Backup & Recovery

Backup and Recovery Utilities

- **mongoexport**
- **Mongoimport**
- **mongodump**
- **mongorestore**

Mongoexport

- One of the primary methods to extract the data
- Extract the data in JSON format
- Useful for moving the data to other databases
- https://www.quackit.com/json/tutorial/list_of_json_databases.cfm
- **mongoexport** must run on a single specified database and collection.
- You cannot run **mongoexport** on an entire database or multiple collections.

Mongoexport

- [root@mongoserver4 ~]# mongoexport -u dba -p oracle -d moviedb

  2021-04-06T12:19:30.312-0400 must specify a collection

  2021-04-06T12:19:30.312-0400 try 'mongoexport --help' for more information

- mongoexport -u dba -p oracle --authenticationDatabase=admin -d moviedb -c movies -o movie.json
- At the end of the export , the number of records exported will be listed

Mongoexport

- Exporting the data in CSV format
- $ mongoexport -u dba -p oracle --authenticationDatabase=admin -d moviedb -c movies -o movie.csv --type CSV --fields name
- The option --type CSV and list fields specified using --fields
- --sort: This works similar to a query level sort, sorting documents by some keys.
- --limit: This works similar to a query level limit, limiting the number of documents outputted.

Exporting based on a query

- --query can be used
- Eg
  - mongoexport -u dba -p oracle --authenticationDatabase=admin -d moviedb -c movies -q='{"name":"test"}'
  - You must enclose the query document in single quotes ('{ ... }') to ensure that it does not interact with your shell environment

Mongoimport

- Used to import the data into mongodb
- This tool is designed to take an output of mongoexport as input
- The tool supports JSON, CSV and TSV formats
- **mongoexport**, **mongoimport** operates on a single target collection within the specified database. This means that if you wish to import data into multiple collections, you must separate the data into individual files.

Mongoimport

- mongoimport -u dba -p oracle --authenticationDatabase=admin -d moviedb -c newmovies --file movies.json
- With **mongoimport**, we can use the --drop option to drop the collection before the import takes place.
- **Other important arguments**
- --stopOnError: If specified, the import will stop on the first error it encounters
- --type: This can be either JSON, CSV, or TSV to specify what type of file will be imported, but the default type is JSON

Mongoimport

- --ignoreBlanks TSV and CSV only, this will ignore empty fields in your import file.
- --headerline : TSV and CSV only, this will assume the first line of your import file is a list of field names.
- --fields: TSV and CSV only, this will specify a comma-separated list of keys in your documents for CSV and TSV formats. This is only needed if you do not have a header line.
- *$ mongoimport -u dba -p oracle --authenticationDatabase=admin -d movies -c contacts --type CSV --file contacts.csv --ignoreBlanks --headerline*

Mongodump

- Take the backup of all collections in the mongodb instance
- Mongodump created a ,bson and a json file for each collection
- mongodump -u dba -p oracle

Important Options

--db This allows you to specify a single database for the command to backup, by default it will back up all databases.

--collection: specify a single collection to backup, by default it will back up all collections.

--excludeCollection: This allows you to specify a collection to exclude from the backup.

$ ***mongodump -u dba -p oracle --authenticationDatabase=admin --db moviedb --excludeCollection=newmovies***

mongorestore

Used to restore the database/collections created by mongodump

- *$ mongorestore -u dba -p oracle --drop dump*
- *--dryRun: This allows you to see the output of running a mongorestore without actually changing the information in the database, this is an excellent way to test your command before executing potentially dangerous operations.*
- *--drop: Similar to mongoimport, the --drop option will drop the collections to be restored before restoring them, allowing you to ensure no old data remains after the command has run.*

mongorestore

- *--stopOnError: If enabled, the process stops as soon as a single error occurs.*
- *--nsInclude: Instead of providing a database and collection specifically, this option allows you to define which namespaces (databases and collections) should be imported from the dump file.*
- *--nsExclude: This is the complimentary option for nsInclude, allowing you to provide a namespace pattern that is not imported when running the restore.*

mongorestore

Restore a specific collection using "mongorestore"

- *$ mongorestore -u dba -p oracle --drop --nsInclude="movies.contacts" dump*

Restore a database using "mongorestore"

- *$ mongorestore -u dba -p oracle --drop --nsInclude="movies.* " dump*

Restore the collections from one db to another.

- *mongorestore -u dba -p oracle --authenticationDatabase=admin --drop --nsFrom="moviedb" --nsTo="backup" --db="backup" dump/moviedb*