KOENIG step forward

Microsoft Solutions Partner
Microsoft Cloud Training Services

KOENIG SOLUTIONS · COURSE OUTLINE

DP-050T00: Migrate SQL Workloads to Azure

Learn to plan and execute migrations of SQL Server workloads to Azure VMs, Azure SQL Database and Managed Instance.

5	20	8
MODULES	TOPICS	HANDS-ON LABS

COURSE OVERVIEW

This course covers the purpose and stages of data platform modernisation, along with the different data migration paths available. It examines the tools used to plan and assess migrations, including the Database Migration Guide, Map Toolkit, Data Migration Assistant, Database Experimentation Assistant, Azure Database Migration Service and SQL Migration Assistant. It then addresses migrating SQL Server workloads to Azure Virtual Machines, including high availability and disaster recovery considerations. Finally, it covers migrating workloads to Azure SQL Database and Azure SQL Database Managed Instance, including offline and online migration methods, data loading and application configuration.

WHO THIS COURSE IS FOR

- **Database Administrators**
- **Database Engineers**
- **Data Platform Architects**
- **Infrastructure Administrators**
- **Cloud Solution Architects**

LEARNING OBJECTIVES

- Explain the purpose and stages of data platform modernisation
- Identify data migration paths and tools for assessment
- Evaluate workloads using Database Experimentation Assistant
- Apply migration considerations for SQL Server to Azure VMs
- Plan high availability and disaster recovery scenarios
- Compare offline and online migration to Azure SQL Database
- Assess migration scenarios for SQL Database Managed Instance
- Describe application configuration changes for Managed Instance

COURSE SYLLABUS

5 Modules, 20 Topics

01

3 Labs

Introducing Data Platform Modernization

In this module, the students will learn the purpose of Data Platform Modernization and they will outline the benefits that data platform modernization can bring to an organization. The students will then learn the various stages of a data platform migration projects to understand what is involve in each stage to maximise the chances of a successful Data Platform Modernization Projects. Finally, students will explore the various data migration paths to understand how each approach is different and why you would choose one migration approach over another.

TOPICS

Understand Data Platform Modernization · Understanding the stages of migration · Data Migration Paths

02

2 Labs

Choose the Right Tools for Data Migration

In this module, the student will be introduced to the Data Migration Guide as a starting point for the source of information that your organization should use for step by step guidance for modernizing your existing data platform. They will then learn the value of the Microsoft Assessment and Planning Toolkit to help discover the data assets that currently exist in their environments. The students will then learn the tools that can be used to help them to asses for compatibility or workload issues using both the Data Migration and Data Experimentation Assistant. The students will then see how the Azure Database Migration Service can be used to aid online migration of databases to reduce the amount of downtime. Finally, an overview of the SQL Migration assistant is provided to show student how to migrate no-SQL Server workloads.

TOPICS

- Discover the Database Migration Guide
- Build your data estate inventory using Map Toolkit
- Identify Migration candidates using Data Migration Assistant
- Evaluate a Data workload using Database Experimentation Assistant
- Data Migration using Azure Database Migration Service
- Migrate non-SQL Server workloads to Azure using SQL Migration Assistant

03

Lab

Migrating SQL Workloads to Azure Virtual Machines

In this module, the student will learn how to migrate on-premises SQL workloads to Azure Virtual Machines that are running SQL Server. Students will first explore the migration consideration when migrating from on-premises SQL Server to Azure Virtual Machines and the benefits they can gain by performing the migration. They will then learn the different migration options that can be performed when migrating to Azure Virtual Machines. This will include a look at the benefits and limitations of each approach. The students will finally look at SQL Server workloads that include High Availability and Disaster Recovery to ensure service continuity.

TOPICS

- Considerations of SQL Server to Azure VM Migrations
- SQL Workloads to Azure VM Migration Options
- Implementing High Availability and Disaster Recovery Scenarios

04

Lab

Migrate SQL Workloads to Azure SQL Databases

In this module, the students will explore what is Azure SQL Database and why it is a suitable target for SQL based workloads. It teaches students how to choose the appropriate SQL Server instance option and why it can fulfil business requirements for data platform modernization. The modules will also show students how they can perform both offline and online migrations to Azure SQL Database. By doing so, they can assess which method maybe appropriate to their scenarios at work. It will also show the tools that can be used to enable the data migration process. Finally, they will explore the methods that can be used to load data into Azure SQL Database from an on-premises instance.

TOPICS

- Choose the right SQL Server Instance option in Azure
- Migrate SQL Server to Azure SQL DB offline
- Migrate SQL Server to Azure SQL DB online
- Load and Move data to Azure SQL Database

05

Lab

Migrate SQL Workloads to Azure SQL Database Managed Instance

This module will explore what is an Azure SQL Database Managed Instance and why it is a suitable target for SQL based workloads. They also learn how Azure SQL Database Managed Instance can fulfil the business requirements for data platform modernization. The students will then explore the tools that can be used to enable the data migration process to Azure SQL Database Managed Instance. They will then explore the methods and tools that can be used to load data into Azure SQL Database Managed Instance from an on-premises instance. Finally, they will learn some of the changes that may need to be made to existing SQL based applications so that they can use Azure SQL Database Managed Instance.

TOPICS

- Evaluate migration scenarios to SQL Database Managed Instance
- Migrate to SQL Database Managed instance
- Load and Move data to SQL Database Managed instance
- Application Configuration and Optimization

HANDS-ON LABS

Practise What You Learn

#	MODULE	ACTIVITY
01	**Introducing Data Platform Modernization**	■ **Introducing Data Platform Modernization:** Understand Data Platform Modernization ■ Understand the Stages of Migration ■ Data Migration Paths
02	**Choose the Right Tools for Data Migration**	■ **Choose the right Tools for Data Migration:** Identify Migration candidates using Data Migration Assistant ■ Evaluate a Data workload using Database Experimentation Assistant
03	**Migrating SQL Workloads to Azure Virtual Machines**	Migrating SQL Workloads to Azure Virtual Machines
04	**Migrate SQL Workloads to Azure SQL Databases**	Migrate SQL Workloads to Azure SQL Databases
05	**Migrate SQL Workloads to Azure SQL Database Managed Instance**	Migrate SQL Workloads to Azure SQL Database Managed Instance

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training | Live Online Classes (ILO) | Fly-Me-A-Trainer (FMAT) | Flexi (Self-Paced) | 1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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