

COURSE OVERVIEW

Course Name:
(DP-420) Designing and Implementing Cloud Native Applications using Microsoft Azure

COURSE DURATION: 4 Days

Gauteng:

3rd Floor, 34 Whitely Road
Melrose Arch
Johannesburg
2196

Gauteng:

192 on Bram
192 Bram Fischer Drive
Ferndale, Randburg
Johannesburg
2160

Cape Town:

3rd Floor, Thomas Pattullo Building
19 Jan Smuts St
Cape Town
8000

Durban:

9 Mountview Close
Broadlands
Mount Edgecombe
Durban
4302

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INTRODUCTION

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.

DELIVERY METHOD

Our courses have flexible delivery options:

- In-person classroom training at the Impactful training facilities
 - Johannesburg, Durban, Cape Town
- Virtual instructor-led training
- Nationally: on-site at the client

INTENDED AUDIENCE

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.

PREREQUISITES

Before attending this course, students must have:

- Knowledge of Microsoft Azure and ability to navigate the Azure portal (AZ-900 equivalent)
- Experience writing in an Azure-supported language at the intermediate level. (C#, JavaScript, Python, or Java)
- Ability to write code to connect and perform operations on a SQL or NoSQL database product. (SQL Server, Oracle, MongoDB, Cassandra or similar)

COURSE CONTENT

Get started with Azure Cosmos DB for NoSQL

Learn about the Azure Cosmos DB for NoSQL and how to get started with your first account, database, and container.

Plan and implement Azure Cosmos DB for NoSQL

Plan for configuration options and provisioning choices with a new Azure Cosmos DB for NoSQL account.

Connect to Azure Cosmos DB for NoSQL with the SDK

Use the Microsoft.Azure.Cosmos library from NuGet to connect to an Azure Cosmos DB for NoSQL account from a .NET application.

Access and manage data with the Azure Cosmos DB for NoSQL SDKs

Use the .NET SDK for Azure Cosmos DB for NoSQL to perform common operations on databases, containers, and items.

Execute queries in Azure Cosmos DB for NoSQL

Create SQL queries for the Azure Cosmos DB for NoSQL using the Data Explorer and the .NET SDK

Define and implement an indexing strategy for Azure Cosmos DB for NoSQL

Create custom indexing policies for Azure Cosmos DB for NoSQL containers.

Integrate Azure Cosmos DB for NoSQL with Azure services

Integrate Azure Cosmos DB for NoSQL with Azure Cognitive Search, Azure Functions, and your own solutions.

Implement a data modeling and partitioning strategy for Azure Cosmos DB for NoSQL

In this learning path, you'll learn how Azure Cosmos DB uses partitioning to scale containers and how spending some time thinking about your data model helps to meet the performance needs of your applications.

Design and implement a replication strategy for Azure Cosmos DB for NoSQL

Plan and implement techniques to replicate data across the globe in Azure Cosmos DB for NoSQL.

Optimize query and operation performance in Azure Cosmos DB for NoSQL

Optimize the performance of your queries and operations using Azure Cosmos DB for NoSQL.

Monitor and troubleshoot an Azure Cosmos DB for NoSQL solution

Review the common Cosmos DB administrative tasks of monitor, performance metrics, backup and security used in Azure.

Manage an Azure Cosmos DB for NoSQL solution using DevOps practices

Use the command line and Azure Resource Manager to automate common management tasks for Azure Cosmos DB for NoSQL.

Create server-side programming constructs in Azure Cosmos DB for NoSQL

Use JavaScript to author server-side stored procedures, user-defined functions, and triggers.