Administering Microsoft Azure SQL Solutions

Code:	DP-300T00
Length:	4 days
URL:	View Online

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.

Audience Profile

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 anc 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.

Skills Gained

- 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

Prerequisites

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

- AZ-900T00 Microsoft Azure Fundamentals
- DP-900T00 Microsoft Azure Data Fundamentals

Course Details

Outline

- Prepare to maintain SQL databases on Azure
- Deploy IaaS solutions with Azure SQL
- Deploy PaaS solutions with Azure SQL
- Evaluate strategies for migrating to Azure SQL
- Migrate SQL Server workloads to Azure SQL Database
- Migrate SQL Server workloads to Azure SQL Managed Instance
- Configure database authentication and authorization

- Protect data in-transit and at rest
- Implement compliance controls for sensitive data
- Describe performance monitoring
- Configure SQL Server resources for optimal performance
- Configure databases for optimal performance
- Explore query performance optimization
- Evaluate performance improvements
- Explore performance-based design
- Automate deployment of database resources
- Create and manage SQL Agent jobs
- Manage Azure PaaS tasks using automation
- Describe high availability and disaster recovery strategies
- Explore IaaS and PaaS solutions for high availability and disaster recovery
- Back up and restore databases

Plan and Implement Data Platform Resources

- Deploy IaaS solutions with Azure SQL
- Deploy PaaS solutions with Azure SQL
- Evaluate strategies for migrating to Azure SQL
- Migrate SQL workloads to Azure SQL Databases
- Migrate SQL workloads to Azure Managed Instances

Implement a Secure Environment for a Database Service

- Configure database authentication and authorization
- Protect data in-transit and at rest
- Implement compliance controls for sensitive data

Monitor and Optimize Operational Resources

- Describe performance monitoring
- Configure SQL Server resources for optimal performance
- Configure databases for optimal performance

Optimize Query Performance

- Explore query performance optimization
- Explore performance-based database design
- Evaluate performance improvements

Automate database tasks

- Automate deployment of database resources
- Create and manage SQL Agent jobs
- Manage Azure PaaS tasks using automation

Plan and Implement a High Availability and Disaster Recovery Solution

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