Improving Actor Recovery Time with Snapshots



Jason Roberts
.NET MVP

@robertsjason dontcodetired.com



Overview



Understanding snapshots

Snapshot HOCON configuration

PlayerActorState class

Saving snapshot after every 5 events

Retrieving snapshots & updating state

Replay journal events since snapshot creation



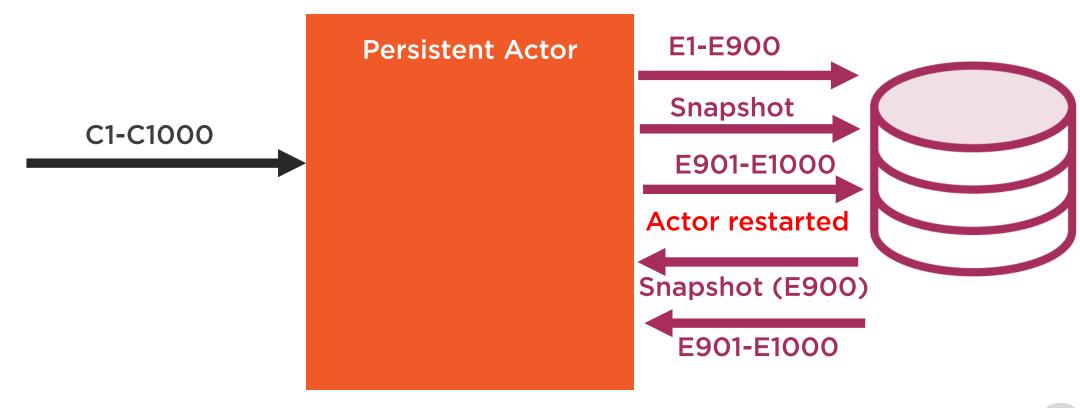
Understanding Snapshots



Database read time Network transmission time Actor event replay (CPU)

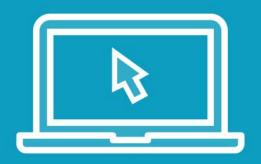


Understanding Snapshots





Demo



HOCON snapshot-store

PlayerActorState class for snapshot

Save snapshot after every 5 events

Recover<SnapshotOffer>(...)

Set actor state to retrieved snapshot

Replay journal events since snapshot creation



Summary



Understanding snapshots

Improve actor recovery time

Replay fewer individual events

Snapshot HOCON configuration

PlayerActorState class

Saving snapshot after every 5 events

SaveSnapshot(_state);

Retrieving snapshots & updating state

Recover<SnapshotOffer>(offer => ...)

Replay journal events since snapshot creation



http://getakka.net/

