

DocumentDB & Redis

Can U Show me Teh Codez?

<https://github.com/WalkingDisaster/GABC>

What is Cloud Native?

- Take advantage of cloud architectures
 - Pay-as-you-go
 - Favoring small nodes over few large nodes
- Cost and performance scales well from small to large
- Redundancy and horizontal scale
 - Cost in complexity

Data Options

- Document Databases - Well suited for cloud
- SQL Databases - Scales up better than out
- Raw tables or BLOB - Random access a problem
- Cache - Relatively limited scope

The Problem with Distribution

- Consistency
- Consistency
- Consistency

What is DocumentDB

- Built by Microsoft
- Designed for very high volume, and extremely large scale
- Indexed with a SQL like syntax for access
- Configurable consistency levels
- Shards

So What Is DocumentDB?

- Native to Azure
- Stores JSON data
- REST interface
- JavaScript stored procedures

What isn't DocumentDB

- Map/Reduce
- Analytics
- Complex transactions
- Cross-table or cross-document relationships

Demo

Showing teh codez

What is Redis Cache

- More than just a key/value store
- Lots of capabilities

Redis Data Types

- Data types
 - String
 - List
 - Set
 - Sorted Set
 - Hash
 - Bit Array
 - HyperLogLog

Redis Can

- Session State
- Pub/Sub
- Distributed Locks
- Strong Concurrency

Demo

More of teh codez

Why Use Both?

- DocumentDB
 - Provides very large scale at a very reasonable price
 - All fields are indexed, with simple query language
 - Easy to program against
- Redis
 - When a single source of truth is required
 - Data sets are not too large
 - Extremely fast

Demo

Codez 4eva

Questions

<http://gabc-columbus.azurewebsites.net/Hero>
<https://github.com/WalkingDisaster/GABC>