Cosmo DB

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Types of Databases

Relational Database

Non-Relational Database

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Types of NoSQL Databases

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Read/Write requests go to nearest region.

Supports multiple cloud database models.

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- Table API
- Cassandra API
- Gremlin API
- MongoDB API
- SQL API

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Table API

Azure Cosmos DB

Table Storage

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Table API

Cosmos DB Table API is built on Table Storage

Guaranteed High Availability

Single Digit Millisecond Latency

Automatic Secondary Indexing

Global Distribution

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Consistency Problem of NoSQL Databases

- How to keep all of the locations in sync?
- You need to have the same data at all different locations.

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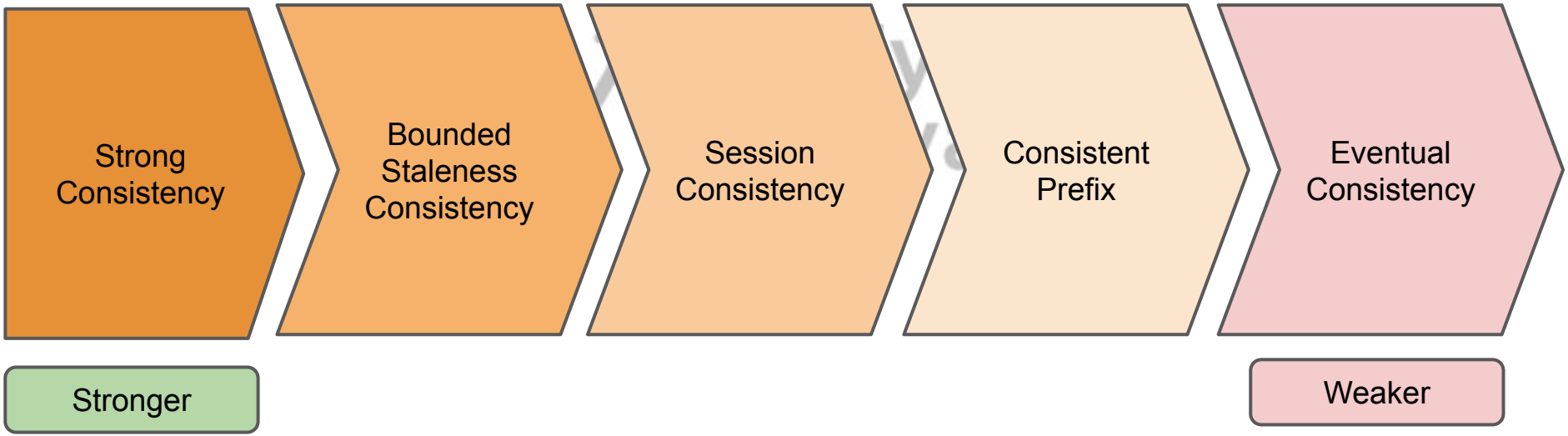
Consistency Levels



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Consistency Levels

Stronger Consistency

It guarantees that a read operation will return the latest version of the item.

Your database should be only in one region.

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Consistency Levels

Bounded Staleness Consistency

Low write latencies but require total global order guarantee.

Same cost as “**strong consistency”** but allows you to store data in multiple regions.

It is the second most famous consistency level among the cosmos db customers.

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Consistency Levels

Session Consistency

- Guarantees consistency for each client session.
- Lowest latency reads and writes.
- Most popular consistency level chosen.

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Consistency Levels

Consistent Prefix

Guarantees that read operations will never see out of order writes.

Reads can return older values, but never out of order.

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Consistency Levels

Eventual Consistency

A request can return a older value.

Lowest Latency and the worst consistency.

Count of Retweets, likes and non-threaded comments.

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Back Ups

Snapshots every 4 hrs

Snapshots of deleted databases will be retained for 30 days.

Additional backups using the Data Migration Tool.

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Demo !!

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