



Pune DevCon 2017



Building scalable and efficient data driven apps using **Azure Cosmos DB**



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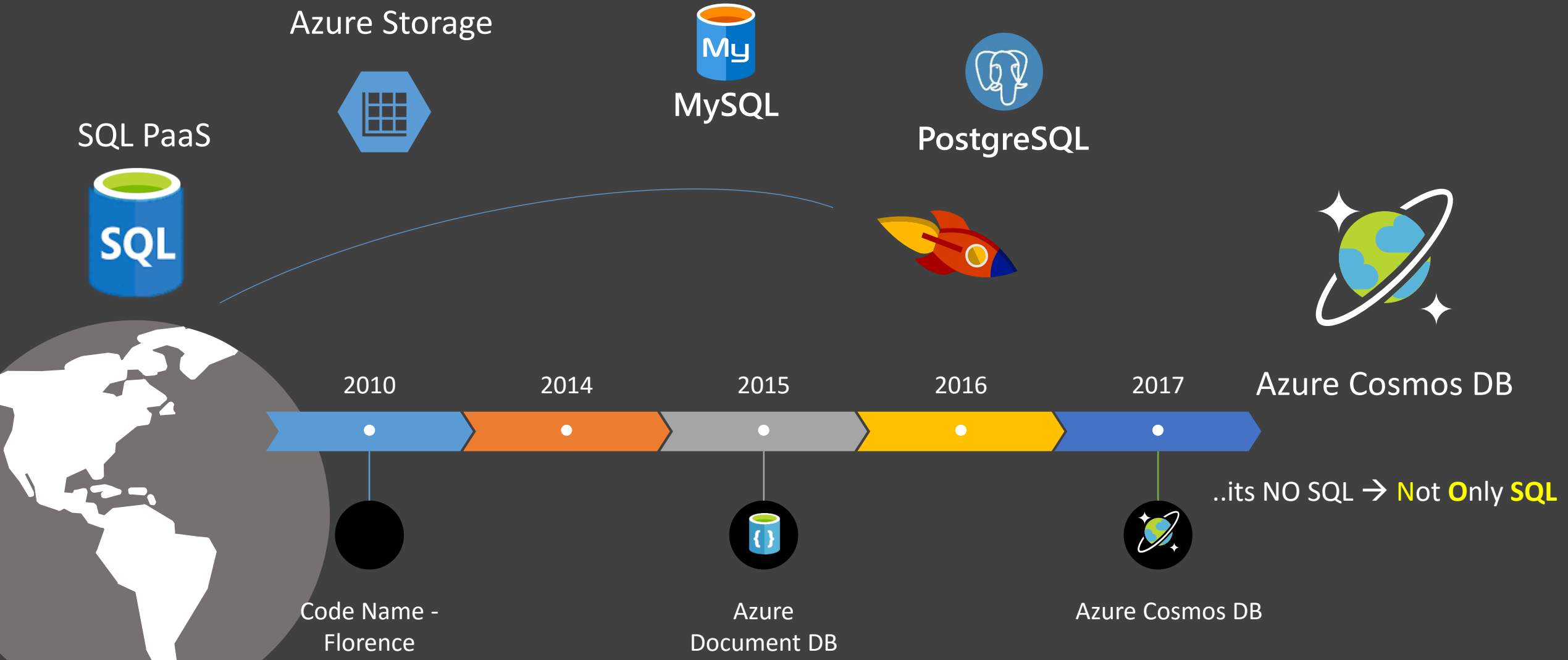
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Agenda





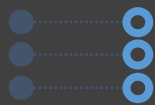
Azure Cosmos DB

A globally distributed, massively scalable, multi-model database service



Table API

MongoDB API



Key-value



Column-family



Document



Graph

Elastic scale out
of storage & throughput

Guaranteed low latency at the 99th percentile

Five well-defined consistency models

Turnkey global distribution

Comprehensive SLAs



Azure Cosmos DB Facts



- Linearizability (once operation is complete, it will be visible to all)
- 99.99% availability and low latency.
- Predictable consistency for a session, high read throughput + low latency
- Reads will never see out of order writes (no gaps).
- Potential for out of order reads. Lowest cost for reads of all consistency levels.

Request Units (RU)

Request Units (RU) is a rate-based currency. Abstracts physical resources for performing requests

1 RU = 1 Read of 1 KB Document

Reads under < 10 ms

indexed writes under 10 ms at the 99th percentile, within the same Azure region.

Demo



1. Create Cosmos DB from Azure Portal
2. Create Cosmos DB from .NET Console Application

Azure Cosmos DB APIs



MongoDB

SQL

Table storage

Gremlin Graph

Spark

Cassandra

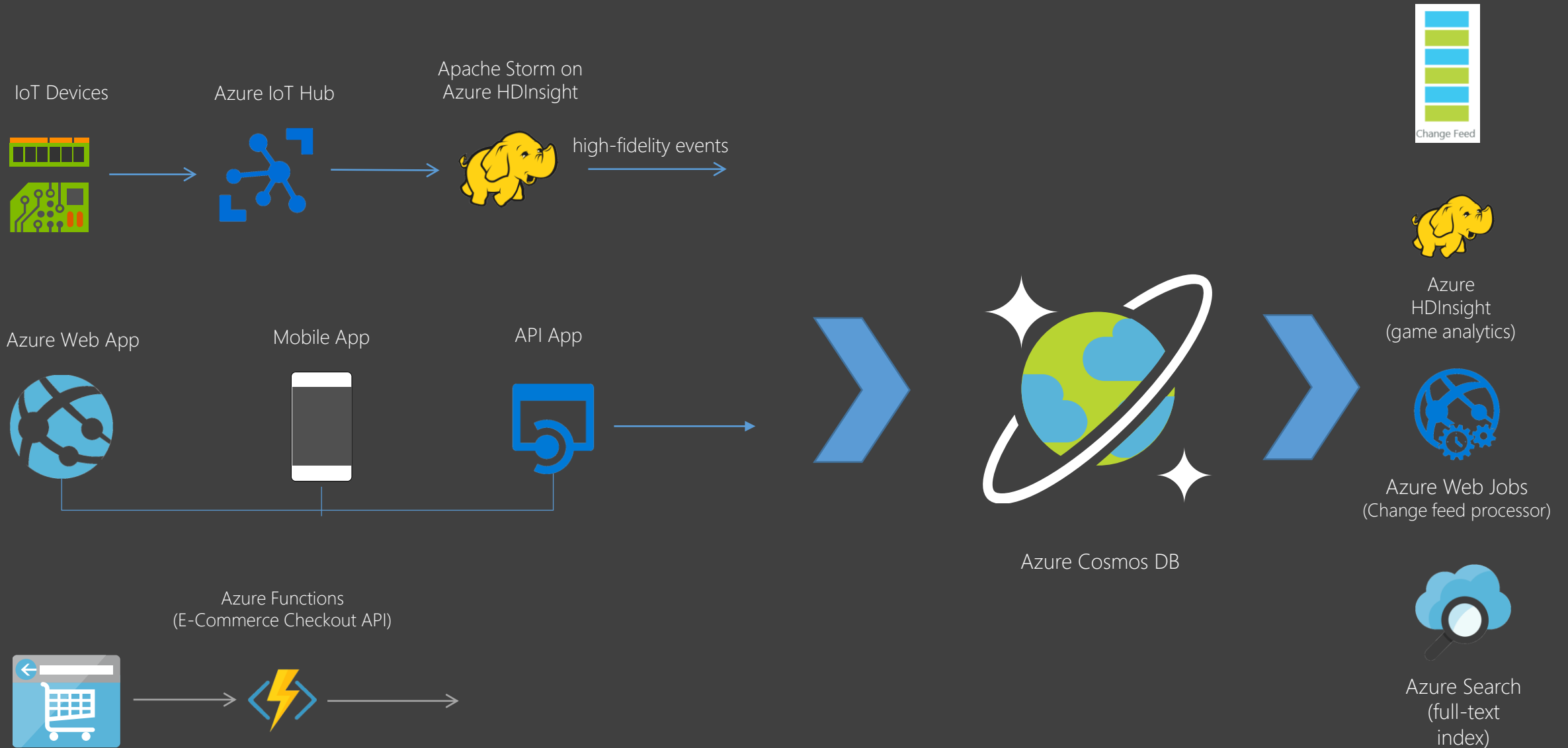
Now GA

Demo



1. Query Azure Cosmos DB
2. Migrate SQL PaaS to Azure Cosmos DB using Tool
3. Introduction to Table API

Different scenarios for using Azure Cosmos DB

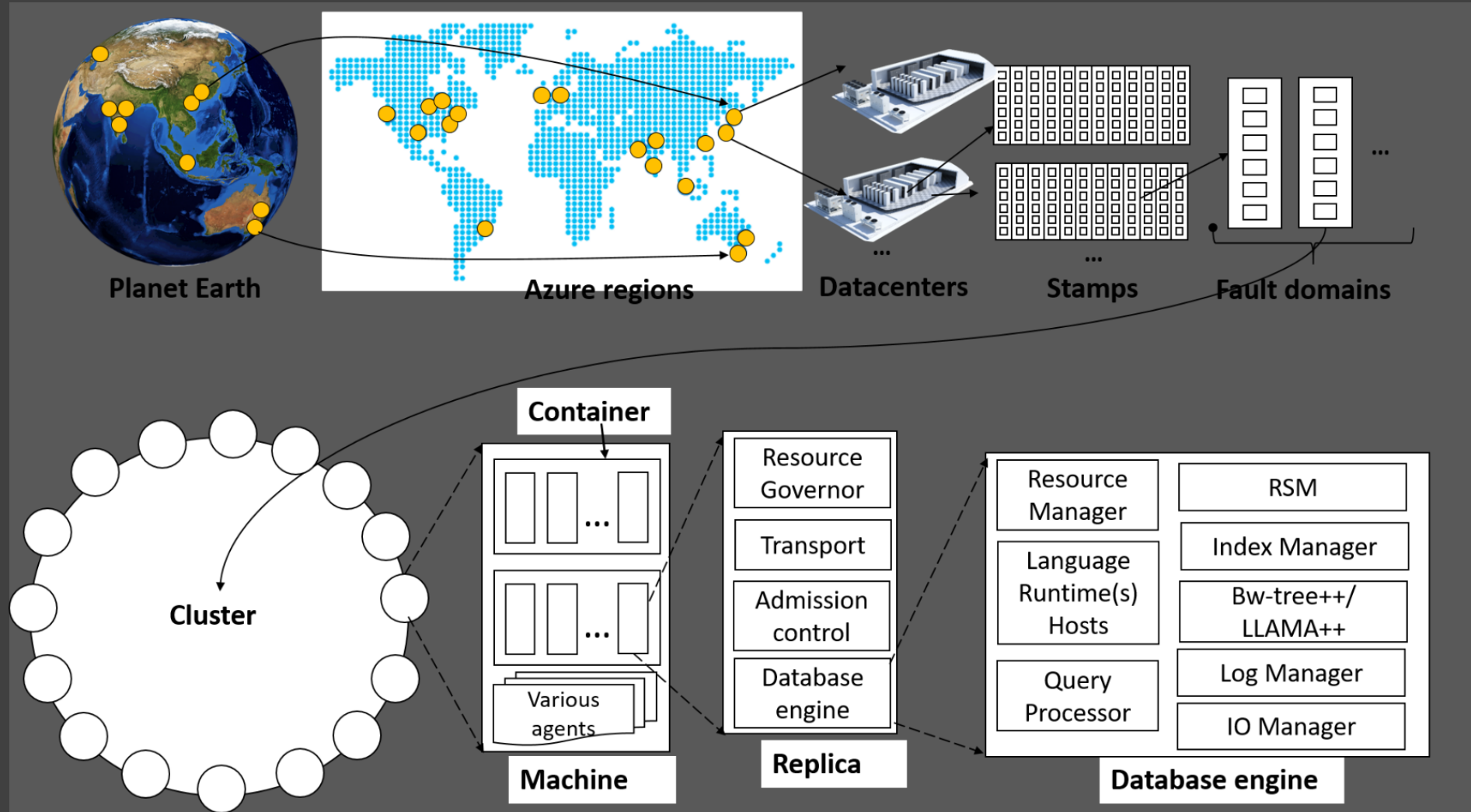


Demo



Using Azure Cosmos DB using
ASP.NET Core + Angular

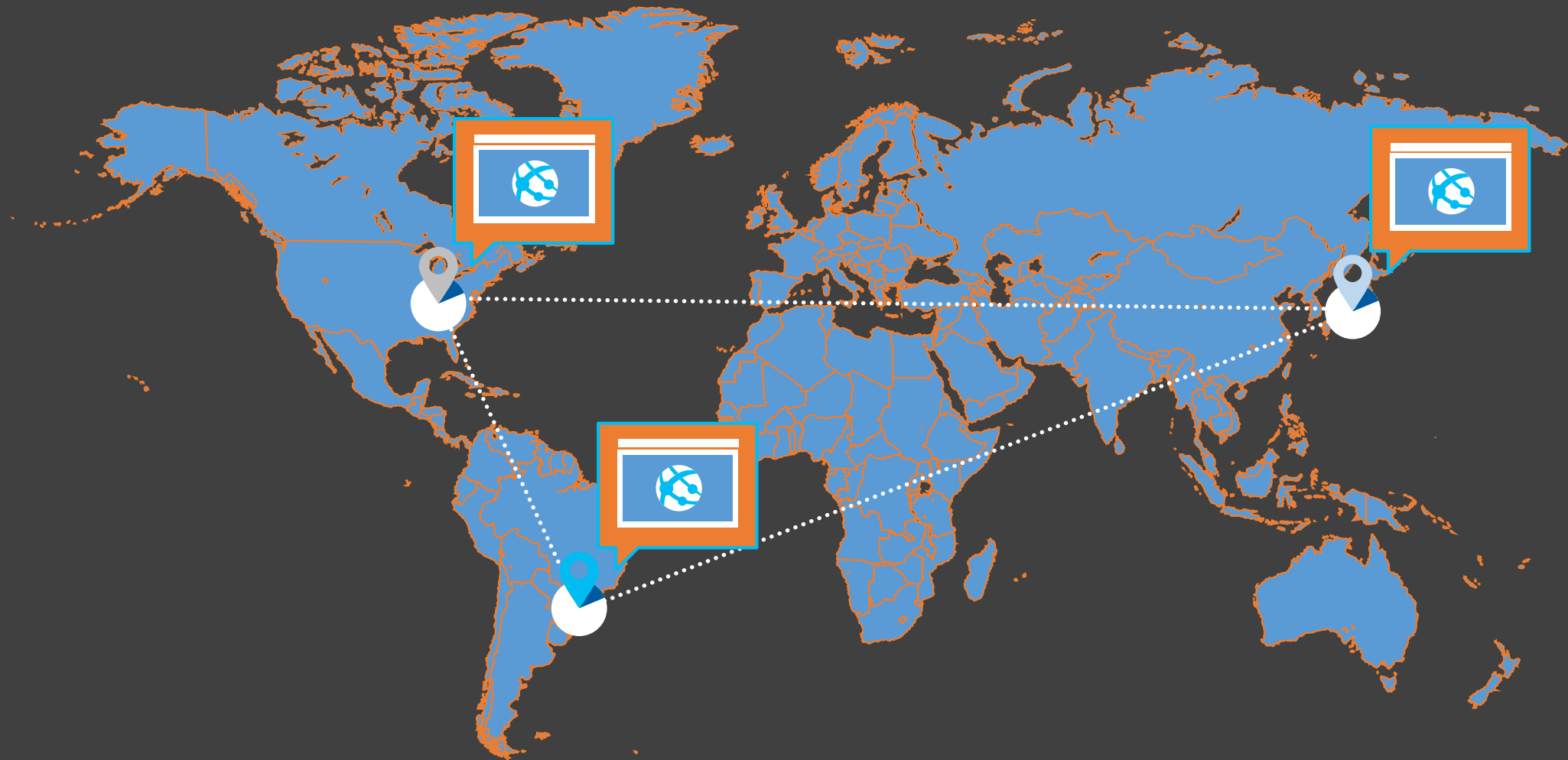
Azure Cosmos DB – Behind the scene



Generally Available

Azure Cosmos DB

New multi-master write support



Get connected...



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Additional Resources

- <https://blog.e-zest.com/> 
- <https://github.com/VikramPendse>
- <https://www.dotnetcurry.com/>
- <https://docs.microsoft.com/en-us/azure/>

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