

MongoDB Installation Guide

Comp 533

1 Install

1. Go to

`https://www.mongodb.com/download-center#community`

2. Download the community server for your platform
3. Also download Compass for your platform
4. Install them

2 Setup

1. Set up the data directory

```
sudo mkdir -p /data/db
```

2. Add the path and / or aliases to `.bash_profile`

```
#mongodb
export PATH="/Users/risamyers/Documents/Technical/mongodb-osx-x86\_64-3.4.10/bin:$PATH"
alias mongo="/Users/risamyers/Documents/Technical/mongodb-osx-x86\_64-3.4.10/bin/mongo"
alias mongod="/Users/risamyers/Documents/Technical/mongodb-osx-x86\_64-3.4.10/bin/mongod"
alias mongos="/Users/risamyers/Documents/Technical/mongodb-osx-x86\_64-3.4.10/bin/mongos"
alias mongoimport="/Users/risamyers/Documents/Technical/mongodb-osx-x86\_64-3.4.10/bin/mongoimport"
```

3. Start the server

```
mongod --port 27017 --dbpath /data/db
```

4. Connect to the mongodb instance `mongo --port 27017`
5. Create the user administrator (in the admin authentication database).

```
use admin
db.createUser(
  {
    user: "myUserAdmin",
    pwd: "abc123",
    roles: [ { role: "userAdminAnyDatabase", db: "admin" } ]
  }
)
exit
```

6. Re-start the MongoDB instance with access control.
`mongod --auth --port 27017 --dbpath /data/db`
7. Connect and authenticate as the user administrator
`mongo --port 27017 -u "myUserAdmin" -p "abc123" --authenticationDatabase "admin"`
8. Create additional users as needed for your deployment (in ricedb database)

```
use ricedb
db.createUser(
  {
    user: "ricedb",
    pwd: "mypwd",
    roles: [ { role: "readWrite", db: "ricedb" } ]
  }
)
exit
```

9. Connect and authenticate as ricedb and connect to the ricedb database
`mongo --port 27017 -u "ricedb" -p "myPwd" --authenticationDatabase "ricedb" ricedb`

3 Run

1. Start the MongoDB instance with access control.
`mongod --auth --port 27017 --dbpath /data/db`
2. Load the Assignment 5 data
 cd to the path to where you have downloaded the assignment 5 data files and run the following
 FROM THE COMMAND PROMPT

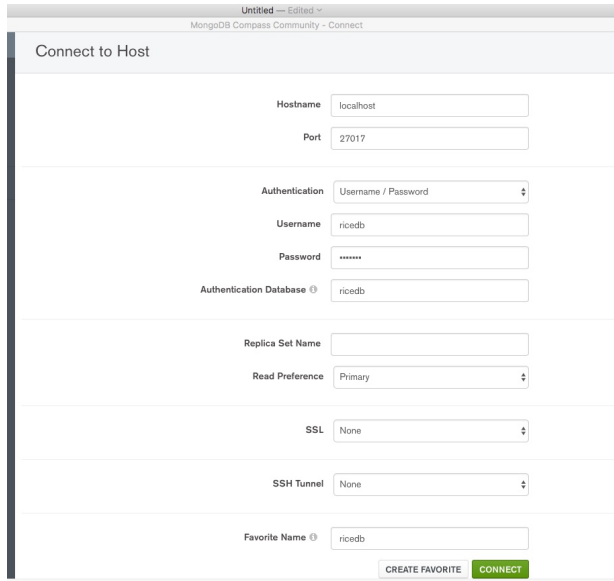
```
mongoimport --db ricedb --collection componentCategory --jsonArray --file componentCat.json --username ricedb --password myPwd
mongoimport --db ricedb --collection component --jsonArray --file component.json --username ricedb --password myPwd
mongoimport --db ricedb --collection employee --jsonArray --file employee.json --username ricedb --password myPwd
mongoimport --db ricedb --collection event --jsonArray --file event.json --username ricedb --password myPwd
mongoimport --db ricedb --collection eventAssignment --jsonArray --file eventAssignment.json --username ricedb --password myPwd
mongoimport --db ricedb --collection itemSold --jsonArray --file itemSold.json --username ricedb --password myPwd
mongoimport --db ricedb --collection location --jsonArray --file location.json --username ricedb --password myPwd
mongoimport --db ricedb --collection menu --jsonArray --file menu.json --username ricedb --password myPwd
mongoimport --db ricedb --collection menuItem --jsonArray --file menuItem.json --username ricedb --password myPwd
mongoimport --db ricedb --collection product --jsonArray --file product.json --username ricedb --password myPwd
mongoimport --db ricedb --collection productSold --jsonArray --file productSold.json --username ricedb --password myPwd
mongoimport --db ricedb --collection recipeItem --jsonArray --file recipeItem.json --username ricedb --password myPwd
mongoimport --db ricedb --collection ticket --jsonArray --file ticket.json --username ricedb --password myPwd
mongoimport --db ricedb --collection unit --jsonArray --file unit.json --username ricedb --password myPwd
mongoimport --db ricedb --collection tkt --jsonArray --file tkt.json --username ricedb --password myPwd
```

3. Check that the data is correct
4. Start the instance with your user
`mongo --port 27017 -u "ricedb" -p "mypwd" --authenticationDatabase "ricedb" ricedb`
5. `db.<colName>.find();`
 Where <colName> is any of the above collection names

3.1 Compass

Compass is a browsing tool that has some limited capabilities in the free edition. To use it:

1. Open MongoDB Compass
2. Create a connection to ricedb

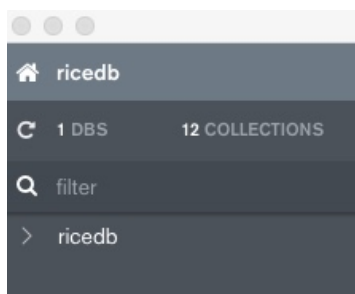


The screenshot shows the 'Connect to Host' dialog in MongoDB Compass. The fields are as follows:

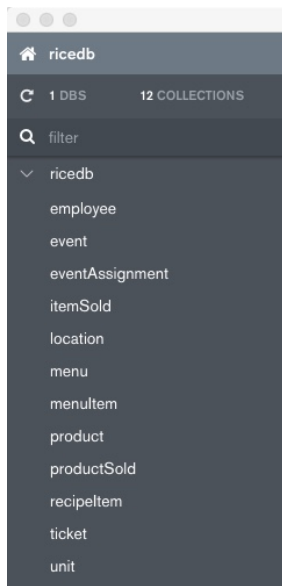
- Hostname: localhost
- Port: 27017
- Authentication: Username / Password
- Username: ricedb
- Password: (masked with dots)
- Authentication Database: ricedb
- Replica Set Name: (empty)
- Read Preference: Primary
- SSL: None
- SSH Tunnel: None
- Favorite Name: ricedb

At the bottom, there are two buttons: 'CREATE FAVORITE' and 'CONNECT'.

3. Click "CREATE FAVORITE"
4. Click "CONNECT"
5. Click the > next to ricedb to see what is in ricedb



6. It should contain



7. Run a simple filter

8. Click on menuItem, enter the following criteria, and click on “Find”



9. You should see

```
> {
  _id: ObjectId("5a0227d66f73d5f342f9e1c4")
  menuItemId: 63
  menuId: 1
  productCode: "wx"
  price: 0.5
}
```