Event stream/CQRS

Context

Scalable distributed systems with many writers

Solution

Segregate operations that read data from operations that update data by using separate interfaces.

Reads and writes may operate on different schemas.

A processor applies writes to the permanent record.

Event streams may be replayed speculatively or as a recovery strategy.

Uniform interface for GUI, admin, and API updates

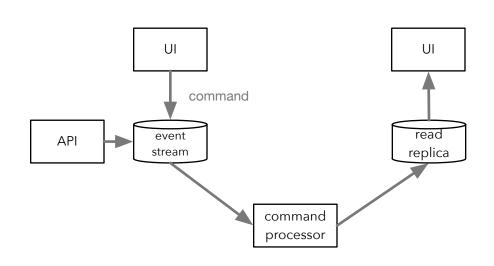
https://msdn.microsoft.com/en-us/library/dn568103.aspx

Forces

Queries and updates operate on the same entities in the same datastore.

Relational DBMSes exhibit locking and variable performance in these cases.

Read scaling and write scaling are rivalrous Access control can be difficult if frameworks expose objects with both read and write capabilities



CQRS = "Command-Query Responsibility Separation"