



WHY YOU SHOULD THINK TWICE BEFORE CHOOSING COSMOS DB

TORSTEIN NICOLAYSEN

@TNICOLAYSEN



NDC OSLO
2019-06-20

DISCLAIMER

Parts of this talk might be outdated in the future

Microsoft has a list of all feedback with status
<https://feedback.azure.com/forums/263030-azure-cosmos-db>

FIRST ADVICE MAKE SURE IT FITS YOUR USE CASE

WHAT TO CONSIDER

Relational or hierarchical data?

Advanced query functionality?

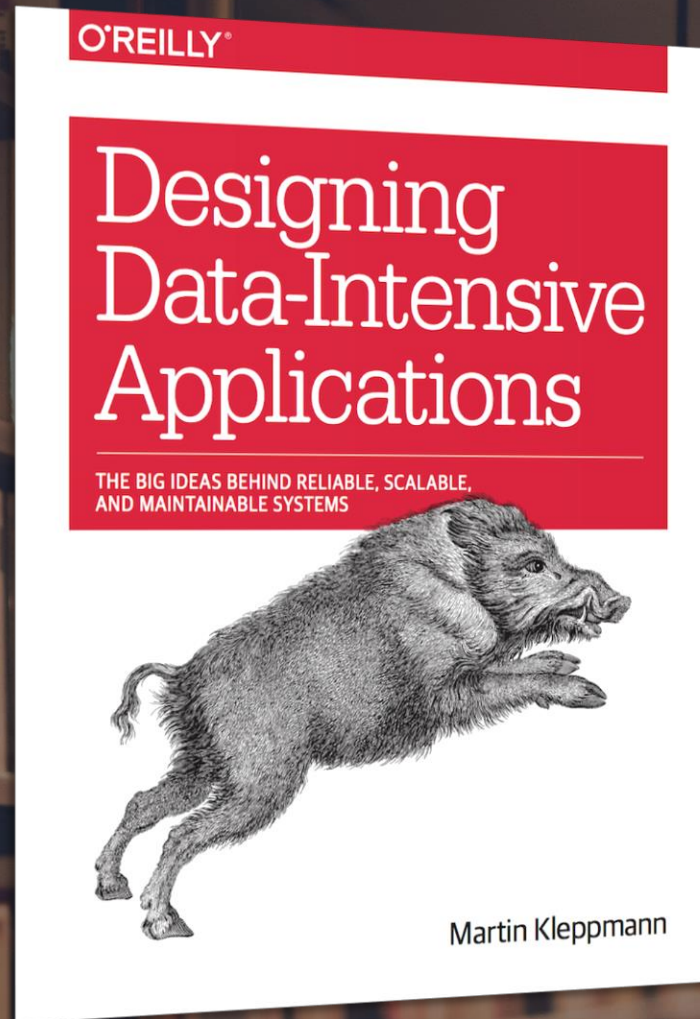
Support transactions?

Read data right after writing it?

Redundancy?

Competence?

<https://docs.microsoft.com/en-us/azure/cosmos-db/use-cases>



<https://dataintensive.net/>

A close-up, slightly blurred photograph of a person's hand holding a blue pen, poised to write on a document. The hand is wearing a grey, textured sweater. The desk is cluttered with various items: a white mug, a spiral-bound notebook, and several sheets of paper, some of which appear to be architectural drawings or blueprints. The lighting is soft and warm, creating a focused and productive atmosphere.

SECOND ADVICE **LEARN THE PRODUCT**

FOURTH ADVICE

TAKE YOUR TIME WITH DESIGN AND ARCHITECTURE

DESIGN CONSIDERATIONS

Do you need consistency?

How do you handle fault scenarios?

Is response time important?

How many reads and writes?

Can conflicts happen?

Queries or lookups?

Who resolves conflicts?

IMPLEMENTATION TIPS

Choosing a partition key is hard – choose wisely

Set aside time for experimentation


Use ETags to get optimistic concurrency

Plan for HTTP 429 – Too many requests

Look into techniques like CQRS and Event Sourcing

The background is a blurred image of a financial dashboard. It features several rectangular panels, each containing a line chart with green or blue lines. Some panels also display numerical data, such as 'CTR 14.65%' and '10.6%', and '9.38' with a '-0.1%' change. The overall color scheme is dark with light blue and green accents.

FIFTH ADVICE TEST EARLY AND MONITOR CONTINUOUSLY

A close-up photograph of a wooden mousetrap on a carpeted floor. A person's thumb is caught in the metal trap, which is sprung. The trap has a red circular logo with a stylized animal on it. Overlaid on the image is the text 'CONSTRUCTIVE RANT' in a white, handwritten-style font, and 'THINGS TO BE AWARE OF' in a larger, bold, white sans-serif font.

CONSTRUCTIVE RANT THINGS TO BE AWARE OF

REQUEST UNIT USAGE IS HARD TO PREDICT

Everything costs RUs

- Azure Function reading the event feed
- Indexer after changes
- Triggers and stored procedures

Little documentation on how the cost changes with more data

Wrong design can end up with a very costly system

LIMITED PLATFORM SUPPORT

Officially supported SDKs are available for

- .NET
- Java
- Python
- Node

Tooling is lacking on other platforms than Windows

SIMPLE ON THE OUTSIDE, COMPLEX EVERYWHERE ELSE

Few things to configure

Easy to get started

No details about internal workings

Complexity is pushed to applications and clients

A person is sitting on a large, dark rock in the foreground, looking out over a vast, dark landscape under a starry night sky. The person is wearing dark clothing and is positioned on the left side of the frame. Above them, a large, light blue thought bubble contains the text "WILL I USE COSMOS DB IN ANOTHER PROJECT?". The background shows a deep canyon or valley with dark, rocky walls and a starry sky filled with many stars.

WILL I USE COSMOS DB IN
ANOTHER PROJECT?

CLOSING THUOGHTS...



@TNICOLAYSEN



← QUESTIONS?

THANKS!

Slides: <http://bit.do/tnic>

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