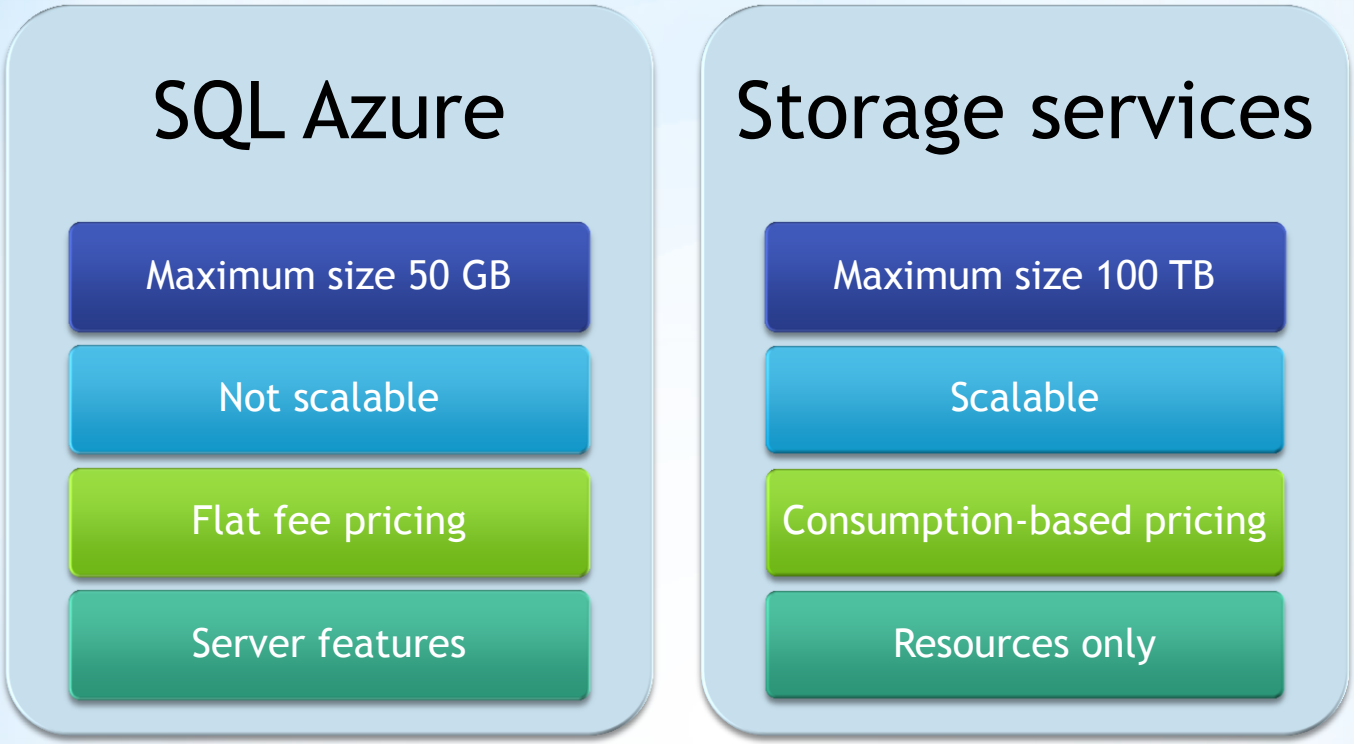
*Azure without SQL

Mark Seemann

@ploeh

COMMENTOR
WHEN QUALITY MATTERS

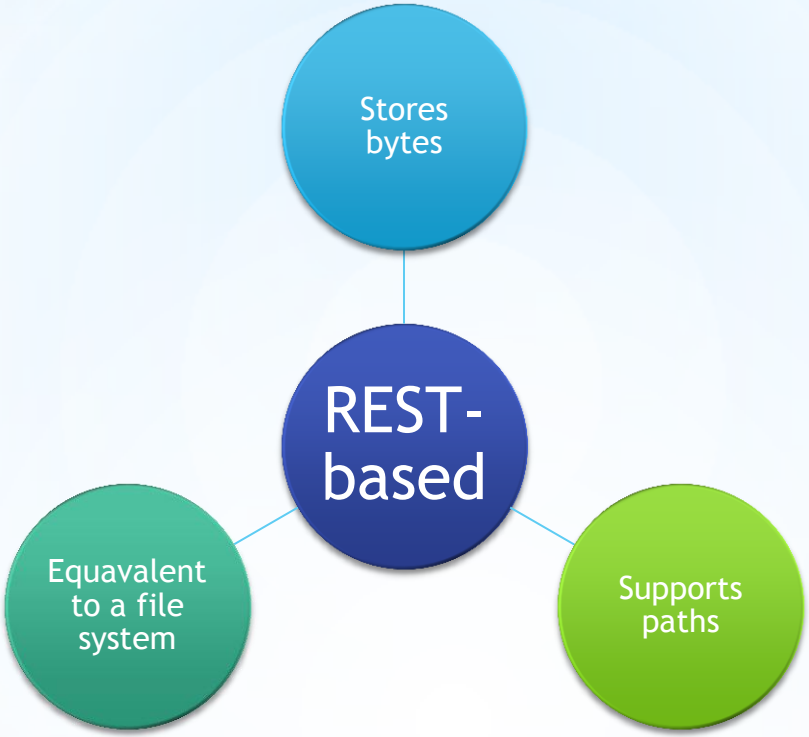


*Storage Services vs SQL Azure

COMMENTOR
WHEN QUALITY MATTERS

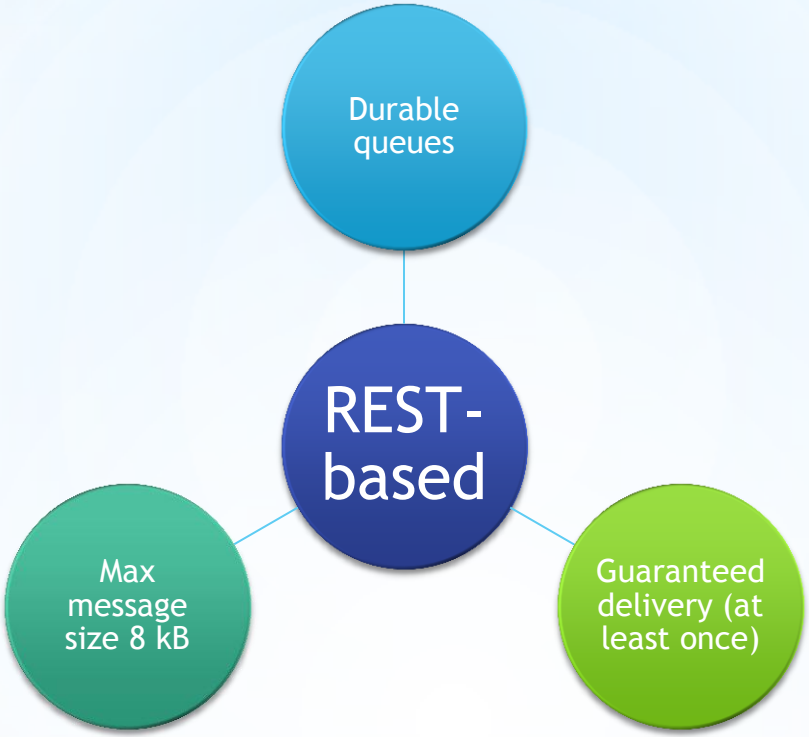
*Azure Storage Services

COMMENTOR
WHEN QUALITY MATTERS



*Blob

COMMENTOR
WHEN QUALITY MATTERS



*Queue

COMMENTOR
WHEN QUALITY MATTERS

*Table

COMMENTOR
WHEN QUALITY MATTERS

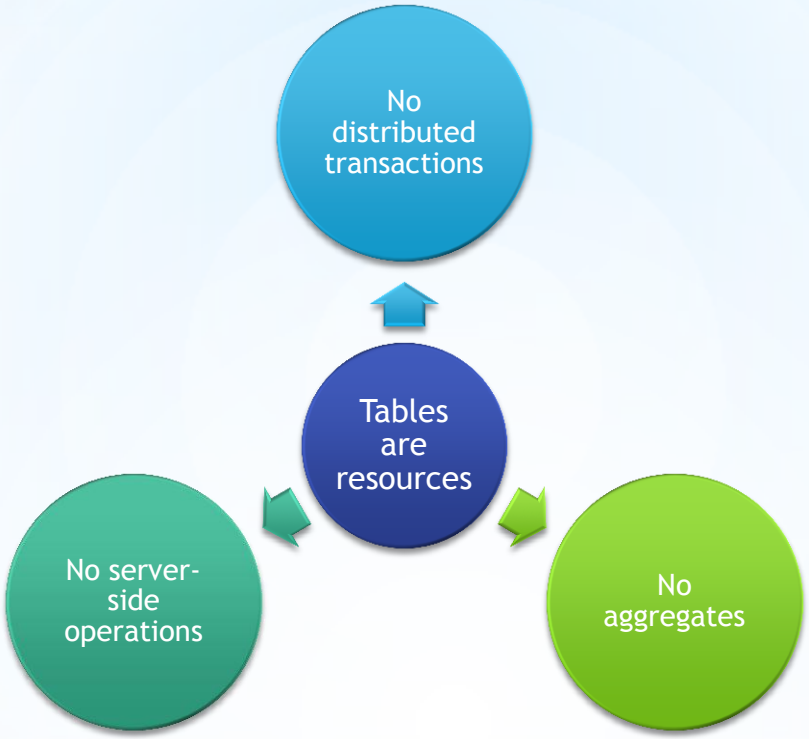


*Table vs Relational Data

COMMENTOR
WHEN QUALITY MATTERS

*Consequences

COMMENTOR
WHEN QUALITY MATTERS

Demo
Booking application

Reservation Table

Capacity Blob

Event Queue

*Denormalizing data

COMMENTOR
WHEN QUALITY MATTERS

Reservation Capacity Event

*Updating Denormalized Data

COMMENTOR
WHEN QUALITY MATTERS

Reservation Update

Capacity

Event

*Updating Denormalized Data

COMMENTOR
WHEN QUALITY MATTERS

Reservation Update

Capacity Failure

Event

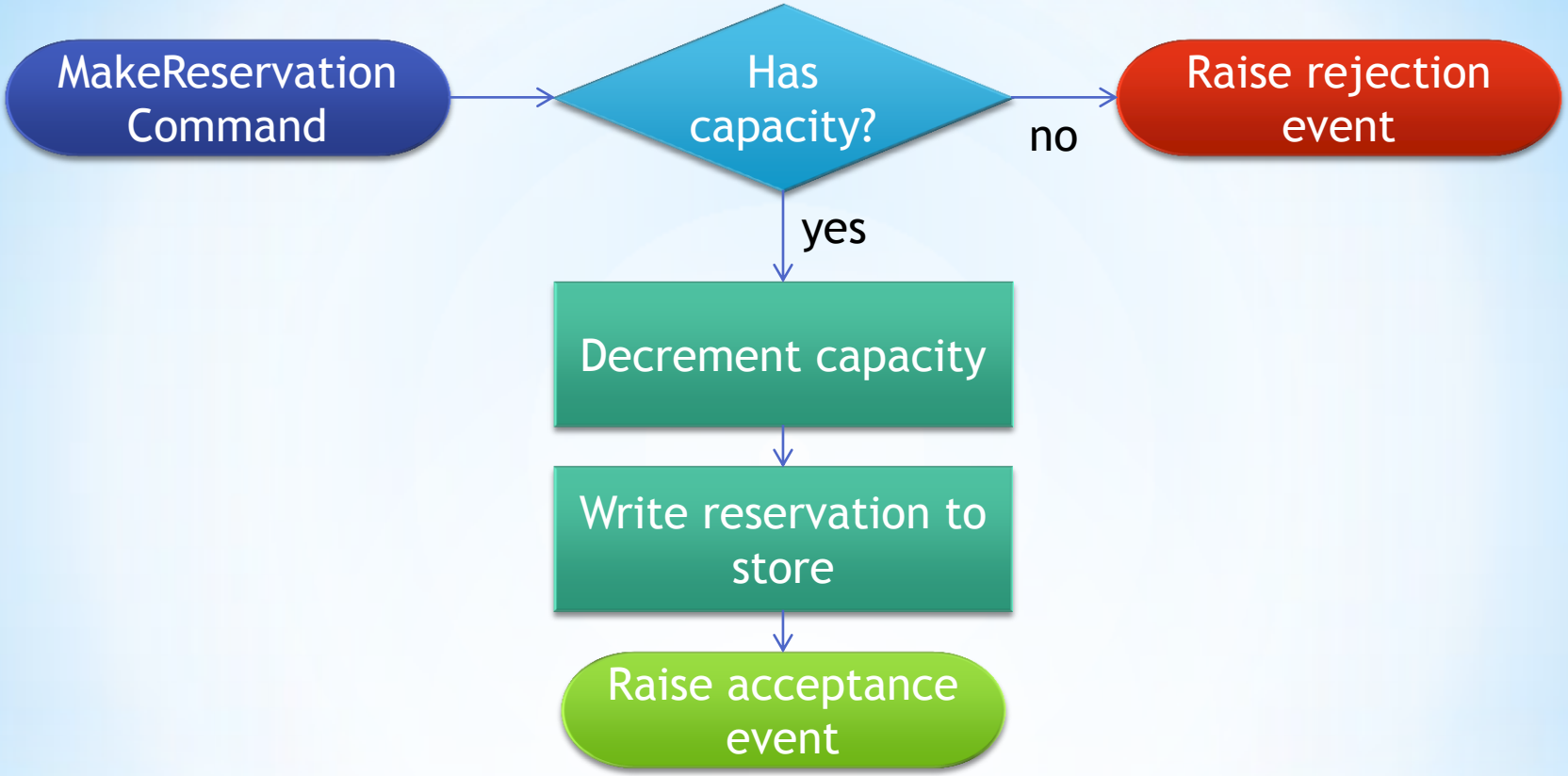
*Updating Denormalized Data

COMMENTOR
WHEN QUALITY MATTERS

Capacity Reservation Event

*Update order matters

COMMENTOR
WHEN QUALITY MATTERS



*Update workflow

COMMENTOR
WHEN QUALITY MATTERS

*Ensuring Eventual Consistency

COMMENTOR
WHEN QUALITY MATTERS

Demo
Consuming durable messages

Capacity Update

Reservation Failure

Event

*Updating Denormalized Data

COMMENTOR
WHEN QUALITY MATTERS

Capacity Update

Reservation Failure

Event

*Updating Denormalized Data

COMMENTOR
WHEN QUALITY MATTERS

Capacity Update

Reservation Failure Update

Event

*Updating Denormalized Data

COMMENTOR
WHEN QUALITY MATTERS

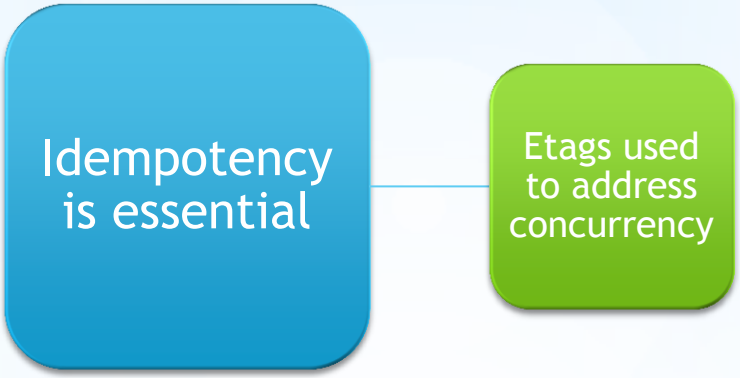
Capacity Update

Reservation Failure Update

Event Update

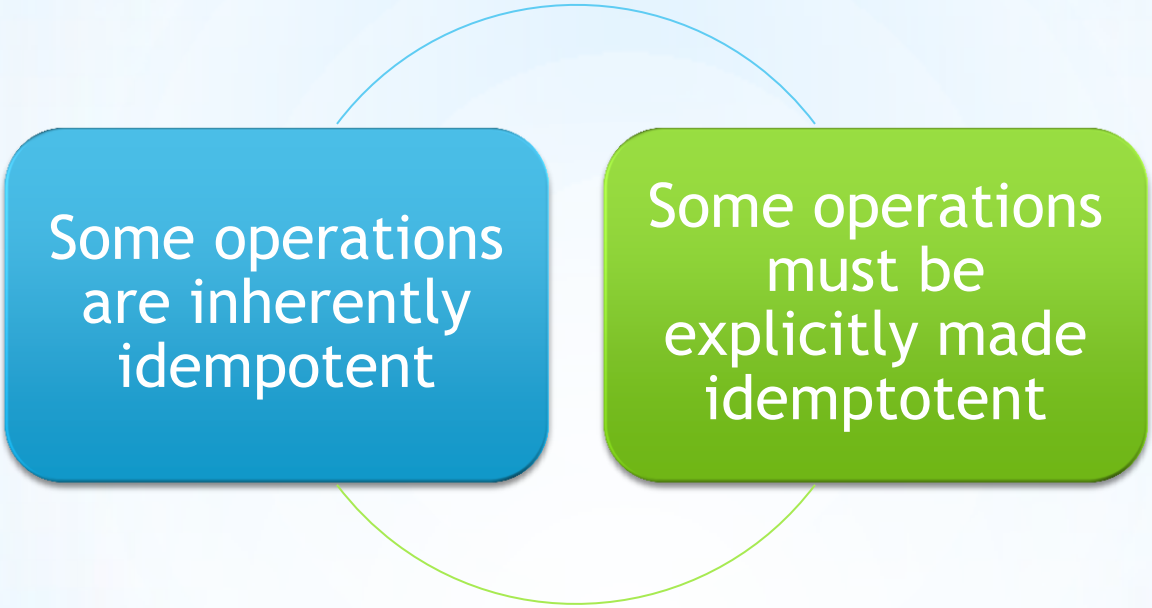
*Updating Denormalized Data

COMMENTOR
WHEN QUALITY MATTERS



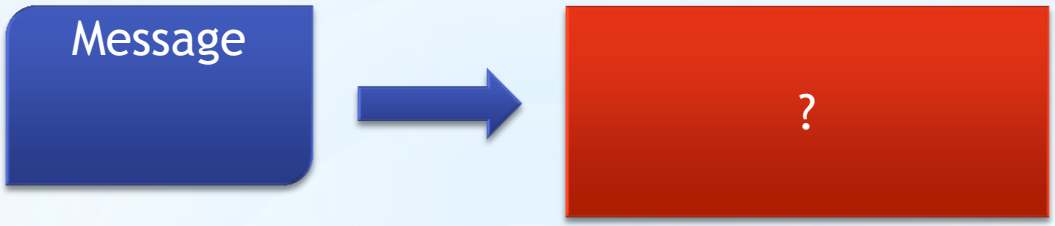
*Background Processing

COMMENTOR
WHEN QUALITY MATTERS



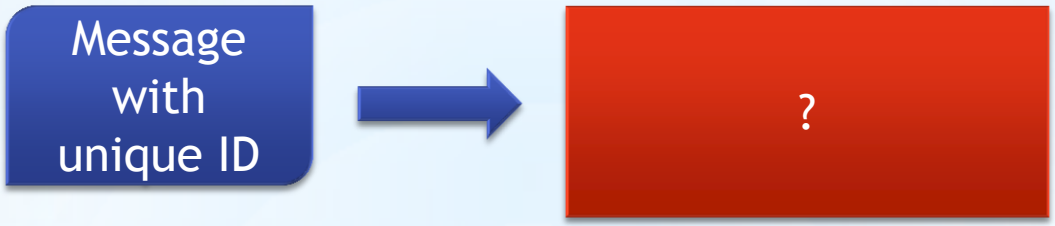
*Idempotency

COMMENTOR
WHEN QUALITY MATTERS



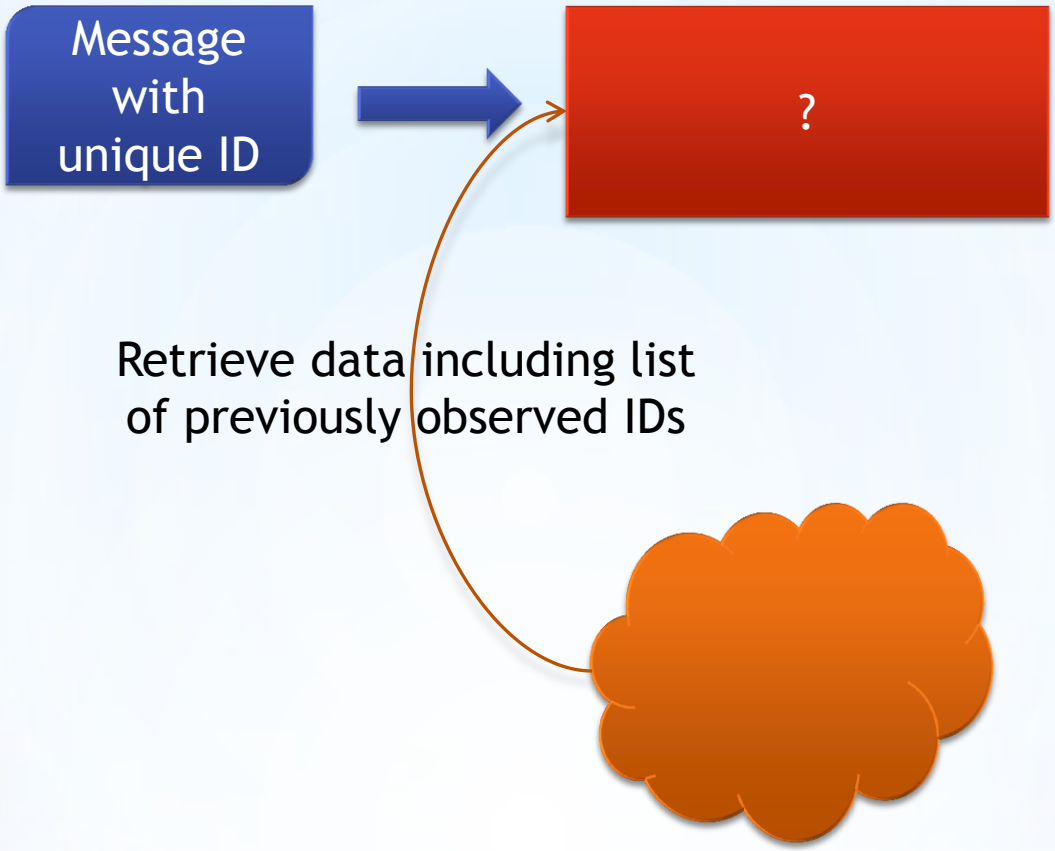
*Making operations idempotent

COMMENTOR
WHEN QUALITY MATTERS



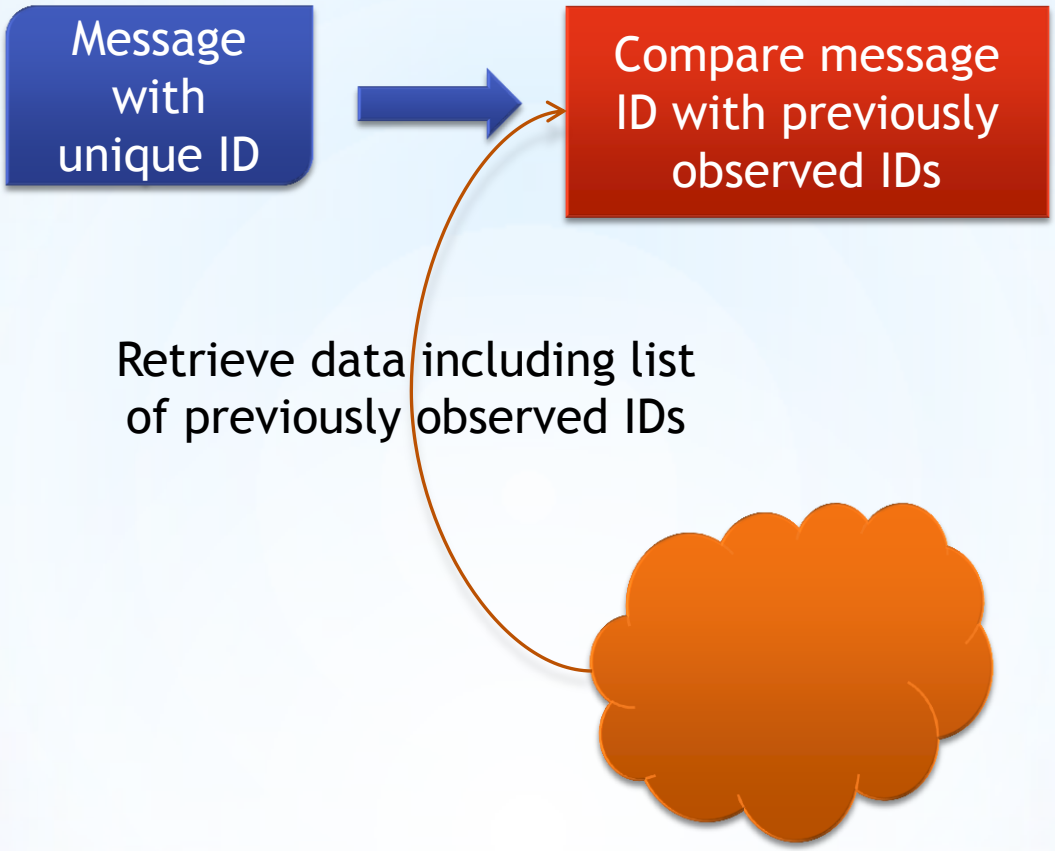
*Making operations idempotent

COMMENTOR
WHEN QUALITY MATTERS



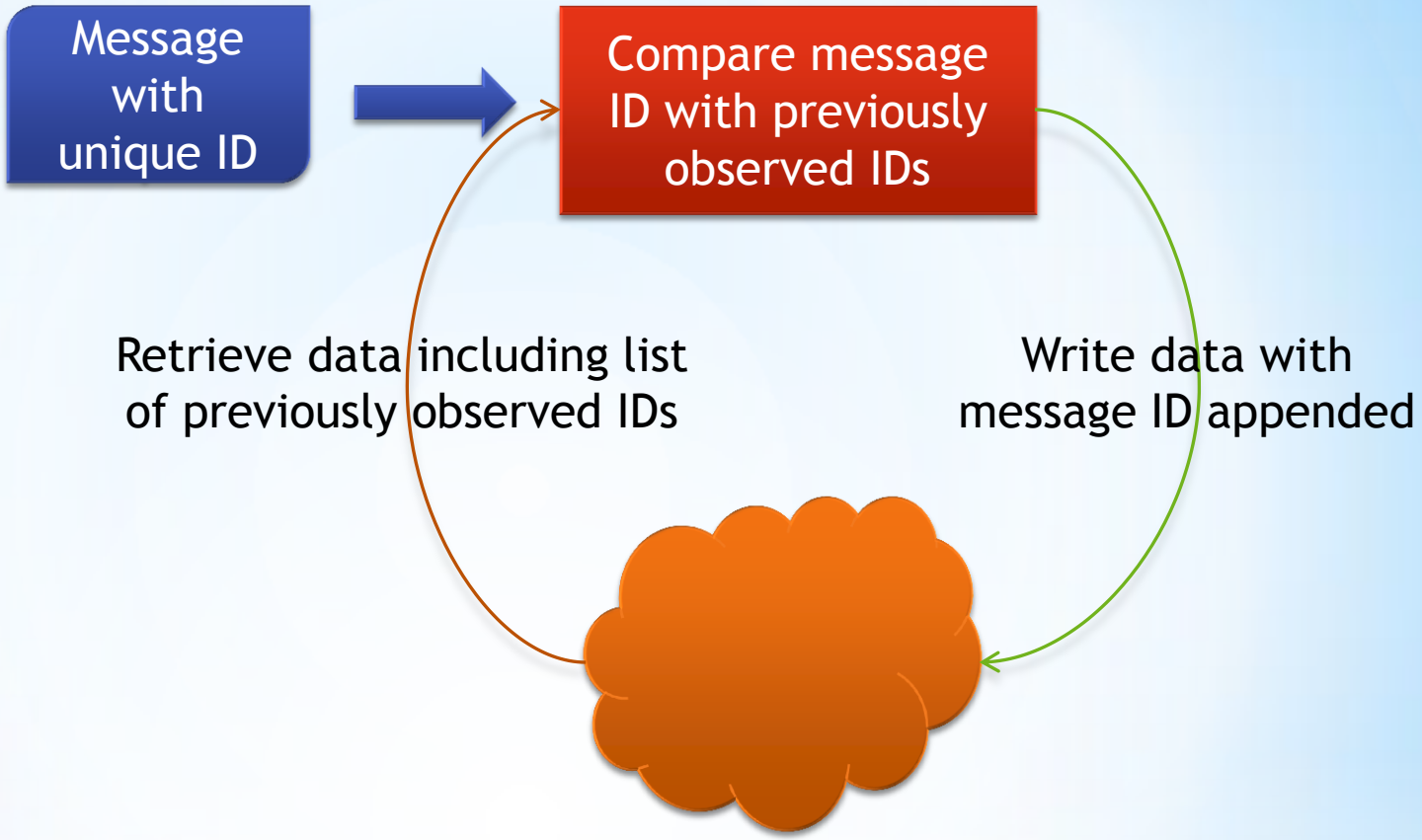
*Making operations idempotent

COMMENTOR
WHEN QUALITY MATTERS



*Making operations idempotent

COMMENTOR
WHEN QUALITY MATTERS



*Making operations idempotent

COMMENTOR
WHEN QUALITY MATTERS

*Concurrency

COMMENTOR
WHEN QUALITY MATTERS

Demo
Using Etags

Capacity Update

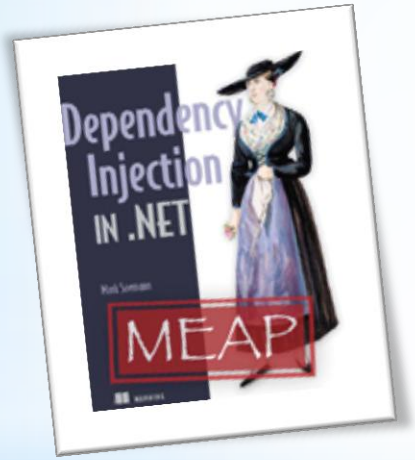
Reservation Failure Update

Event Update

*Eventual Consistency

COMMENTOR
WHEN QUALITY MATTERS

COMMENTOR
WHEN QUALITY MATTERS



*Mark Seemann

http://blog.ploeh.dk/

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COMMENTOR
WHERE QUALITY MATTERS