



DP-300T00: Administering Microsoft Azure SQL Solutions

Summary

Length: 32 hours Level: Experienced

This course provides students with the knowledge and skills to administer a SQL Server database infrastructure for cloud, on-premises and hybrid relational databases and who work with the Microsoft PaaS relational database offerings. Additionally, it will be of use to individuals who develop applications that deliver content from SQL-based relational databases. This course may earn a Credly Badge.

Learning Objectives

After completing this course, students will be able to:

Plan, deploy and configure Azure SQL offerings

Monitor database performance and tune a database and queries for optimum performance

Plan and configure a High Availability Solution

Course Outline

1. The Role of the Azure Database Administrator

Azure Data Platform Roles

Azure Database Platforms and Options

SQL Server Compatibility Levels

Azure Preview Features

2. Plan and Implement Data Platform Resources

Deploying SQL Server using IaaS

Deploying SQL Server using PaaS

Deploying Open Source Database Solutions on Azure

3. Implement a Secure Environment

Configure Database Authentication

Configure Database Authorization

Implement Security for Data at Rest

Implement Security for Data in Transit

Implement Compliance Controls for Sensitive Data

4. Monitor and Optimize Operational Resources

Baselines and Performance Monitoring

Major Causes of Performance Issues

Configuring Resources for Optimal Performance

User Database Configuration

Performance-related Maintenance Tasks

5. Optimize Query Performance

Understanding SQL Server Query Plans

Explore Performance-based Database Design

Evaluate Performance Improvements

6. Automation of Tasks

- Setting up Automatic Deployment
- Defining Scheduled Tasks
- Configuring Extended Events
- Managing Azure PaaS resources Using Automated Methods

7. Plan and Implement a High Availability and Disaster Recovery Environment

- High Availability and Disaster Recovery Strategies
- IaaS Platform and Database Tools for HADR
- PaaS Platform and Database Tools for HADR
- Database Backup and Recovery

Audience

The audience for this course is data professionals managing data and databases who want to learn about administering the data platform technologies that are available on Microsoft Azure. This course is also valuable for data architects and application developers who need to understand what technologies are available for the data platform with Azure and how to work with those technologies through applications.

Prerequisites

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