

Slalom Cosmos DB Accelerator

Slalom Cosmos DB Accelerator allows our developers to migrate data and provides a SQL API based code sample to [jump start development](#).

OUR GOAL

The goal of the Cosmos DB Accelerator is to simply demonstrate the main functionality of the Azure's NoSQL database.

Cosmos DB supports multiple data models and supports multiple API for the data stored. For our initial delivery we will provide example for SQL API.

This accelerator includes:

- Templates to automate the provisioning of Cosmos DB and Accounts. ARM, BICEP and Terraform templates are provided.
- Four version of Retail data based on open source AdventureWorks database.
- A Windows console application developed using .Net C# which demonstrates:
 - Create Databases and Containers
 - Load data into Cosmos DB NoSQL using provided four versions of AdventureWorks data files.
 - Query and Update the data using SQL queries and Cosmos DB SDK methods.
 - Provide basic analytical queries by joining data.
 - Provide paginated queries.
 - Delete databases

A Readme markdown file with instructions on how to execute the templates and use the application menu items. The file includes links to four version of the data files and original AdventureWorks database backup file.

OUR APPROACH

Deliver Quickly

The Accelerator includes a fully functioning sample which could be used in a client engagement to jump start development of a solution based on Cosmos DB.

Infrastructure as a code

Provided templates should help provision Cosmos DB instance. The three templates are widely used industry standards.

Supported APIs (Future)

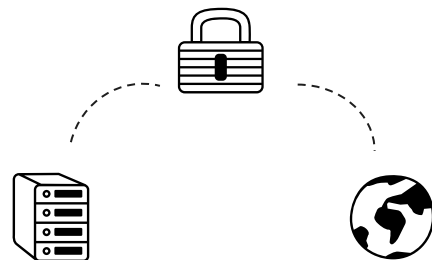
Future releases will include separate code bases for other APIs:

- Mongo DB
- Cassandra
- Postgres
- Gremlins

Programming Languages (Future)

Future releases will be separate versions of the accelerator for each of the following languages

- Python
- NodeJS



Slalom Cosmos DB Accelerator

A custom database service designed to help you **easily build and scale applications**

that can run **globally with low latency and high availability**? Say no more.

MORE ABOUT COSMOS DB

Slalom Cosmos DB is a custom, fully managed NoSQL database service built for global applications that need seamless and secure data distribution. It is designed to help you easily build and scale applications that can run globally with low latency and high availability. With our accelerator, you can store and access data using multiple data models, including documents, key-value, graph, and column-family data models, providing you with the flexibility you need to build applications that can handle a variety of data types.

One of the key benefits of Cosmos DB is its ability to globally distribute your data to any number of Azure regions, which allows you to provide a fast and responsive experience for your users around the world. This accelerator also provides elastic scalability, allowing you to scale up or down based on your needs and pay only for what you use.

In addition to its scalability and distribution capabilities, our database service also provides a range of features that help you ensure the security and compliance of your data. You can easily encrypt your data, audit your access logs, and implement role-based access control.

In summary, Slalom Cosmos DB is a powerful and flexible database service that can help you build and scale global applications quickly and easily, while also ensuring the security and compliance of your data.

COSMOS DB KEY CAPABILITIES

- 1. Multi-model data support:** This accelerator supports multiple data models such as document, key-value, graph, and column-family data models, allowing you to choose the best model for your data.
- 2. Global distribution:** Allowing you to distribute your data globally across any number of Azure regions, Cosmos DB makes it easier to achieve low latency and provide a better experience for your users.
- 3. Elastic scalability:** Azure Cosmos DB can handle large amounts of data and can scale up or down quickly based on your needs, allowing you to pay only for what you use.
- 4. Low latency:** Providing low latency access to your data, this accelerator allows you to deliver a faster, more responsive experience to your users.
- 5. Consistency options:** This accelerator provides different consistency options to choose from, allowing you to select the appropriate consistency level based on your needs.
- 6. Security and compliance:** Azure Cosmos DB is compliant with industry standards such as HIPAA, GDPR, and ISO, and provides features such as encryption, auditing, and role-based access control to help you secure your data.
- 7. Cost-effective:** A cost-effective solution for managing large amounts of data, this database service allows you to save money while still getting the performance and scalability you need.
- 8. Enterprise-grade security & compliance:** Compliant with industry standards such as HIPAA, GDPR, and ISO, Cosmos DB provides features such as encryption, auditing, and role-based access control to help you secure your data.

Slalom Cosmos DB Accelerator

Handling **large volumes of data and driving monumental impact** in organizations, all in record time. **Cosmos DB** can be used in a **variety** of different industries.

TOP USE CASES FOR COSMOS DB

These are just a few examples of how Cosmos DB can be used in different industries. The flexibility and scalability of Cosmos DB makes it a great option for a wide variety of use cases, and there are likely many other applications that are specific to each industry.



Finance

- **Fraud detection:** Cosmos DB can help financial institutions detect fraudulent activities in real-time by analyzing large amounts of transaction data.
- **Risk management:** Our accelerator can help banks and other financial institutions manage risk by providing a highly scalable and flexible platform to analyze and manage large volumes of financial data.
- **Compliance reporting:** This service can help financial institutions meet regulatory compliance requirements by providing a centralized platform to store and analyze financial data.



Manufacturing

- **Supply chain management:** This accelerator help manufacturers track inventory levels, monitor production, and manage their supply chain in real-time.
- **Predictive maintenance:** Cosmos DB can help manufacturers predict when equipment is likely to fail, allowing them to schedule maintenance before it becomes a problem.
- **Quality control:** Helping manufacturers monitor product quality in real-time, Cosmos DB allows them to quickly identify and address quality issues.



Retail

- **Personalized marketing:** Cosmos DB can provide personalized recommendations to their customers by analyzing their purchase history, browsing behavior, and other data.
- **Inventory management:** This accelerator can help retailers manage inventory in real-time, allowing them to optimize stock levels and avoid stockouts.
- **Customer service:** Helping retailers provide better customer service by enabling them to access customer data in real-time, Cosmos DB allows them to quickly respond to inquiries and resolve issues.



Healthcare

- **Patient management:** Our accelerator can help healthcare providers manage patient data and provide personalized treatment plans based on their medical history and other data.
- **Clinical trials:** Helping healthcare organizations manage and analyze data from clinical trials, this database service allows them to quickly identify potential treatments and drug interactions.
- **Health monitoring:** Cosmos DB can help healthcare providers monitor patients in real-time, allowing them to quickly respond to changes in their condition and provide personalized care.