Managing Concurrency



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Module Outline



Two users update the same Blob

The different ways to manage concurreny

- Last update wins
- Optimistic Concurrency
- Pessimistic Concurrency



Demo



Two users update the same Blob

Implement the logic to overwrite a Blob



Implement Optimistic Concurrency

Last update wins



"An update should fail if another user has updated the same Blob in the meantime."

Sara – software developer at Wired Brain Coffee



Implement Optimistic Concurrency

Last update wins

Optimistic Concurrency

Entity Tag (ETag)



Demo



Use a Blob's ETag to implement Optimistic Concurrency



Implement Pessimistic Concurrency

Last update wins

Optimistic Concurrency

Entity Tag (ETag)

Pessimistic Concurrency

Lease



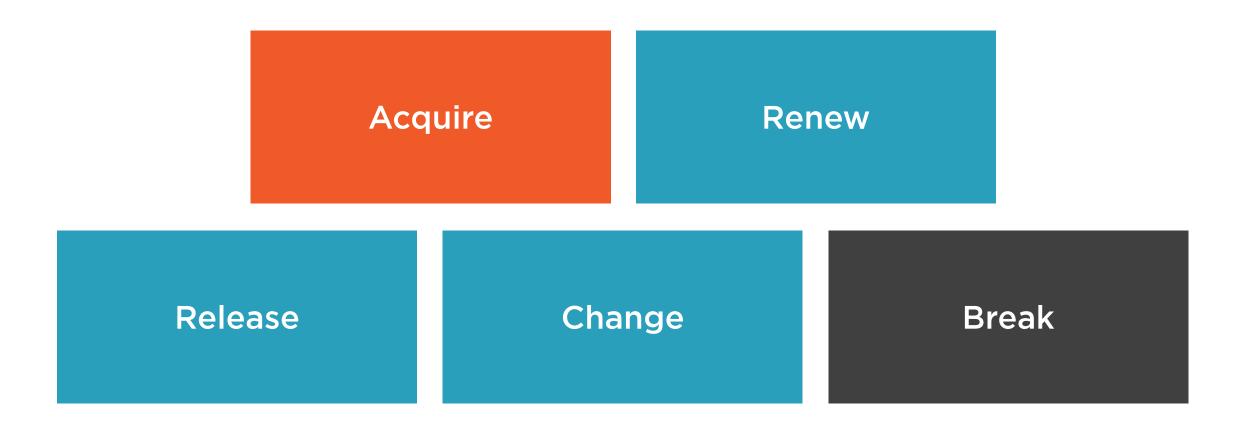
Demo



Use a Lease to implement Pessimistic Concurrency



Break a Lease on a Blob





Break a Lease on a Blob

await cloudBlockBlob.BreakLeaseAsync(
 TimeSpan.FromSeconds(0));



Break a Lease on a Blob

TimeSpan timeUntilLeaseEnds =
 await cloudBlockBlob.BreakLeaseAsync(null);



Summary



Last upate wins

Use the ETag for Optimistic Concurrency

Use a Lease for Pessimistic Concurency

