MICROSOFT TRAINING

Migrate Nosql Workloads Azure Cosmos Db Training Course

Learn to seamlessly migrate NoSQL workloads to Azure Cosmos DB. Master data migration for scalable, high-performance cloud solutions.

DURATION
2 hours

LEVEL
Intermediate

FORMAT
Instructor-Led

- Globally Recognized Certification
- Expert-Led Hands-On Training
- Flexible Scheduling

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COURSE OVERVIEW

This intermediate-level course, "Migrate NoSQL Workloads Azure Cosmos DB Training Course," provides a targeted and practical learning experience for IT professionals looking to leverage the power of Microsoft Azure Cosmos DB. Throughout this 2-hour intensive program, you will gain the essential knowledge and hands-on skills required to successfully plan, execute, and optimize the migration of diverse NoSQL workloads from existing platforms to Azure Cosmos DB, Microsoft's globally distributed, multi-model database service.

Participants will delve into core technologies such as Azure Cosmos DB's various APIs (including SQL, MongoDB, Cassandra, Gremlin, and Table), Azure Database Migration Service (DMS), and other data migration tools and techniques. You will learn how to assess current NoSQL environments, design optimal Cosmos DB data models, ensure data integrity during transfer, and implement effective post-migration monitoring and performance tuning. The professional benefits of this course include enhanced cloud database administration capabilities, the ability to drive significant cost efficiencies through cloud adoption, and the strategic advantage of deploying highly scalable and resilient data solutions.

Duration	2 hours
Level	Intermediate
Vendor	Microsoft

COURSE CURRICULUM

01 Module 1: Introduction to Azure Cosmos DB and Migration Fundamentals

- Overview of Azure Cosmos DB capabilities and benefits
- Understanding Cosmos DB APIs: SQL, MongoDB, Cassandra, Gremlin, Table
- Common challenges in NoSQL migrations
- Introduction to migration strategies and tools for Cosmos DB
- Cost considerations and resource planning for Cosmos DB

02 Module 2: Pre-Migration Assessment and Planning

- Assessing existing NoSQL workloads (MongoDB, Cassandra, etc.)
- Data modeling best practices for Azure Cosmos DB APIs
- Estimating throughput (RUs) and storage requirements
- Identifying migration risks and developing mitigation plans
- Network connectivity and security planning for migration

03 Module 3: Executing the Migration with Azure Tools

- Utilizing Azure Database Migration Service (DMS) for NoSQL
- Hands-on with the Azure Cosmos DB Data Migration Tool
- Programmatic migration techniques using SDKs for specific APIs
- Migrating data from MongoDB, Cassandra, and Azure Table Storage sources
- Data transformation and cleansing during migration

04 Module 4: Post-Migration Optimization and Operations

- Validating data integrity and consistency post-migration
- Performance tuning and indexing strategies for Cosmos DB
- Monitoring Azure Cosmos DB with Azure Monitor
- Backup, restore, and disaster recovery strategies
- Security best practices and access control in Cosmos DB

CAREER PATHWAYS

Graduates of this program are prepared for the following roles:

> **Azure Data Engineer**

> **Cloud Database Administrator (NoSQL Specialist)**

> **Azure Solutions Architect (Data Migration Focus)**

FREQUENTLY ASKED QUESTIONS

Q: What specific types of NoSQL databases will I learn to migrate to Azure Cosmos DB in this course?

This course focuses on migration strategies and tools applicable to popular NoSQL platforms, including MongoDB, Apache Cassandra, and Azure Table Storage, demonstrating how to effectively transition these workloads to their corresponding Azure Cosmos DB APIs (MongoDB API, Cassandra API, and Table API) and the Core (SQL) API.

Q: How will this course help me understand data modeling challenges when moving complex NoSQL schemas to Azure Cosmos DB?

You will learn to assess your existing NoSQL data models and translate them effectively to Azure Cosmos DB's multi-model design. The course covers critical considerations for schema design within the SQL API, and how to best leverage the native API compatibility for MongoDB, Cassandra, and Table data, ensuring optimal performance and scalability in your new Cosmos DB environment.

Q: What practical skills will I gain to handle potential downtime and ensure data consistency during a real-world NoSQL migration to Azure Cosmos DB?

This course provides practical guidance on minimizing downtime through various cutover strategies, including online and offline migration techniques. You will also learn about robust data validation methods, consistency level considerations in Azure Cosmos DB, and monitoring tools to ensure data integrity and operational continuity throughout the migration process.

ABOUT COMPUTER PRIDE

East Africa's Premier IT Training Center

With over 15 years of excellence, Computer Pride delivers globally recognized certification programs from leading technology vendors. Located on Kenyatta Avenue in Nairobi's CBD, our state-of-the-art facilities and expert instructors have empowered thousands of professionals across East Africa.

15+	10,000+	50+
Years of Excellence	Professionals Trained	Vendor Certifications

READY TO ENROL?

Take the next step in your technology career.

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