



GTech Learn

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Course Contents

DP-420: Designing and Implementing Cloud-Native Applications Using Microsoft Azure Cosmos DB

Duration: 4 Days	Level: Intermediate	Role: Developer
Certification: Available	Public Schedules: View Dates	Private Delivery: Reach Us

What's included?

- ✓ Learn from Microsoft Certified Trainer (MCT's)
- ✓ 24x7 Lab Access
- ✓ Official Courseware
- ✓ Exam Preps / Practice Tests
- ✓ Badges & Completion Certificate
- ✓ Discounted Exam Vouchers



Data & AI
Azure

Training Services

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Overview

This course teaches developers how to create application using the SQL API and SDK for Azure Cosmos DB. Students will learn how to write efficient queries, create indexing policies, manage and provisioned resources, and perform common operations with the SDK.

Audience Profile

Software engineers tasked with authoring cloud-native solutions that leverage Azure Cosmos DB SQL API and its various SDKs. They are familiar with C#, Python, Java, or JavaScript. They also have experience writing code that interacts with a SQL or NoSQL database platform.

Contents

Learning path 1: Get started with Azure Cosmos DB for NoSQL

- Introduction to Azure Cosmos DB for NoSQL
- Try Azure Cosmos DB for NoSQL

Learning Path 2: Plan and implement Azure Cosmos DB for NoSQL

- Plan resource requirements
- Configure Azure Cosmos DB for NoSQL throughput
- Moving data into and out of Azure Cosmos DB for NoSQL

Learning Path 3: Connect to Azure Cosmos DB for NoSQL with the SDK

- Import and use the Azure Cosmos DB for NoSQL SDK
- Configure the Azure Cosmos DB for NoSQL SDK

Learning Path 4: Access and manage data with the Azure Cosmos DB for NoSQL SDKs

- Implement Azure Cosmos DB for NoSQL point operations
- Perform cross-document transactional operations with the Azure Cosmos DB for NoSQL
- Process bulk data in Azure Cosmos DB for NoSQL

Learning Path 5: Execute queries in Azure Cosmos DB for NoSQL

- Query the Azure Cosmos DB for NoSQL
- Author complex queries with the Azure Cosmos DB for NoSQL

Learning Path 6: Define and implement an indexing strategy for Azure Cosmos DB for NoSQL

- Define indexes in Azure Cosmos DB for NoSQL
- Customize indexes in Azure Cosmos DB for NoSQL

Learning Path 7: Integrate Azure Cosmos DB for NoSQL with Azure services

- Consume an Azure Cosmos DB for NoSQL change feed using the SDK
- Handle events with Azure Functions and Azure Cosmos DB for NoSQL change feed
- Search Azure Cosmos DB for NoSQL data with Azure Cognitive Search

Learning Path 8: Implement a data modeling and partitioning strategy for Azure Cosmos DB for NoSQL

- Implement a non-relational data model
- Design a data partitioning strategy

Learning Path 9: Design and implement a replication strategy for Azure Cosmos DB for NoSQL

- Configure replication and manage failovers in Azure Cosmos DB
- Use consistency models in Azure Cosmos DB for NoSQL
- Configure multi-region write in Azure Cosmos DB for NoSQL

Learning Path 10: Optimize query and operation performance in Azure Cosmos DB for NoSQL

- Optimize indexes in Azure Cosmos DB for NoSQL
- Measure index performance in Azure Cosmos DB for NoSQL
- Implement integrated cache

Learning Path 11: Monitor and troubleshoot an Azure Cosmos DB for NoSQL solution

- Measure performance in Azure Cosmos DB for NoSQL
- Monitor responses and events in Azure Cosmos DB for NoSQL
- Implementing backup and restore for Azure Cosmos DB for NoSQL
- Implement security in Azure Cosmos DB for NoSQL

Learning Path 12: Manage an Azure Cosmos DB for NoSQL solution using DevOps practices

- Write management scripts for Azure Cosmos DB for NoSQL
- Create resource template for Azure Cosmos DB for NoSQL

Learning Path 13: Create server-side programming constructs in Azure Cosmos DB for NoSQL

- Build multi-item transactions with the Azure Cosmos DB for NoSQL
- Expand query and transaction functionality in Azure Cosmos DB for NoSQL

About GTech Learn

Established in 2011 in the USA, GTech Learn is one of the leading IT training organizations in North America & South East Asia. Driven by its unique USPs, GTech Learn is spurring competition, meeting the unmet needs of customers, assisting in skills upgrade, and supplementing talent pools with its presence in the USA, Canada, Singapore and India. This is consistent with our vision to help our Learners with skills upgrade for enhanced career opportunities.







As a Microsoft Learning Partner, we offer a broad range of learning solutions across the full Microsoft technology stack that can be customized.

Since 2011, GTech Learn has been developing custom-fit learning solutions that involve creating and delivering maximum results.

We have successfully helped all types of businesses, government entities, and individuals. For this reason, GTech has chosen by Microsoft to deliver comprehensive learning programs around the globe.

With flexible learning options, state-of-the-art delivery methods, numerous language preferences, experienced instructors, and complete dedication to our students, GTech Learn has the capabilities to help students develop their Microsoft skill sets and achieve increasingly high standards of productivity while organizations of all sizes realize the full potential of their technology investments.

Our Accreditations with Microsoft

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 Infrastructure Azure Training Services	 Digital & App Innovation Azure Training Services	 Data & AI Azure Training Services