01 Intro

When deploying MongoDB in production, you should have a strategy for capturing and restoring backups in the case of data loss events.

Back Up with Atlas

MongoDB Atlas, the official MongoDB cloud service, provides 2 fully-managed methods for backups:

- Continuous Backups, which take incremental backups of data in your cluster, ensuring your backups are typically just a few seconds behind the operational system. Atlas continuous backups allow you to restore from stored snapshots or from a selected point in time within the last 24 hours. You can also query a continuous backup snapshot.

- Cloud Provider Snapshots, which provide localized backup storage using the native snapshot functionality of the cluster's cloud service provider.

Back Up with MongoDB Cloud Manager or Ops Manager

- MongoDB Cloud Manager is a hosted back up, monitoring, and automation service for MongoDB. MongoDB Cloud Manager supports backing up and restoring MongoDB replica sets and sharded clusters from a graphical user interface.

- With Ops Manager, MongoDB subscribers can install and run the same core software that powers MongoDB Cloud Manager on their own infrastructure. Ops Manager is an on-premise solution that has similar functionality to MongoDB Cloud Manager and is available with Enterprise Advanced subscriptions.

Back Up by Copying Underlying Data Files

- Back Up with Filesystem Snapshots. You can create a backup of a MongoDB deployment by making a copy of MongoDB's underlying data files.

- Back Up with cp or rsync. If your storage system does not support snapshots, you can copy the files directly using cp, rsync, or a similar tool. Since copying multiple files is not an atomic operation, you must stop all writes to the mongod before copying the files. Otherwise, you will copy the files in an invalid state.

Back Up and Restore with MongoDB Tools

- Back Up with mongodump. mongodump reads data from a MongoDB database and creates high fidelity BSON files which the mongorestore tool can use to populate a MongoDB database. mongodump and mongorestore are simple and efficient tools for backing up and restoring small MongoDB deployments, but are not ideal for capturing backups of larger systems.