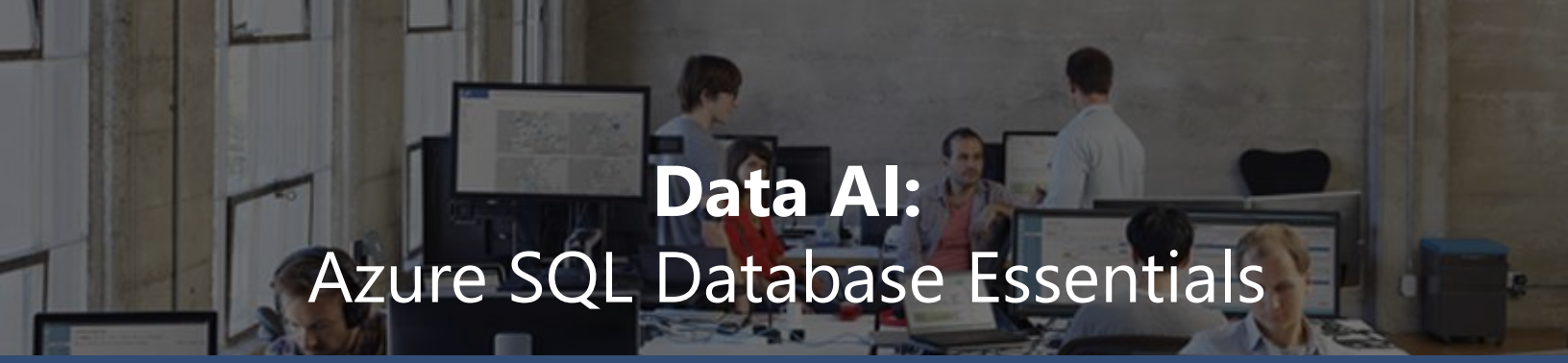


Data AI:
Azure SQL Database Essentials

WorkshopPLUS

Duration: 3 Days | **Focus Area:** Business/IT Alignment | **Level**: 200

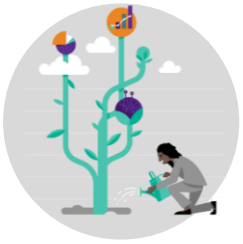
This course will provide you the knowledge and tools necessary to understand the capabilities and usage of cloud databases. It will help you to get familiar with the Azure SQL Database concepts and also help you to learn how to migrate, manage, monitor and troubleshoot your Azure SQL Database solution.

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

OUTCOMES

Skills

Gain a comprehensive understanding of the features and capabilities of Azure SQL Database.



Best Practices

Learn reliable methods of managing, designing scalable and disaster recovery plans, monitoring and troubleshooting Azure SQL Database.

Way Forward

Take what you've learned in the classroom and apply it to your environment for your business.

PREREQUISITES

Participants that have existing experience performing database management will receive the most value from this course.

Recommended Qualifications

- Experience in SQL Server fundamentals like administration, high availability, performance tuning, troubleshooting
- Some basic knowledge on Microsoft's Windows Azure platform

Hardware Requirements

- An Intel Core-i5-based PC
- 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

Microsoft

AGENDA

Duration: 3 days

Introduction to Azure SQL Database
Azure SQL Database Administration
Azure SQL Database Business Continuity

Elastic Database Pools
Azure SQL Database Managed Instance
Azure SQL Database Migration & Sync Data

Manage Security for Azure SQL Database
Monitoring and Tuning Azure SQL Database

SYLLABUS

Module 1: Introduction to Azure SQL Database

- Basic concepts of Azure SQL Database
- How to create Azure SQL Database
- Various Tools to Manage Azure SQL Database
- The difference between SQL Server IaaS and PaaS Solutions

Module 2: Azure SQL Database Administration

- Scaling Azure SQL Databases Up and Down
- Maintenance and Scheduling Jobs in Azure SQL Database
- Manage Logins in Azure SQL Database

Module 3: Azure SQL Database Business Continuity

- Business Continuity Features in Azure SQL Database
- Disaster Recovery Features in Azure SQL Database

Module 4: Manage Security for Azure SQL Database

- Introduction to Azure SQL Database Security
- Implement Azure Active Directory Security
- Implement Firewall Rules and Virtual Networks
- Implement Transparent Data Encryption
- Implement Always Encrypted
- Implement Row Level Security
- Implement Dynamic Data Masking
- Implement Auditing for Azure SQL Database
- Implement Advanced Threat Detection

Module 5: Monitoring and Tuning Azure SQL Database

- Monitoring and Troubleshooting Azure SQL Database
- Monitoring Query Performance using Query Performance Insight
- Azure SQL Database Tuning using Automatic Tuning
- Monitoring Azure SQL Database performance using Intelligent Insights
- Monitoring Azure SQL Database performance using Extended Events
- Configure Alerts through Azure Portal

Module 6: Elastic Database Pools in Azure SQL Database

- Introduction to Elastic Database Pools in Azure SQL Database
- Scaling out with Azure SQL Database
- Elastic Database Query Overview
- Managing scaled-out cloud databases
- Distributed transactions across cloud databases

Module 7: Azure SQL Managed Instance

- Introduction to Azure SQL Managed Instance
- Azure SQL Managed Instance Infrastructure
- Azure SQL Managed Instance Business Model
- How to Connect to Azure SQL Managed Instance

Module 8: Azure SQL Database Migration & Sync Data

- Steps to migrate your database to Azure SQL Database
- Is your database ready to move to Azure SQL database?
- Fix database migration compatibility issues
- Migrate a compatible SQL Server database to Azure SQL Database
- Sync Data across multiple cloud and on-premises databases

NEXT STEPS: If you are interested in running SQL Database in Azure for your organization, contact your Microsoft Account Representative.

Microsoft