Linux 平台安装 MongoDB	https://www.runoob.com/mongodb/mongodb-linux-install.html
linux 查看系统信息命令	https://www.cnblogs.com/klb561/p/9157569.html
mongodb-linux-x86_64-rhel70-4.2.1.tgz	https://fastdl.mongodb.org/linux/mongodb-linux-x86_64-rhel70-4.2.1.tgz
mongodb.conf配置文件详解	https://blog.csdn.net/qiaqia609/article/details/78902864
关闭MongoDB服务的几种方法	https://blog.csdn.net/github_38885296/article/details/80619191

1、查看linux系统信息

1.1、redhat-release只适合Redhat系的Linux系统

cat /etc/redhat-release

```
[root@iZbp16e5pr6sbudyuvo3ruZ /]# cat /etc/redhat-release
CentOS Linux release 7.4.1708 (Core)
[root@iZbp16e5pr6sbudyuvo3ruZ /]#
```

2、可以在官网直接下载 mongodb tag压缩包，然后上传到服务器


```
[root@iZbp16e5pr6sbudyuvo3ruZ src]# ll
total 112892
-rw-r--r-- 1 root root 115601247 Dec  3 15:07 mongodb-linux-x86_64-rhel70-4.2.1.tgz
[root@iZbp16e5pr6sbudyuvo3ruZ src]#
```

2.1、可以通过 curl 或者 wget命令下载（ESC比较慢）

wget https://fastdl.mongodb.org/linux/mongodb-linux-x86_64-rhel70-4.2.1.tgz

3、解压 mongodb-linux-x86_64-rhel70-4.2.1.tgz

```
tar -zxvf mongodb-linux-x86_64-rhel70-4.2.1.tgz
```

```
[root@iZbp16e5pr6sbudyuvo3ruZ src]# tar -zxvf mongodb-linux-x86_64-rhel70-4.2.1.tgz
mongodb-linux-x86_64-rhel70-4.2.1/THIRD-PARTY-NOTICES.gotools
mongodb-linux-x86_64-rhel70-4.2.1/README
mongodb-linux-x86_64-rhel70-4.2.1/THIRD-PARTY-NOTICES
mongodb-linux-x86_64-rhel70-4.2.1/MPL-2
mongodb-linux-x86_64-rhel70-4.2.1/LICENSE-Community.txt
mongodb-linux-x86_64-rhel70-4.2.1/bin/mongodump
mongodb-linux-x86_64-rhel70-4.2.1/bin/mongorestore
mongodb-linux-x86_64-rhel70-4.2.1/bin/mongoexport
mongodb-linux-x86_64-rhel70-4.2.1/bin/mongoimport
mongodb-linux-x86_64-rhel70-4.2.1/bin/mongostat
mongodb-linux-x86_64-rhel70-4.2.1/bin/mongotop
mongodb-linux-x86_64-rhel70-4.2.1/bin/bsondump
```

```
[root@iZbp16e5pr6sbudyuvo3ruZ src]# ll
total 112896
drwxr-xr-x 3 root root      4096 Dec  3 15:10 mongodb-linux-x86_64-rhel70-4.2.1
-rw-r--r-- 1 root root 115601247 Dec  3 15:07 mongodb-linux-x86_64-rhel70-4.2.1.tgz
[root@iZbp16e5pr6sbudyuvo3ruZ src]#
```

4、将解压包拷贝到指定目录（需要提前创建目录）

```
mkdir -p /usr/local/dev
```

```
mv  /usr/local/src/mongodb-linux-x86_64-rhel70-4.2.1  /usr/local/dev/mongodb
```

```
[root@iZbp16e5pr6sbudyuvo3ruZ dev]# ll
total 4
drwxr-xr-x 3 root root 4096 Dec  3 15:10 mongodb
[root@iZbp16e5pr6sbudyuvo3ruZ dev]# cd mongodb/
[root@iZbp16e5pr6sbudyuvo3ruZ mongodb]# ll
total 316
drwxr-xr-x 2 root root    4096 Dec  3 15:11 bin
-rw-r--r-- 1 root root   30608 Oct 16 09:55 LICENSE-Community.txt
-rw-r--r-- 1 root root   16726 Oct 16 09:55 MPL-2
-rw-r--r-- 1 root root    2617 Oct 16 09:55 README
-rw-r--r-- 1 root root   75405 Oct 16 09:55 THIRD-PARTY-NOTICES
-rw-r--r-- 1 root root  183512 Oct 16 09:57 THIRD-PARTY-NOTICES.gotools
[root@iZbp16e5pr6sbudyuvo3ruZ mongodb]#
```

5、将MongoDB的可执行文件（位于 bin 目录下），可以将其添加到PATH路径中

```
export PATH=/usr/local/dev/mongodb/bin:$PATH
```

红色表示为：mongodb的安装路径

6、尝试通过bin目录下的 mongod 命令启动 mongodb 数据库服务，会提示 /data/db不存在，需要创建 /data/db

cd /usr/local/dev/mongodb/bin
./mongod


```
uZ dev]# cd mongodb/bin/
uZ bin]# ll

0811 Oct 16 09:56 bsondump
7694 Oct 16 10:17 install_compass
4944 Oct 16 10:17 mongo
4856 Oct 16 10:17 mongod
5905 Oct 16 09:56 mongodump
1931 Oct 16 09:56 mongoexport
3296 Oct 16 09:56 mongofiles
0724 Oct 16 09:56 mongoimport
4584 Oct 16 09:57 mongoreplay
8133 Oct 16 09:56 mongorestore
6704 Oct 16 10:17 mongos
8080 Oct 16 09:56 mongostat
8118 Oct 16 09:56 mongotop
uZ bin]# ./mongod
0 I  CONTROL  [main] Automatically disabling TLS 1.0, to force-enable TLS 1.0 specify --sslDisabledProtocols 'none'
0 I  CONTROL  [initandlisten] MongoDB starting : pid=4888 port=27017 dbpath=/data/db 64-bit host=iZbp16e5pr6sbudyuvo3ruZ
0 I  CONTROL  [initandlisten] db version v4.2.1
0 I  CONTROL  [initandlisten] git version: edf6d45851c0b9ee15548f0f847df141764a317e
0 I  CONTROL  [initandlisten] OpenSSL version: OpenSSL 1.0.1e-fips 11 Feb 2013
0 I  CONTROL  [initandlisten] allocator: tcmalloc
0 I  CONTROL  [initandlisten] modules: none
0 I  CONTROL  [initandlisten] build environment:
0 I  CONTROL  [initandlisten]     distmod: rhel70
0 I  CONTROL  [initandlisten]     distarch: x86_64
0 I  CONTROL  [initandlisten]     target_arch: x86_64
0 I  CONTROL  [initandlisten] options: {}
0 I  STORAGE  [initandlisten] exception in initAndListen: NonExistentPath: Data directory /data/db not found., terminating
0 I  NETWORK  [initandlisten] shutdown: going to close listening sockets...
0 I  NETWORK  [initandlisten] removing socket file: /tmp/mongodb-27017.sock
0 I  -        [initandlisten] Stopping further Flow Control ticket acquisitions.
0 I  CONTROL  [initandlisten] now exiting
0 I  CONTROL  [initandlisten] shutting down with code:100
uZ bin]#
```

7、在根目录下创建数据库目录：

MongoDB的数据存储在data目录的db目录下，但是这个目录在安装过程不会自动创建，所以你需要手动创建data目录，并在data目录中创建db目录。

7.1、创建 /data/db目录

mkdir -p /data/db

7.2、启动mongodb服务

cd /usr/local/dev/mongodb/bin
./mongod

可以通过 --dbpath指定具体的数据库目录：eg

./mongod --dbpath=/usr/local/dev/mongodb/data/db

MongoDB初始化信息

```
n]
n] ** WARNING: soft rlimits too low. rlimits set to 7283 processes, 65535 files. Number of processes should be at least 32767.5 : 0.5 times number of files.
n]
n] createCollection: admin.system.version with provided UUID: c65354ea-9912-440e-9635-17b33e0aa823 and options: { uuid: UUID("c65354ea-9912-440e-9635-17b33e0aa823") }
n] index build: done building index _id_ on ns admin.system.version
n] Marking collection admin.system.version as collection version: <unsharded>
n] setting featureCompatibilityVersion to 4.2
n] Marking collection local.system.replset as collection version: <unsharded>
n] Flow Control is enabled on this deployment.
n] Marking collection admin.system.roles as collection version: <unsharded>
n] createCollection: local.startup_log with generated UUID: 28e7e557-74c4-4a16-a9dc-312566192d85 and options: { capped: true, size: 10485760 }
n] index build: done building index _id_ on ns local.startup_log
n] Marking collection local.startup_log as collection version: <unsharded>
n] Initializing full-time diagnostic data capture with directory '/data/db/diagnostic.data'
onCacheRefresh] Marking collection config.system.sessions as collection version: <unsharded>
onCacheRefresh] createCollection: config.system.sessions with provided UUID: 87943248-8830-409a-8f7c-fd81b58c8fd5 and options: { uuid: UUID("87943248-8830-409a-8f7c-fd81b58c8fd5") }
n] Listening on /tmp/mongodb-27017.sock.
n] Listening on 127.0.0.1
n] waiting for connections on port 27017
onCacheRefresh] index build: done building index _id_ on ns config.system.sessions
onCacheRefresh] index build: starting on config.system.sessions properties: { v: 2, key: { lastUse: 1 }, name: "lsidTTLIndex", ns: "config.system.sessions", expireAfterSeconds: 1800 } using method

onCacheRefresh] build may temporarily use up to 500 megabytes of RAM
onCacheRefresh] index build: collection scan done. scanned 0 total records in 0 seconds
onCacheRefresh] index build: inserted 0 keys from external sorter into index in 0 seconds
onCacheRefresh] index build: done building index lsidTTLIndex on ns config.system.sessions
onCacheReap] Marking collection config.transactions as collection version: <unsharded>
g collection local.oplog.rs as collection version: <unsharded>
```

7.3、查看 data/db目录


```
[root@iZbp16e5pr6sbudyuvo3ruZ bin]# cd ..)
[root@iZbp16e5pr6sbudyuvo3ruZ mongodb]# cd /data/db
[root@iZbp16e5pr6sbudyuvo3ruZ db]# ll
total 228
-rw------- 1 root root 20480 Dec  3 15:48 collection-0-34019640041976009105.wt
-rw------- 1 root root 20480 Dec  3 15:48 collection-2-34019640041976009105.wt
-rw------- 1 root root  4096 Dec  3 15:48 collection-4-34019640041976009105.wt
drwx------ 2 root root  4096 Dec  3 15:48 diagnostic.data
-rw------- 1 root root 20480 Dec  3 15:48 index-1-34019640041976009105.wt
-rw------- 1 root root 20480 Dec  3 15:48 index-3-34019640041976009105.wt
-rw------- 1 root root  4096 Dec  3 15:48 index-5-34019640041976009105.wt
-rw------- 1 root root 12288 Dec  3 15:48 index-6-34019640041976009105.wt
drwx------ 2 root root  4096 Dec  3 15:45 journal
-rw------- 1 root root 20480 Dec  3 15:48 _mdb_catalog.wt
-rw------- 1 root root     0 Dec  3 15:48 mongod.lock
-rw------- 1 root root 20480 Dec  3 15:48 sizeStorer.wt
-rw------- 1 root root   114 Dec  3 15:45 storage.bson
-rw------- 1 root root    47 Dec  3 15:45 WiredTiger
-rw------- 1 root root  4096 Dec  3 15:48 WiredTigerLAS.wt
-rw------- 1 root root    21 Dec  3 15:45 WiredTiger.lock
-rw------- 1 root root  1185 Dec  3 15:48 WiredTiger.turtle
-rw------- 1 root root 61440 Dec  3 15:48 WiredTiger.wt
```

8、自定义目录数据库和日志目录

进入mongodb目录	cd /usr/local/dev/mongodb
创建data和db目录	sudo mkdir -p data/db
授权	sudo chmod -R 777 data/db
创建logs目录	sudo mkdir logs
进入logs目录创建 mongodb.log文件	cd logs
	touch mongodb.log

```
[root@iZbp16e5pr6sbudyuvo3ruZ mongodb]# ll
total 324
drwxr-xr-x 2 root root   4096 Dec  3 15:11 bin
drwxr-xr-x 3 root root   4096 Dec  3 16:09 data
-rw-r--r-- 1 root root  30608 Oct 16 09:55 LICENSE-Community.txt
drwxr-xr-x 2 root root   4096 Dec  3 16:11 logs
-rw-r--r-- 1 root root  16726 Oct 16 09:55 MPL-2
-rw-r--r-- 1 root root   2617 Oct 16 09:55 README
-rw-r--r-- 1 root root  75405 Oct 16 09:55 THIRD-PARTY-NOTICES
-rw-r--r-- 1 root root 183512 Oct 16 09:57 THIRD-PARTY-NOTICES.gotools
[root@iZbp16e5pr6sbudyuvo3ruZ mongodb]#
```

8.2、配置mongodb相关信息

cd /usr/local/mongodb/bin

sudo vi mongodb.conf

#设置数据文件存放目录
dbpath=/usr/local/dev/mongodb/data/db
#设置日志文件存放目录
logpath=/usr/local/dev/mongodb/logs/mongodb.log

#设置端口号
port=27017
#设置以守护程序的方式启动，即在后台运行
fork=true
#开启一个HTTP协议的端口提供REST的服务这个端口是你Server端口加上1000，即28017，默认的HTTP端口是数据库状态页面，注意该功能只适用于版本小于3.2，高版本不支持
#nohttpinterface=true

```
[root@iZbp16e5pr6sbudyuvo3ruZ bin]# cd /usr/local/dev/mongodb/bin/
[root@iZbp16e5pr6sbudyuvo3ruZ bin]# ll
total 282148
-rwxr-xr-x 1 root root 10100811 Oct 16 09:56 bsondump
-rwxr-xr-x 1 root root     7694 Oct 16 10:17 install_compass
-rwxr-xr-x 1 root root 47534944 Oct 16 10:17 mongo
-rwxr-xr-x 1 root root 71584856 Oct 16 10:17 mongod
-rw-r--r-- 1 root root      418 Dec  3 16:24 mongodb.conf
-rwxr-xr-x 1 root root 14765905 Oct 16 09:56 mongodump
-rwxr-xr-x 1 root root 14511931 Oct 16 09:56 mongoexport
-rwxr-xr-x 1 root root 14473296 Oct 16 09:56 mongofiles
-rwxr-xr-x 1 root root 14690724 Oct 16 09:56 mongoimport
-rwxr-xr-x 1 root root 18154584 Oct 16 09:57 mongoreplay
-rwxr-xr-x 1 root root 15088133 Oct 16 09:56 mongorestore
-rwxr-xr-x 1 root root 39806704 Oct 16 10:17 mongos
-rwxr-xr-x 1 root root 14258080 Oct 16 09:56 mongostat
-rwxr-xr-x 1 root root 13918118 Oct 16 09:56 mongotop
[root@iZbp16e5pr6sbudyuvo3ruZ bin]#
```

8.3、以配置文件方式启动 mongodb服务器

cd /usr/local/mongodb/bin

./mongod -f mongodb.conf

```
There doesn't seem to be a server running with dbpath: /data/db
[root@iZbp16e5pr6sbudyuvo3ruZ bin]# ./mongod -f mongodb.conf
about to fork child process, waiting until server is ready for connections.
forked process: 11628
child process started successfully, parent exiting
[root@iZbp16e5pr6sbudyuvo3ruZ bin]#
```

8.3.1、ERROR 提示配置信息 nohttpinterface参数错误，关闭此参数即可，注意该功能只适用于版本小于3.2，高版本不支持。关闭此参数即可

```
[root@iZbp16e5pr6sbudyuvo3ruZ bin]# ./mongod -f mongodb.conf
Error parsing INI config file: unrecognised option 'nohttpinterface'
try './mongod --help' for more information
```

8.3.2、ERROR：服务已经启动过了，可以使用 ps -ef | grep mongo 命令检查一下是否启动，关闭服务，重新启动

```
[root@iZbp16e5pr6sbudyuvo3ruZ bin]# ./mongod -f mongodb.conf
about to fork child process, waiting until server is ready for connections.
forked process: 5401
child process started successfully, parent exiting
```

```
[root@iZbp16e5pr6sbudyuvo3ruZ bin]# ps -ef | grep mongo
root      5401     1  0 16:29 ?        00:00:00 ./mongod -f mongodb.conf
root      7650 11315  0 16:31 pts/2    00:00:00 grep --color=auto mongo
[root@iZbp16e5pr6sbudyuvo3ruZ bin]#
```

通过 mongod --shutdown 命令关闭服务

./mongod --shutdown -f mongodb.conf

```
[root@iZbp16e5pr6sbudyuvo3ruZ bin]# ./mongod --shutdown -f mongodb.conf
2019-12-03T16:36:45.253+0800 I  CONTROL  [main] log file "/usr/local/dev/mc
killing process with pid: 11628
[root@iZbp16e5pr6sbudyuvo3ruZ bin]#
```

或通过db.shutdownServer();

./mongo

use admin

db.shutdownServer();

```
> use admin
switched to db admin
> db.shutdownServer();
2019-12-03T16:39:16.634+0800 I  NETWORK  [js] DBClientConnection failed to receive message f
server should be down...
2019-12-03T16:39:16.636+0800 I  NETWORK  [js] trying reconnect to 127.0.0.1:27017 failed
2019-12-03T16:39:16.636+0800 I  NETWORK  [js] reconnect 127.0.0.1:27017 failed failed
```

9、通过 mongo 进入 MongoDB后台管理 Shell

cd /usr/local/mongodb/bin

cd /usr/local/mongodb/bin

./mongo

以下显示了 mongdb链接信息、shell版本、mogodb server 版本

MongoDB shell version v4.2.1
connecting to: mongodb://127.0.0.1:27017/?
compressors=disabled&gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("0dc06187-8d01-4ca8-bec3-3dc07c690ad0") }
MongoDB server version: 4.2.1

```
MongoDB shell version v4.2.1
connecting to: mongodb://127.0.0.1:27017/?compressors=disabled&gssapiServiceName=mongodb
Implicit session: session { "id" : UUID("0dc06187-8d01-4ca8-bec3-3dc07c690ad0") }
MongoDB server version: 4.2.1
Server has startup warnings:
2019-12-03T16:40:58.522+0800 I  STORAGE  [initandlisten]
2019-12-03T16:40:58.522+0800 I  STORAGE  [initandlisten] ** WARNING: Using the XFS filesystem is strongly recomme
2019-12-03T16:40:58.522+0800 I  STORAGE  [initandlisten] **          See http://dochub.mongodb.org/core/prodnotes
2019-12-03T16:40:59.554+0800 I  CONTROL  [initandlisten]
2019-12-03T16:40:59.554+0800 I  CONTROL  [initandlisten] ** WARNING: Access control is not enabled for the databa
2019-12-03T16:40:59.554+0800 I  CONTROL  [initandlisten] **          Read and write access to data and configurat
2019-12-03T16:40:59.554+0800 I  CONTROL  [initandlisten] ** WARNING: You are running this process as the root use
2019-12-03T16:40:59.554+0800 I  CONTROL  [initandlisten]
2019-12-03T16:40:59.554+0800 I  CONTROL  [initandlisten] ** WARNING: This server is bound to localhost.
2019-12-03T16:40:59.554+0800 I  CONTROL  [initandlisten] **          Remote systems will be unable to connect to
2019-12-03T16:40:59.554+0800 I  CONTROL  [initandlisten] **          Start the server with --bind_ip <address> to
2019-12-03T16:40:59.555+0800 I  CONTROL  [initandlisten] **          addresses it should serve responses from, or
2019-12-03T16:40:59.555+0800 I  CONTROL  [initandlisten] **          bind to all interfaces. If this behavior is
2019-12-03T16:40:59.555+0800 I  CONTROL  [initandlisten] **          server with --bind_ip 127.0.0.1 to disable t
2019-12-03T16:40:59.555+0800 I  CONTROL  [initandlisten]
2019-12-03T16:40:59.555+0800 I  CONTROL  [initandlisten]
2019-12-03T16:40:59.555+0800 I  CONTROL  [initandlisten] ** WARNING: /sys/kernel/mm/transparent_hugepage/enabled
2019-12-03T16:40:59.555+0800 I  CONTROL  [initandlisten] **          We suggest setting it to 'never'
2019-12-03T16:40:59.555+0800 I  CONTROL  [initandlisten]
2019-12-03T16:40:59.555+0800 I  CONTROL  [initandlisten] ** WARNING: /sys/kernel/mm/transparent_hugepage/defrag i
2019-12-03T16:40:59.555+0800 I  CONTROL  [initandlisten] **          We suggest setting it to 'never'
2019-12-03T16:40:59.555+0800 I  CONTROL  [initandlisten]
2019-12-03T16:40:59.555+0800 I  CONTROL  [initandlisten] ** WARNING: soft rlimits too low. rlimits set to 7283 pr
2019-12-03T16:40:59.555+0800 I  CONTROL  [initandlisten]
---
Enable MongoDB's free cloud-based monitoring service, which will then receive and display
metrics about your deployment (disk utilization, CPU, operation statistics, etc).

The monitoring data will be available on a MongoDB website with a unique URL accessible to you
and anyone you share the URL with. MongoDB may use this information to make product
improvements and to suggest MongoDB products and deployment options to you.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
---

>
```

显示 所有的数据库

```
> show dbs
admin    0.000GB
config   0.000GB
local    0.000GB
>
```

10、检查mongodb 访问ip权限

netstat -anp | grep mongo

下图标识只有本机能链接

```
child process started successfully, parent exiting
[root@iZbp16e5pr6sbudyuvo3ruZ bin]# netstat -anp | grep mongo
tcp        0      0 127.0.0.1:27017         0.0.0.0:*              LISTEN      31812/./mongod
unix  2      [ ACC ]     STREAM     LISTENING     4168447  31812/./mongod        /tmp/mongodb-27017.sock
[root@iZbp16e5pr6sbudyuvo3ruZ bin]#
```

10.1、修改链接属性（但不建议，建议通过用户和权限去链接）：

```
[root@iZbp16e5pr6sbudyuvo3ruZ bin]# cat mongodb.conf
# 任何机器可以连接
bind_ip_all=true
#设置IP 默认为本地链接和183.158.82.191
#bind_ip=127.0.0.1
#设置端口号
port=27017
#开启认证
#auth=true

#设置数据文件存放目录
dbpath=/usr/local/dev/mongodb/data/db
#设置日志文件存放目录
logpath=/usr/local/dev/mongodb/logs/mongodb.log
#日志输出方式，使用追加的方式写日志
logappend=true
#设置以守护程序的方式启动，即在后台运行
fork=true
```
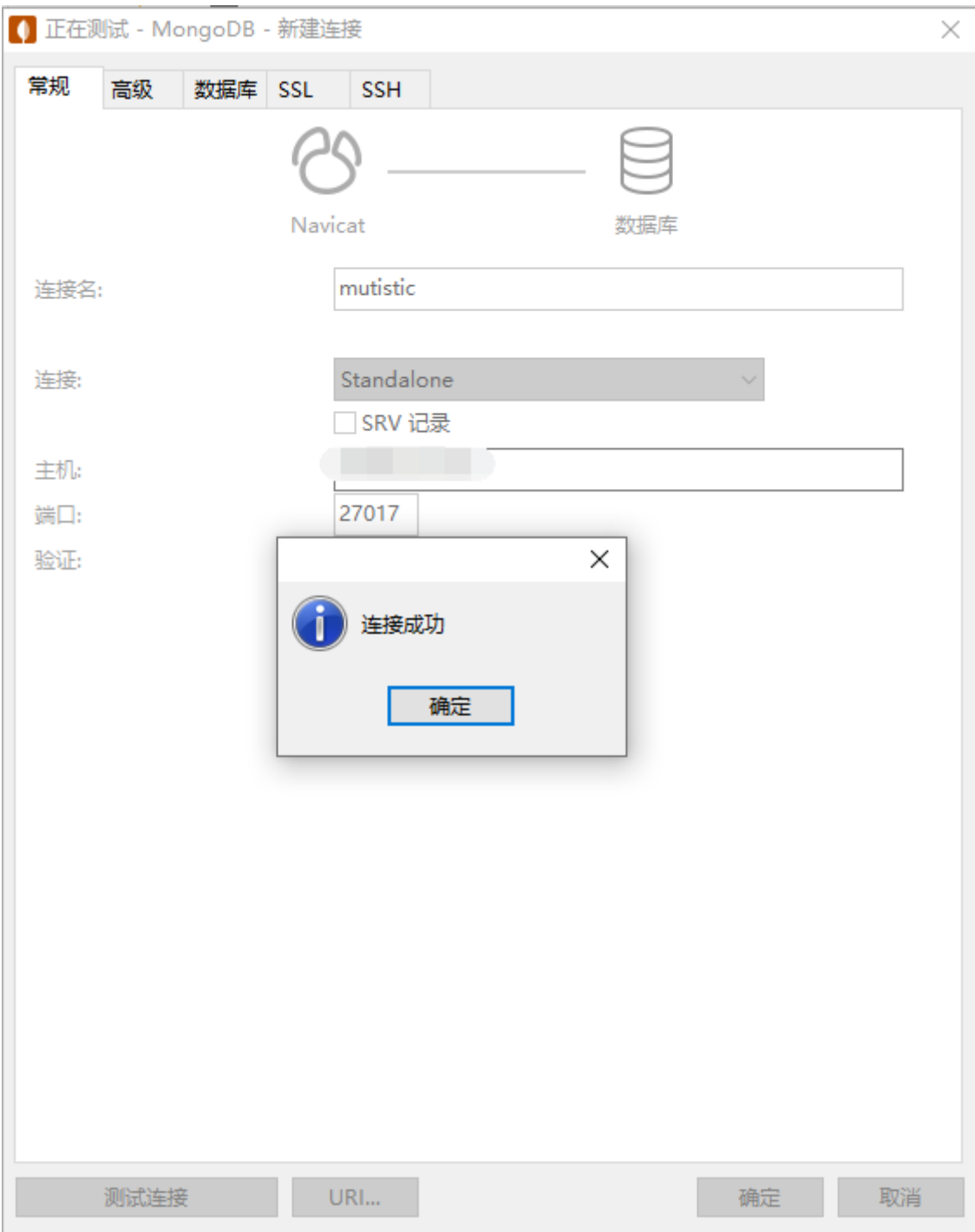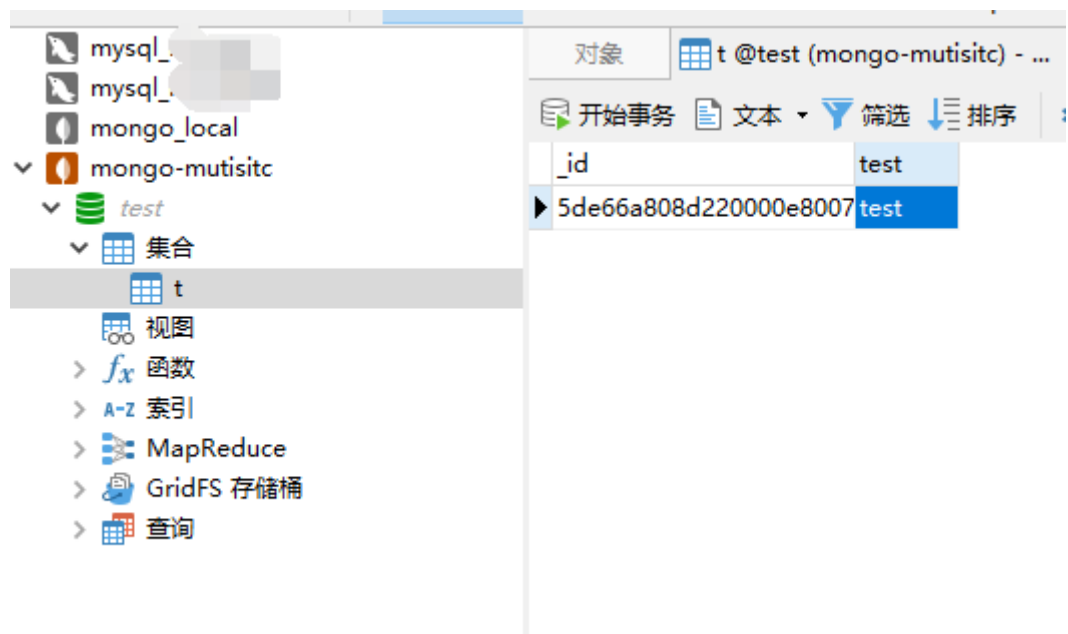
```
[root@iZbp16e5pr6sbudyuvo3ruZ bin]# netstat -anp | grep mongo
tcp        0      0 0.0.0.0:27017          0.0.0.0:*              LISTEN      13838/./mongod
unix  2      [ ACC ]     STREAM     LISTENING     4295254  13838/./mongod        /tmp/mongodb-27017.sock
```

正在测试 - MongoDB - 新建连接   ✕

常规　高级　数据库　SSL　SSH

Navicat ————————— 数据库

连接名:　　　　　　mutistic

连接:　　　　　　　Standalone

　　　　　　　　　☐ SRV 记录

主机:

端口:　　　　　　　27017

验证:

　　　　　　　　　　　　　　　　　　　✕

　　　ℹ　连接成功

　　　　　　　确定

测试连接　　　URI...　　　　　　　确定　　取消

```
> show dbs
admin    0.000GB
config   0.000GB
local    0.000GB
test     0.000GB
>
```

11、授权登录和验证