MongoDB Change Streams

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Change Streams

- Applications can use change streams to subscribe to all data changes on
  - a single collection,
  - a database, or
  - an entire deployment, and
  - immediately react to them

Change Streams

- Because change streams use the aggregation framework, applications can also filter for specific changes or transform the notifications at will.

Change Streams

- New in version 3.6

Availability

Change Streams are available for Replica Sets and Sharded Clusters

Storage Engine

- The replica sets and sharded clusters must use the WiredTiger storage engine.
- Change streams can also be used on deployments that employ MongoDB’s encryption-at-rest feature.

Replica Set Protocol Version

- The replica sets and sharded clusters must use replica set protocol version 1 (pv1)

Read Concern “majority” Enablement

- Starting in MongoDB 4.2, change streams are available regardless of the "majority" read concern support;
- That is, read concern majority support can be either enabled (default) or disabled to use change streams.
- In MongoDB 4.0 and earlier, change streams are available only if "majority" read concern support is enabled (default).

Watch Collection

Target	Description
A Collection	You can open a change stream cursor for a single collection (except **`system`** collections, or any collections in the **`admin`**, **`local`**, and **`config`** databases).

Watch Database

Target	Description
A Database	Starting in MongoDB 4.0, you can open a change stream cursor for a single database (excluding **`admin`**, **`local`**, and **`config`** database) to watch for changes to all its non-system collections.

Watch Deployment

Target	Description
A Deployment	Starting in MongoDB 4.0, you can open a change stream cursor for a deployment (either a replica set or a sharded cluster) to watch for changes to all non-system collections across all databases except for **`admin`**, **`local`**, and **`config`**.