

Working with Azure Cosmos DB - Cassandra API



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Overview



Introduction on Apache Cassandra

Benefits of using Azure Cosmos DB
Cassandra API

Provisioning a new Cosmos DB
Cassandra API instance

Interact with Cosmos DB Cassandra API

- .NET SDK
- Data Explorer

Demo: working with Cosmos DB
Cassandra API



“Apache Cassandra is a free and open-source, distributed, wide column store, NoSQL database...”

Wikipedia



Wide Column Store



A wide column store is a type of NoSQL database



Unlike a relational database, the names and format of the columns can vary from row to row in the same table



Apache Cassandra, Hbase and Azure Tables



Azure Cosmos DB Cassandra API



Cosmos DB Cassandra API can be used as the data store for apps written for Apache Cassandra



Existing Cassandra applications using CQLv4 compliant drivers, can communicate with the Cosmos DB Cassandra API



Switch from Apache Cassandra to Cosmos DB Cassandra API by just updating the connection string



Use the CQL, Cassandra-based tools and Cassandra client drivers you're already familiar with



Benefit of Using Cosmos DB Cassandra API

No operations management (PaaS)

Use existing code and tools

Global distribution and availability

Low latency reads and writes


Throughput and storage elasticity

Choice of five well-defined consistency levels



Provisioning Cosmos DB Cassandra API

Create Azure Cosmos DB Account

 Try Cosmos DB for free, up to 20K RU/s, for 30 days with unlimited renewals. [→](#)

[Basics](#) [Network](#) [Tags](#) [Review + create](#)

Azure Cosmos DB is a globally distributed, multi-model, fully managed database service. [Try it for free](#), for 30 days with unlimited renewals. Go to production starting at \$24/month per database, multiple containers included. [Learn more](#)

Project Details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

* Subscription

Pay-As-You-Go

* Resource Group


Select existing...

[Create new](#)


Instance Details

* Account Name

Enter account name

* API 


Cassandra

Jupyter Notebooks or Apache Spark 

[Sign up for Jupyter Notebooks or Apache Spark preview](#)


* Location

(US) East US

Geo-Redundancy 

Enable

Disable

Multi-region Writes 

Enable

Disable



Interact with Cosmos DB Cassandra API

Cassandra-based tools
(e.g. cqlsh)

Data Explorer

Programmatically,
using the SDK
(CassandraCSharpDriver)



Demo



Provisioning a new instance of Cosmos DB Cassandra API using the Portal

Working with Cosmos DB Cassandra API using the .NET SDK and Data Explorer



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