**Dump and Restore database(MySQL and Mongodb)**

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1. **Dump the data:**

The script is available that will dump the MySQL and Mongo databases into a single .tgz file. Below are the steps.

* *Make sure there is enough space (as much as the data size of MySQL and Mongo databases ) for a data dump. To* check the available free disk space

***df -h***

***free***

* *Make a folder.*

*# Make the “mig” folder on the maximum available space path.*

***mkdir mig***

* *Change* the directory

***cd mig***

* *Fetch the the folder “iitbombayxdbupgrade/Script/DumpScript” from the remote machine, run the following command.*

***scp -r <user\_remote\_machine>@<IP\_remote\_machine>:<path\_of\_DumpScript\_folder> .***

* Change the directory

***cd DumpScript***

* Set MySQL server detail(*IP, port and user credential*) and Mongo server detail(*IP, port and user credential*) of the old release machine in the ***parameter.config*** file. R*un the script as per the instructions given in README.md file*

***vi parameter.config***

After changing the parameters, save and exit

* *As per requirement, comment or un-comments the code.*

***vi dump.sh***

***Example:***

***# If not-required, comments it.***

***echo -e "..... Generating tar file ....."***

***# tar -czf openedx-data-${NOW}.tgz ${SQL\_FILE} mongo-dump-${NOW} mysql-structure-data-${NOW}.sql***

***# Remove the dump files after tar file generate.***

***# rm -r mongo-dump-${NOW}***

***# rm mysql-structure-data-${NOW}.sql***

* *Run the script as per the instructions given in the README.md file. (script is provided by Open edX)*

***bash dump.sh***

**Note:** After running the above script, check the current working directory.

* A folder is created, with a name "mongo-dump-<timestamp -yyyymmddThhmmss>", eg., "mongo-dump-20180814T164638". It contains files having a dump of mongo databases.
* A .sql file with a name "mysql-structure-data-<timestamp-yyyymmddThhmmss>.sql" is created, eg., "mysql-structure-data-20180814T164638.sql". It is a dump of all MySQL user databases.
* A .tgz file is created, with a name "openedx-data-<timestamp -yyyymmddThhmmss>", eg., "openedx-data-20180814T164638.tgz", which is tar of all dump of MySQL and Mongo databases ( mentioned above)).

1. **Restore Database**
   1. Make sure enough space is there in **the machine,** to check the available free disk space on the machine

***df -h***

***Free***

* 1. create a folder ‘migrationDump’ in the new release machine and go to the directory.

***mkdir migrationDump***

***cd migrationDump***

* 1. Copy the generated .tgz data file here in the new release( hawthorn) machine.
  2. To restore database, use the following commands in the terminal

***tar -xvf openedx-data-<20180814T164638>.tgz***

*# Restore MySQL*

***vi restoreMysql.sh***

***………………………………………………………………...***

***date***

***mysql -uroot -p < mysql-structure-data-<20180814T164638>.sql***

***date***

***………………………………………………………………***

*# Restore Mongodb*

***vi restoreMongo.sh***

***………………………………………………………………***

***date***

***mongorestore -u admin -p password -h localhost --authenticationDatabase admin --drop -d edxapp mongo-dump-<20180814T164638>/edxapp***

***date***

***mongorestore -u admin -p password -h localhost --authenticationDatabase admin --drop -d cs\_comments\_service mongo-dump-<20180814T164638>/ cs\_comments\_service***

***date***

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1. **Example of Command for The Fresh Machine and The Restore Dump in Machines:**

***Ginkgo.2 Machine:***

***Fresh--------------------------------------------------------------------------------***

*edx@edx:~$ mongorestore -u admin -p -h localhost --authenticationDatabase admin --drop -d cs\_comments\_service FreshGinkgo18Dec/mongo-dump-20181218T151530/cs\_comments\_service*

*Enter password:*

*connected to: localhost*

*edx@edx:~$ mongorestore -u admin -p -h localhost --authenticationDatabase admin --drop -d edxapp FreshGinkgo18Dec/mongo-dump-20181218T151530/edxapp*

***R*e*store dump-------------------------------------------------------------------------***

*edx@edx:/Database/mig/DumpScript/G82\_R2$ mongorestore -u admin -p -h localhost --authenticationDatabase admin --drop -d cs\_comments\_service mongo-dump-20200811T171058/cs\_comments\_service*

*edx@edx:/Database/mig/DumpScript/G82\_R2$ mongorestore -u admin -p -h localhost --authenticationDatabase admin --drop -d edxapp mongo-dump-20200811T171058/edxapp*

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***Hawthorn Machine:***

***Fresh--------------------------------------------------------------------------------***

*edx@edx:/Database/mig$ mongorestore -u admin -p password -h localhost --authenticationDatabase admin --drop -d cs\_comments\_service FH26/mongo-dump-20200702T181904/cs\_comments\_service*

*edx@edx:/Database/mig$ mongorestore -u admin -p password -h localhost --authenticationDatabase admin --drop -d edxapp FH26/mongo-dump-20200702T181904/edxapp*

***Restore dump-------------------------------------------------------------------------***

*edx@edx:/Database/mig/G82\_R2$ mongorestore -u admin -p password -h localhost --authenticationDatabase admin --drop -d cs\_comments\_service mongo-dump-20200811T171058/cs\_comments\_service*

*mongorestore -u admin -p password -h localhost --authenticationDatabase admin --drop -d edxapp mongo-dump-20200811T171058/edxapp*

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***Ironwood Machine:***

***Fresh--------------------------------------------------------------------------------***

*edx@edx:/Database/mig$ mongorestore -u edxadmin -p password -h localhost --authenticationDatabase admin --drop -d cs\_comments\_service FI27/mongo-dump-20200702T182214/cs\_comments\_service*

*edx@edx:/Database/mig$ mongorestore -u edxadmin -p password -h localhost --authenticationDatabase admin --drop -d edxapp FI27/mongo-dump-20200702T182214/edxapp*

***Restore dump-------------------------------------------------------------------------***

*edx@edx:/Database/mig/MH26\_R2$ mongorestore -u edxadmin -p password -h localhost --authenticationDatabase admin --drop -d edxapp mongo-dump-20200812T171541/edxapp*

*edx@edx:/Database/mig/MH26\_R2$ mongorestore -u edxadmin -p password -h localhost --authenticationDatabase admin --drop -d cs\_comments\_service mongo-dump-20200812T171541/cs\_comments\_service*

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