Upgrading to MongoDB 3.2 Using Wired Tiger

Purpose

OMK customers may wish to upgrade MongoDB to 3.2 and realize the efficiencies of Wired Tiger. This example uses CentOS because this is the prevailing Linux distribution used by our customer base.

Steps

- Ensure MongoDB Authentication Is Set Correctly
- Stop Running Services
- Backup Current Database
- Install MongoDB 3.2
- Provision MongoDB 3.2
- Restart OMK Services and Test

Procedure

Ensure MongoDB Authentication Is Set Correctly

In order to ensure a smooth transistion ensure MongoDB authentication is set correctly. The following script will facilitate this.

```
[root@opmantek ~]# /usr/local/omk/bin/setup_mongodb.pl
```

Stop Running OMK Services

```
[root@opmantek ~]# service opconfigd stop
Stopping opconfig daemon opconfigd                         [  OK  ]
[root@opmantek ~]# service opeventsd stop
Stopping opevents daemon opeventsd                         [  OK  ]
[root@opmantek ~]# service omkd stop
Stopping Opmantek Webserver opmantek.exe                   [  OK  ]
[root@opmantek ~]# service opflowd stop
Shutting down flowd:                                       [  OK  ]
```

Backup Current Database

Create Backup Directory

```
[root@opmantek /]# mkdir data/mongodump
```

Dump MongoDB

```
[root@opmantek ~]# mongodump -u=opUserRW -p=op42flow42 --out=/data/mongodump
```

Stop MongoDB

```
[root@opmantek ~]# service mongod stop
Stopping mongod:                                           [  OK  ]
```

Install MongoDB 3.2

Update MongoDB Repository File

In order to install Mondgo3.2 edit /etc/yum.repos.d/mongod-org.repo to reflect the correct version.

/etc/yum.repos.d/mongod-org.repo

```
### change below to 3.2
[mongodb-org-3.2]
name=MongoDB Repository
### change below to 3.2
baseurl=https://repo.mongodb.org/yum/redhat/\$releasever/mongodb-org/3.2/x86_64/
gpgcheck=0
enabled=1
```

Install MongoDB 3.2 with yum

```
[root@opmantek ~]# yum install mongodb-org
```

Provision MongoDB 3.2

Check what kinds of MongoDB configuration files are in /etc

```
[root@opmantek etc]# ls -l | grep mongo
-rw-r--r--   1 root root    1564 2015-09-11 10:00 mongod.conf
-rw-r--r--   1 root root     768 2017-02-02 02:07 mongod.conf.rpmnew
```

If there is one called mongodb.conf it is no longer necessary. Please move this to /root to avoid any future confusion.

Make a backup of the old mondgod.conf and copy the new rpm version over it.

```
[root@opmantek etc]# cp mongod.conf mongod.conf.backup

[root@opmantek etc]# cp mongod.conf.rpmnew mongod.conf
```

Provision MongoDB

Now make the following changes to mongod.conf

- Change the dbPath to /data/mongodb
- Provision wiredTiger (uncomment)

/etc/mongod.conf

```
--snip

# Where and how to store data.
storage:
  dbPath: /data/mongodb
  journal:
    enabled: true
#  engine:
#  mmapv1:
wiredTiger:

--snip
```

Delete temporary files associated with MongoDB

Remove any files in /tmp that look be be associated with MongoDB

If there is a mongod.pid file in /var/run/mongodb, then remove it.

Delete the contents of /data/mongodb and verify the group and owner of /data/mongodb is mongod.

```
[root@opmantek ~]# cd /data/mongodb
[root@opmantek mongodb]# rm -rf *

[root@opmantek mongodb]# cd ..

[root@opmantek data]# ls -l | grep mongodb
drwxr-xr-x 2 mongod mongod  4096 2017-04-05 17:42 mongodb
```

Start MongoDB Service

```
[root@opmantek ~]# service mongod start
Starting mongod:                                           [  OK  ]
[root@opmantek ~]#
```

Restore The Database

```
[root@opmantek ~]# mongorestore /data/mongodump
```

Setup MongoDB for OMK Applicatons

```
[root@opmantek ~]# /usr/local/omk/bin/setup_mongodb.pl
```

Restart OMK Services and Test

Restart Services

```
[root@opmantek mongodb]# service opeventsd start
Starting opevents daemon opeventsd                         [  OK  ]
[root@opmantek mongodb]# service opconfigd start
Starting opconfig daemon opconfigd                         [  OK  ]
[root@opmantek mongodb]# service opflowd start
Starting opflowd:                                          [  OK  ]
[root@opmantek mongodb]# service omkd start
Starting Opmantek Webserver opmantek.exe                   [  OK  ]
```

Test

Log into each OMK Application via the GUI and verify the data is still there. If everything is as it should be then delete /data/mongodump