects, and business intelligence professionals who want to learn about the data platform technologies that exist on Microsoft Azure.
The secondary audience for this course is individuals who develop applications that deliver content from the data platform technologies that exist on Microsoft Azure.

Course Objectives

Please refer to overview.

Course Outline

1 - Azure for the Data Engineer

Explain the evolving world of data
Survey the services in the Azure Data Platform
Identify the tasks that are performed by a Data Engineer
Describe the use cases for the cloud in a Case Study
Lab : Azure for the Data Engineer

2 - Working with Data Storage

Choose a data storage approach in Azure
Create an Azure Storage Account
Explain Azure Data Lake storage
Upload data into Azure Data Lake
Lab : Working with Data Storage

3 - Enabling Team Based Data Science with Azure Databricks

Explain Azure Databricks and Machine Learning Platforms
Describe the Team Data Science Process
Provision Azure Databricks and workspaces
Perform data preparation tasks
Lab : Enabling Team Based Data Science with Azure Databricks

4 - Building Globally Distributed Databases with Cosmos DB

Create an Azure Cosmos DB database built to scale
Insert and query data in your Azure Cosmos DB database
Provision a .NET Core app for Cosmos DB in Visual Studio Code
Distribute your data globally with Azure Cosmos DB
Lab : Building Globally Distributed Databases with Cosmos DB

5 - Working with Relational Data Stores in the Cloud

SQL Database and SQL Data Warehouse
Provision an Azure SQL database to store data
Provision and load data into Azure SQL Data Warehouse
Lab : Working with Relational Data Stores in the Cloud

6 - Performing Real-Time Analytics with Stream Analytics

Explain data streams and event processing
Querying streaming data using Stream Analytics
How to process data with Azure Blob and Stream Analytics
How to process data with Event Hubs and Stream Analytics
Lab : Performing Real-Time Analytics with Stream Analytics

7 - Orchestrating Data Movement with Azure Data Factory

Explain how Azure Data Factory works
Create Linked Services and datasets
Create pipelines and activities
Azure Data Factory pipeline execution and triggers
Lab : Orchestrating Data Movement with Azure Data Factory

8 - Securing Azure Data Platforms

Configuring Network Security
Configuring Authentication
Configuring Authorization
Auditing Security
Lab : Securing Azure Data Platforms

9 - Monitoring and Troubleshooting Data Storage and Processing

Data Engineering troubleshooting approach
Azure Monitoring Capabilities
Troubleshoot common data issues
Troubleshoot common data processing issues
Lab : Monitoring and Troubleshooting Data Storage and Processing

10 - Integrating and Optimizing Data Platforms

Integrating data platforms
Optimizing data stores
Optimize streaming data
Manage disaster recovery
Lab : Integrating and Optimizing Data Platforms

Related Courses, Certifications, Exams

- AZ-900T01 Microsoft Azure Fundamentals