启动配置服务器（每个）

```
#/usr/local/mongodb/bin/mongod   --configsvr  \
>--dbpath    /usr/local/mongodb/dbs/config/      \
>--port 21000    --logpath    /usr/local/mongodb/logs/config.log   --fork
```

启动mongos(每个)

```
#/usr/local/mongodb/bin/mongos    \
>--configdb 192.168.32.128:21000,192.168.32.130:21000,192.168.32.131:21000   \
>--port 20000   --logpath  /usr/local/mongodb/logs/mongos.log --fork
```

启动片副本集（每个）

```
#/usr/local/mongodb/bin/mongod --shardsvr --replSet shard1   \
>--port 22001 --dbpath /usr/local/mongodb/dbs/shard1/     \
>--logpath /usr/local/mongodb/logs/shard1.log --fork --nojournal   --oplogSize 10

#/usr/local/mongodb/bin/mongod --shardsvr --replSet shard2   \
>--port 22002 --dbpath /usr/local/mongodb/dbs/shard2/    \
>--logpath /usr/local/mongodb/logs/shard2.log --fork --nojournal   --oplogSize 10

#/usr/local/mongodb/bin/mongod --shardsvr --replSet shard3  \
>--port 22003 --dbpath /usr/local/mongodb/dbs/shard3/   \
>--logpath /usr/local/mongodb/logs/shard3.log --fork --nojournal   --oplogSize 10
```

设置每一片副本集

第一片

```
./mongo  127.0.0.1:22001
> config = { _id:"shard1", members:[
                {_id:0,host:"192.168.32.128:22001"},
                {_id:1,host:"192.168.32.130:22001"},
                {_id:2,host:"192.168.32.131:22001",arbiterOnly:true}
            ]
       }
>rs.initiate(config);  ## 初始化配置
```

第二片

```
./mongo  127.0.0.1:22002
> config = { _id:"shard3", members:[
                {_id:0,host:"192.168.32.128:22002"},
                {_id:1,host:"192.168.32.130:22002"},
                {_id:2,host:"192.168.32.131:22002",arbiterOnly:true}
```

```
            ]
        }
>rs.initiate(config);  ## 初始化配置
第三片
./mongo  127.0.0.1:22003
> config = { _id:"shard3", members:[
                    {_id:0,host:"192.168.32.128:22003"},
                    {_id:1,host:"192.168.32.130:22003"},
                    {_id:2,host:"192.168.32.131:22003",arbiterOnly:true}
            ]
        }
>rs.initiate(config);  ## 初始化配置


连接到mongos
./mongo 127.0.0.1:20000
use admin
##串联路由服务器与分配副本集
db.runCommand( { addshard :
"shard1/192.168.32.128:22001,192.168.32.130:22001,192.168.32.131:22001",name:"shard1"});
db.runCommand( { addshard :
"shard2/192.168.32.128:22002,192.168.32.130:22002,192.168.32.131:22002",name:"shard2"});
db.runCommand( { addshard :
"shard3/192.168.32.128:22003,192.168.32.130:22003,192.168.32.131:22003",name:"shard3"});

#查看分片服务器的配置
db.runCommand( { listshards : 1 } );
#指定testdb分片生效
db.runCommand( { enablesharding :"testdb"});
#指定数据库里需要分片的集合和片键
db.runCommand( { shardcollection : "testdb.table1",key : {id: hashed} } )
#使用testdb
use  testdb;
#插入测试数据
for (var i = 1; i <= 100000; i++)  db.table1.save({id:i,"test1":"testval1"});

#查看分片情况如下，部分无关信息省掉了
db.table1.stats();
```