

Implementing an Event Sourcing strategy on Azure

Olena Borzenko Eldert Grootenboer

@borzenko_lena

@egrootenboer





























































Use ECS Coins for Swag!

Top 3 win an Atari 2600+

- Get the app
- Visit sessions and sponsors, rate sessions
- **3** Earn ECS Coins
- 4 Spend ECS Coins









Introduction

Olena Borzenko

- Xebia
- Coding Consultant
- Azure MVP
- @borzenko_lena

Eldert Grootenboer

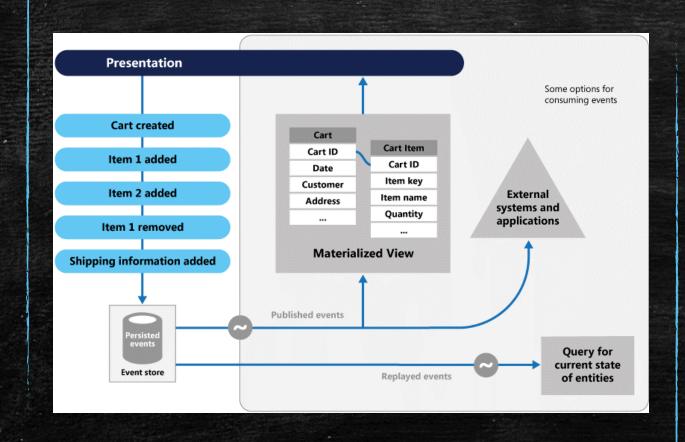
- Microsoft
- Product Manager AzureService Bus
- @egrootenboer





Event Sourcing

Event Sourcing



Event Sourcing pattern
Cloud Design Patterns
Microsoft Docs

Why use Event Sourcing?



CRUD



Locking data



Not easily scalable

Event sourcing pattern



Don't update objects



Write-heavy workloads



Inserts are more efficient

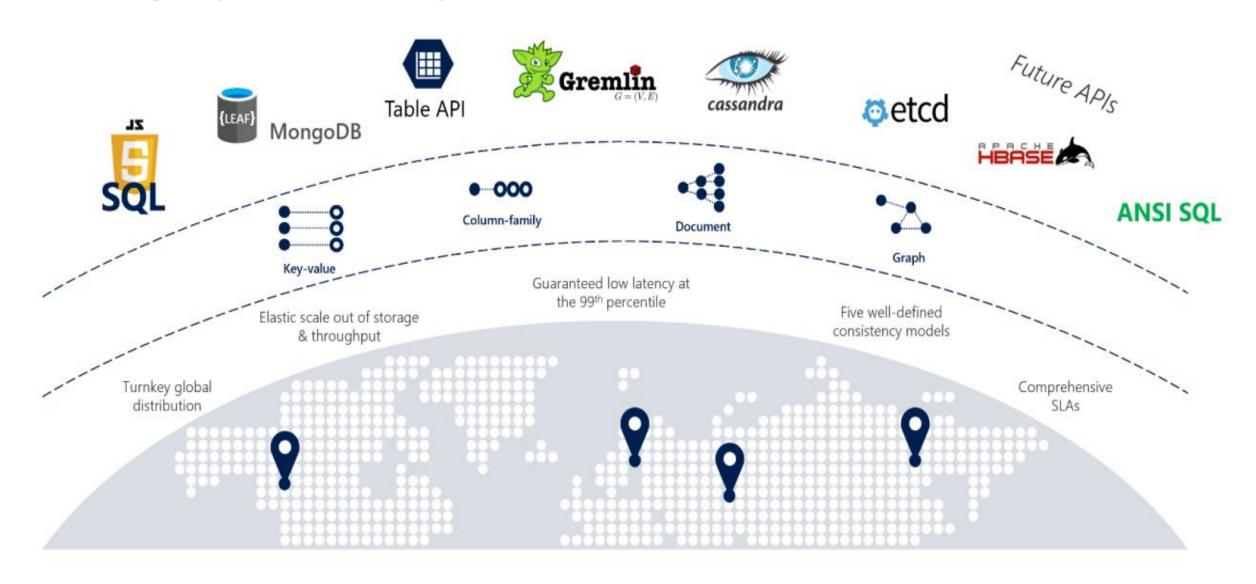


Built-in audit log

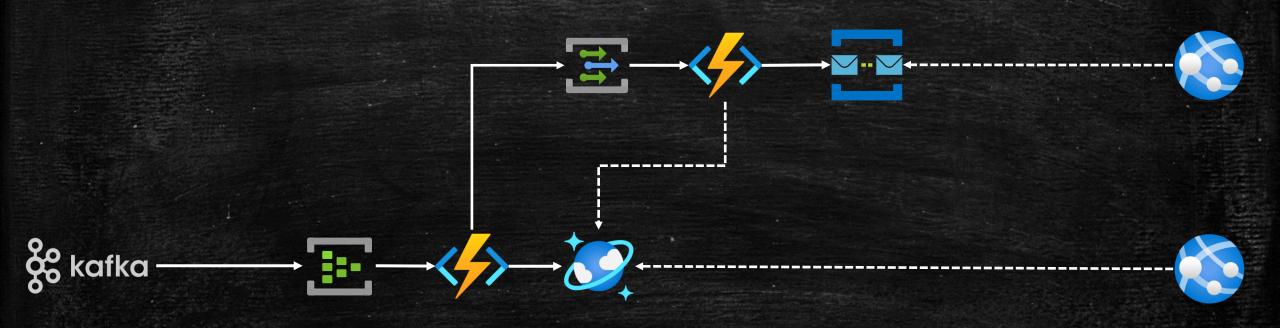
Event Sourcing on Azure

Azure Cosmos DB

Microsoft's globally distributed, massively scalable, multi-model database service



Architecture



Demo

Materialized view

Creating a materialized view









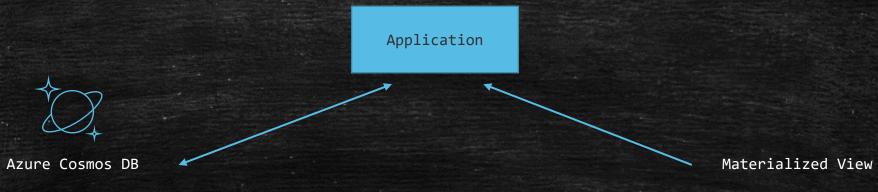
More efficient querying

Pre-populated views

Update on change

Cosmos DB Change Feed

Materialized Views



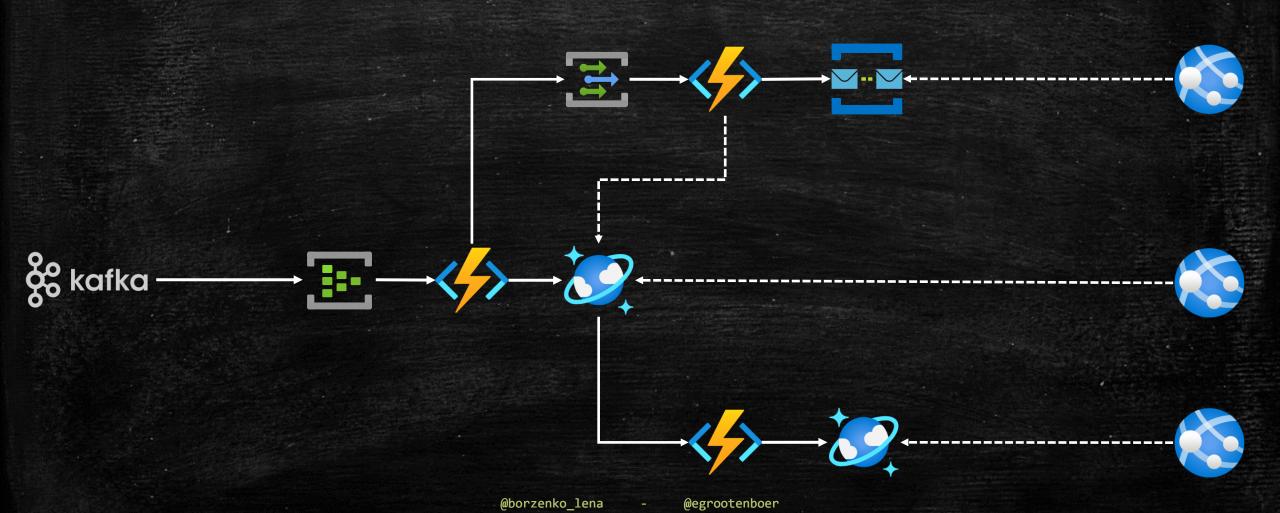
Order	User	Create Date	
123abc	Ben6	6/17/17	
456efg	Ben6	3/14/17	
789hij	Jen4	8/1/16	
012klm	Joe3	3/4/17	



Change feed

User	Total Orders
Ben6	2
Jen4	1
Joe3	1

Architecture



Demo

Almost done!

Key take-aways



Cosmos DB is a great central append-only persistent data store



Use event-sourcing on Azure with heavy write loads



Prepare materialized views for various consumers



Use the Azure eco-system for easy and powerful solutions

THANK YOU, YOU ARE AWESOME ••

PLEASE RATE THIS SESSION IN THE MOBILE APP.





@borzenko_lena



olena-borzenko



borzenko.olena

- @egrootenboer
- eldert-grootenboer
- eldert.grootenboer

https://github.com/EldertGrootenboer/Implementing-an-Event-Sourcing-strategy-on-Azure