Mongodb Backup and Restore

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Backup a Database with mongodump

- The backup utility of MongoDB can create a backup for an entire server, database or collection, or you can use a query to backup for a part of a collection.

- When mongodump only runs without any arguments, the command connects to the MongoDB instance on the local system (e.g. localhost) on port 27017 and creates a database backup named dump/ in the current directory.

- mongodump command overwrites output files if they already exist in the backup data folder.

MongoDB Backup

- Command to backup data from a mongod or mongos instance running on the same machine and on the default port of 27017.

- To take the backup, have to enter the bin directory into the mongodb folder on your machine.

D:\mongodb\bin>mongodump

Backup a Database with mongodump specify the --host and --port

D:\mongodb\bin>mongodump --host mypc-PC --port 27017

Specify different output directory

▶ Can take the backup in specific directory by using the --out or -o option.

▶ Here in the example below we mention the directory under D: is backup_data/backup/ folder.

D:\mongodb\bin>mongodump --out /backup_data/backup/

Backup of a specific collection and a specific database

- To take the backup of a specific database and a specific collection using mongodump command, can specify --db and --collection as options to mongodump.

- Here in the example below our database is myinfo and collection is userdetails

D:\mongodb\bin>mongodump --collection userdetails --db myinfo

- The operation above will create a dump of the collection named userdetails from the database myinfo in a dump/ subdirectory of the current working directory

Create Backups from Non-Local mongod Instances

- In this type of backup the --host and --port options for mongodump allow the user to connect to and backup from a remote host.

mongodump --host [host name] --port 3017 --username [user] --password [pass] --out [backup folder path of local machine]

- for example, the path of the folder like :   /backup_data/backup/

Example

- mongodump --db [DB NAME] --out /var/backups/`date +"%Y%m%d"`

MongoDB Restore

- Restore from dump using mongorestore

- Restore utility using mongorestore command restores a binary backup created by mongodump.

- Can restore either an entire database backup or a subset of the backup.

- The following command will import the database backup in the dump folder to the mongod instance running on the localhost interface. Here we did not mention the folder name, so by default, the database backup in the dump folder will be imported.

D:\mongodb\bin>mongorestore

MongoDB Restore

- Command will import the database backup in the myinfo folder under the dump folder to the mongod instance running on the localhost interface.

- Here we mention the folder name, so the database backup from the mention folder will be imported.

D:\mongodb\bin>mongorestore dump/myinfo

Restore Backups to Non-Local mongod Instances

▶ mongorestore command by default connects to a MongoDB instance running on the localhost interface with default port (27017).

▶ Can also restore the backup to a different host or port by using the --host and --port options.

mongorestore --host [host name] --port 3017 --username [user] --password [password] [backup folder path of local machine]

▶ for example, the path of the folder like :   /backup_data/backup/

Restore MongoDB

▶ Here /data/db/ is location of your mongodb data directory and /backup/db is location of backup directory.

▶ **mongorestore --db mydb --drop /backup/db/mydb**

▶ --drop – Will remove database if already exist.

Hot Backup

- connect to a running instance of MongoDB and take a backup even when users are using the database.

Backup a Whole Database

mongodump -d devdb -o mongoBackups

▸ devdb is the name of the database and mongoBackups is the directory in which database has to be dumped into

Backup a Single Collection

mongodump -d devdb -o mongoBackups --collection vehicles

- devdb is the name of the database and mongoBackups is the directory in which the database has to be dumped into and vehicles is the name of the collection which has to be backed.

Restore Whole Database

mongorestore -d devdb mongoBackups/devdb

► devdb is the name of the database into which we will restore data and mongoBackups is the directory in which we dumped the database devdb

Restore Single Collection

mongorestore -d devdb -c vehicles devdb/devdb/vehicles.bson

- ▶ devdb is the name of the database into which we will restore data and vehicles is the name of the collection & then the path of the .bson file.

MongoDB Backup Shell Script

▶ Can easily schedule the below script in scheduler to backup databases regularly. Create a file as following

    $ vi /backup/mongo-backup.sh

▶ Add below content to file. Update database hostname, database name , username and password accordingly.

    #!/bin/sh

    TODAY=`date +%d%b%Y`

    BACKUP_DIR=/backup/db

    mkdir -p ${BACKUP_DIR}/${TODAY}

    mongodump -h <DATABASE_HOST> -d <DATABASE_NAME> -u <USERNAME> -p <PASSWRD> --out ${BACKUP_DIR}/${TODAY}/

▶ And schedule it daily