Azure Data Services Essentials

This one-day workshop is designed to introduce the various data storage and analysis capabilities of the Microsoft Azure platform. Starting with an introduction to cloud computing and a description of traditional data warehouses, comparisons are made with modern cloud computing technologies in mind. Followed by an overview of various Azure storage options the participant is introduced to a variety of tools that allow for data integration into cloud services.

The focus is on creating and using a data lake for storage and Azure data factory for the movement of data. Finally, this workshop will provide a to brief introduction to Azure SQL Database and Azure SQL DataWarehouse.

Who Should Attend

This course is intended for individuals who want to evaluate deploying, configuring, and administering services and data using the Microsoft Azure platform.
This includes:

- Database Developers who want to evaluate Azure solutions.
- Database Administrators who want to evaluate the use of Azure storage capabilities and the migration of on-premises data and services to the cloud.
- IT professionals who looking to evaluate the use of Azure to host data and data analysis services.

Course Pre Requisites

Before attending this course participants should have:

- A background in Data and IT
- A basic understanding of Azure and Cloud Computing concepts
- A basic understanding of database concepts, including tables and simple queries

What to Bring

This is a BYO device course:

- Please bring along your laptop or device to access the virtual lab environment

Course Code: ADSE
Course Duration: 1 Day
SATV: No

Course Summary

Module 1:   Introduction to the Modern Data Warehouse

Module 2:   Azure Storage

Module 3:   Azure SQL Database

Module 4:   Azure SQL Data Warehouse

Module 5:   Azure Data Factory

Microsoft Partner
Gold Data Platform
Gold Data Analytics
Gold Cloud Platform
Silver Learning
Microsoft

register for this course today as places are strictly limited

1300 927 394

Wardy it solutions

contact@wardyit.com

Course Outline

Module 1:   Introduction to the Modern Data Warehouse

This module introduces students to the concept of a modern data warehouse and describes how Microsoft Azure data services can be used to create an entire ecosystem in the cloud for data storage, integration and analysis. Beginning with a brief introduction of the various data offerings in Azure, the module concludes with a comparison of a traditional on-premise database and the advantages of moving such a system to the cloud.

- Lesson 1: Introduction to Azure data services
- Lesson 2: Traditional vs modern data warehouse
- Lesson 3: Features of a modern data warehouse and why to implement them

Lab 1: (Optional) Creating a new Azure Account

- Exercise 1: Create a new Free Trial Subscription.
- Exercise 2: Customising the Azure portal Interface

Module 2:   Azure Storage

This module introduces the different types of Azure storage available and how to implement them. Beginning with an overview of resource groups, containers and various types of blob storage, comparisons and recommendations are made on which type is suitable for your purpose and the type of data being stored, be it structured, semi-structured or unstructured data. Included in this module is an overview of Azure Data Lake storage and what options are available for various types of data. Finally, a brief introduction to Azure Storage Explorer is followed by a hands-on lab to practice using this and other tools to create various data storage containers.

- Lesson 1: Understanding Azure Storage options
- Lesson 2: Azure Data Lake
- Lesson 2: Creating and managing Azure storage

Lab 2: Configuring Azure Storage

- Exercise 1: Creating and configuring an Azure Storage account
- Exercise 2: Creating and Using Data lake storage

Module 3:   Azure SQL Database

This module introduces the Azure SQL Database, a key component of an Enterprise data storage and analysis solution based in the cloud.

- Lesson 1: Introduction to Azure SQL Database
- Lesson 2: Feature Differences between SQL Database and SQL Server

Lab 3: Introduction to Azure SQL Database

- Exercise 1: Create and configure an Azure SQL Database
  Optional
- Exercise 2: Migrate an on-premise SQL Database to Azure SQL DB

Module 4: Azure SQL Data Warehouse

This module introduces the Azure SQL Data Warehouse, a key component of an Enterprise data storage and analysis solution based in the cloud. The module begins by describing the features and benefits of a SQL Data Warehouse and how this compares to other data offerings. Various options are explored for loading and extracting data to a SQL Data Warehouse including the use of Azure Data Factory.

- Lesson 1: Introduction to SQL Data Warehouse
- Lesson 2: Loading Data into a SQL Data Warehouse

Lab 4: Working with a SQL Data Warehouse

- Exercise 1: Creating a SQL Data Warehouse
- Exercise 2: Loading data with Data Factory

☎ 1300 927 394   **✉ contact@wardyit.com**

Module 5: Azure Data Factory

This module is focused on the extract-transform-load (ETL) process of data, from raw unstructured, semi-structured and structured data sources into data lake storage. This module explains how Azure Data Factory can be used to orchestrate and operationalize complex hybrid data extraction processes to refine large amounts of raw data into actionable business metrics.

- Lesson 1: Introduction to Data Integration
- Lesson 2: Understanding Azure Data Factory

Lab 5: Ingesting data with Azure Data Factory
- Exercise 1: Using the Azure Portal to Create a Data Factory
- Exercise 2: Create datasets and a pipeline
- Exercise 3: Trigger and monitor an Azure Data Factory pipeline

Appendix A: Azure Database Migration

Appendix B: Azure Cost Management