

Data AI: Azure SQL Data Warehouse Essentials

WorkshopPLUS

Focus Area: Availability and Business Continuity

Duration: 3 days

Difficulty: 300-Advanced

Overview

This course will help you to implement, optimize and operate an Azure SQL Data Warehouse. It is SQL analytics platform that lets you scale compute and storage elastically and independently, with a massively parallel processing architecture. Use Azure SQL Data Warehouse to have highly tailored, enterprise-grade performance with modern data warehouse infrastructure.

This workshop is targeted at SQL Server Architects, Database Administrators, IT professionals, SQL Server support staff and DevOps Engineers.

Objectives

After completing this training, students will be able to:

- Understand Massive Parallel Processing Basics
- Understand Azure SQL Data Warehouse objects
- Understand Azure SQL Data Warehouse clients and tools
- Understand loading data into your Azure SQL DWH
- Understand migrating from an on-premise SQL Data warehouse
- Understand storage, elasticity and scaling

Key Takeaways

Course Material

- Unstructured, semi-structured and structured data, developing and running massively parallel data transformation and processing programs over petabytes of data
- Experience on how to simplify data by integrating existing IT investments. Import big data into SQL Data Warehouse and use MPP to run high-performance analytics

Hands-on Labs

- Most of the concepts covered above will be supported by hands-on labs and demos.
- Attendees have access to resources and labs for up to 6 months after workshop completion.

Agenda

Day 1

- Introduction to Azure SQL Data Warehouse
- Azure SQL DWH Implementation

Day 2

- Migrating and loading data
- Azure SQL DWH Scaling

Day 3

- Azure SQL DWH Monitoring
- Azure SQL DWH Administration

Plan for three full days. Early departure on any day is not recommended.

Course Details

Module 1: Introduction to Azure SQL Data Warehouse

- Azure SQL Data Warehouse Overview
- Massive Parallel Processing Basics
- Create a SQL Data Warehouse
- Azure SQL DWH Clients & Tools

Module 2 : Azure SQL DWH Implementation

- Table & Index types in Azure SQL Data Warehouse

Module 3 : Migrating and loading data

- Migrating from an on-premise to SQL Data Warehouse
- Loading data into Azure SQL Data Warehouse

Module 4 : Azure SQL DWH Scaling

- Elasticity Concepts
- Scaling the Compute
- Storage Sizing
- Resource Classes

Module 5: Azure SQL DWH Monitoring

- Monitoring Azure SQL Data Warehouse Activities
- Common Performance Issues

Module 6 : Azure SQL DWH Administration

- Azure SQL Data Warehouse Operations Management
- Securing Azure SQL Data Warehouse

Recommended Qualifications

- Understanding of the fundamentals of T-SQL
- Some basic knowledge of the Microsoft Azure platform

Hardware Requirements

- An Intel Core-i5-based PC
- USB port
- Microsoft/Windows Live ID to connect to the virtual environment
- 4 GB RAM
- 128 GB HDD
- Windows 7 SP1 or later
- Office 2013 Professional Plus
- Internet access with at least 1 Mbps bandwidth per student.

For more information

Contact your Henson Group representative for further details.