

- any other operation that modifies the cluster meta-data in any way. See *Sharding Reference* (page 736) for a complete list of sharding commands. Note, however, that not all commands on the *Sharding Reference* (page 736) page modifies the cluster meta-data.

Change Storage Engine to MMAPv1 If you have changed the storage engine to WiredTiger, change the storage engine to MMAPv1 before downgrading to 2.6.

Change Shards to Use MMAPv1 To change the storage engine to MMAPv1, refer to the procedure in *Change Storage Engine to MMAPv1 for replica set members* (page 822) and *Change Storage Engine to MMAPv1 for standalone mongod* (page 821) as appropriate for your shards.

Change Config Servers to Use MMAPv1

Note: During this process, only two config servers will be running at any given time to ensure that the sharded cluster's metadata is *read only*.

Step 1: Disable the Balancer. Turn off the *balancer* (page 684) in the sharded cluster, as described in *Disable the Balancer* (page 717).

Step 2: Stop the last config server listed in the mongos' configDB setting.

Step 3: Export data of the second config server listed in the mongos' configDB setting.

```
mongodump --out <exportDataDestination>
```

Specify additional options as appropriate, such as username and password if running with authorization enabled. See *mongodump* for available options.

Step 4: For the second config server, create a new data directory for MMAPv1. Ensure that the user account running *mongod* has read and write permissions for the new directory.

Step 5: Restart the second config server with MMAPv1. Specify the newly created MMAPv1 data directory as the *--dbpath* as well as any additional options as appropriate.

```
mongod --dbpath <newMMAPv1DBPath> --configsvr
```

Step 6: Upload the exported data using mongorestore to the second config server.

```
mongorestore <exportDataDestination>
```

Specify additional options as appropriate. See *mongorestore* for available options.

Step 7: Shut down the second config server.

Step 8: Restart the third config server.