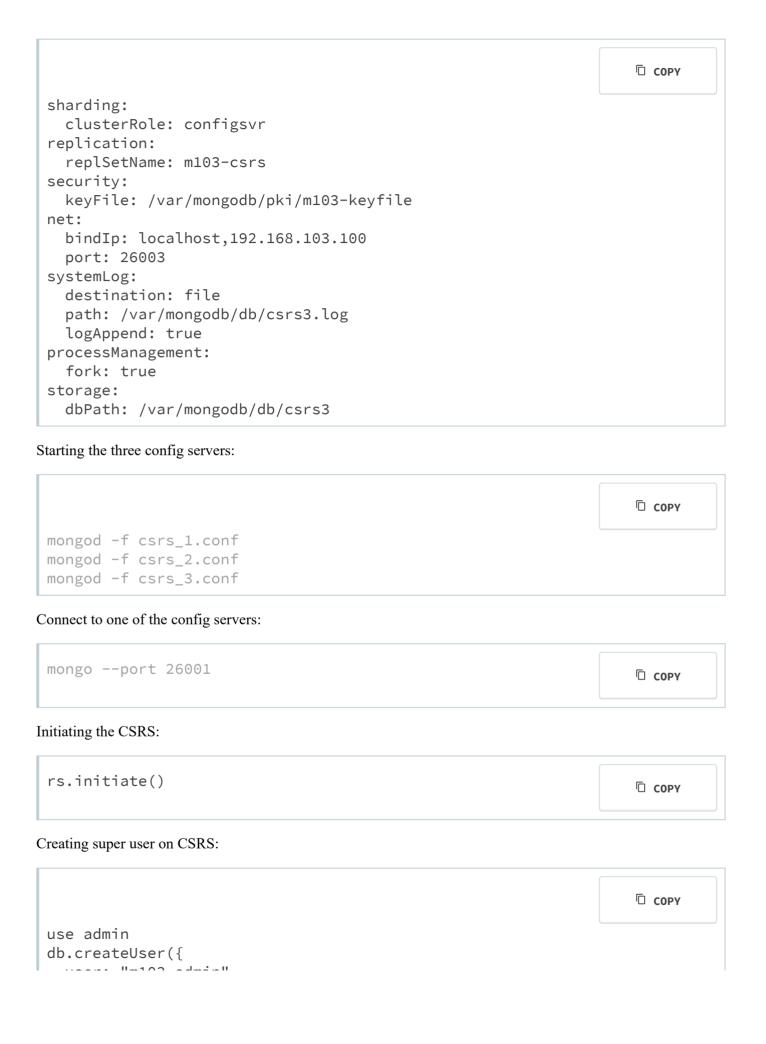
Lecture Instructions

Configuration file for first config server csrs 1.conf:

```
COPY
sharding:
  clusterRole: configsvr
replication:
  replSetName: m103-csrs
security:
  keyFile: /var/mongodb/pki/m103-keyfile
net:
  bindIp: localhost,192.168.103.100
  port: 26001
systemLog:
  destination: file
  path: /var/mongodb/db/csrs1.log
  logAppend: true
processManagement:
  fork: true
storage:
  dbPath: /var/mongodb/db/csrs1
```

csrs 2.conf:

```
COPY
sharding:
 clusterRole: configsvr
replication:
  replSetName: m103-csrs
security:
 keyFile: /var/mongodb/pki/m103-keyfile
 bindIp: localhost, 192.168.103.100
 port: 26002
systemLog:
 destination: file
  path: /var/mongodb/db/csrs2.log
 logAppend: true
processManagement:
 fork: true
storage:
 dbPath: /var/mongodb/db/csrs2
```



```
user: "miu3-admin",
pwd: "m103-pass",
roles: [
     {role: "root", db: "admin"}
]
})
```

Authenticating as the super user:

```
db.auth("m103-admin", "m103-pass")
```

Add the second and third node to the CSRS:

```
rs.add("192.168.103.100:26002")
rs.add("192.168.103.100:26003")
```

Mongos config (mongos.conf):

```
sharding:
    configDB: m103-
    csrs/192.168.103.100:26001,192.168.103.100:26002,192.168.103.100:26003
security:
    keyFile: /var/mongodb/pki/m103-keyfile
net:
    bindIp: localhost,192.168.103.100
port: 26000
systemLog:
    destination: file
    path: /var/mongodb/db/mongos.log
    logAppend: true
processManagement:
    fork: true
```

Connect to mongos:

```
vagrant@m103:~$ mongo --port 26000 --username m103-admin --
□ copy
```

Check sharding status:

```
MongoDB Enterprise mongos> sh.status()
```

□ сору

Updated configuration for node1.conf:

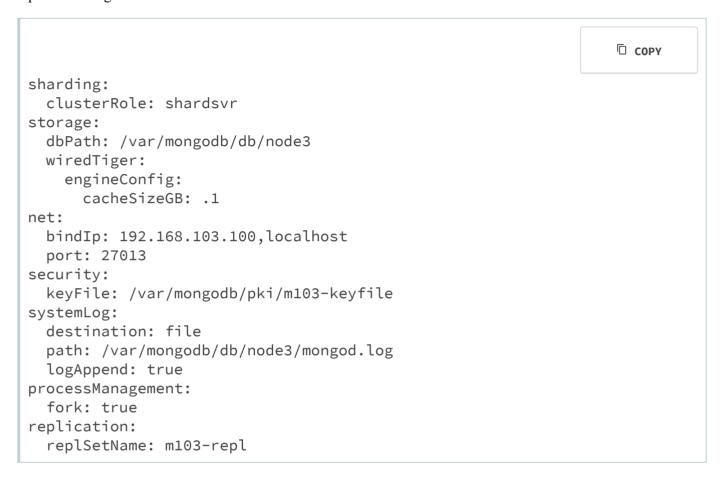
```
COPY
sharding:
 clusterRole: shardsvr
storage:
 dbPath: /var/mongodb/db/node1
 wiredTiger:
    engineConfig:
      cacheSizeGB: .1
net:
  bindIp: 192.168.103.100, localhost
  port: 27011
security:
 keyFile: /var/mongodb/pki/m103-keyfile
systemLog:
 destination: file
  path: /var/mongodb/db/node1/mongod.log
  logAppend: true
processManagement:
 fork: true
replication:
  replSetName: m103-repl
```

Updated configuration for node2.conf:

```
sharding:
    clusterRole: shardsvr
storage:
    dbPath: /var/mongodb/db/node2
    wiredTiger:
        engineConfig:
            cacheSizeGB: .1
net:
    bindIp: 192.168.103.100,localhost
    port: 27012
security:
    keyFile: /var/mongodb/pki/m103-keyfile
systemLog:
    destination: file
```

```
path: /var/mongodb/db/node2/mongod.log
logAppend: true
processManagement:
  fork: true
replication:
  replSetName: m103-repl
```

Updated configuration for node3.conf:



Connecting directly to secondary node (note that if an election has taken place in your replica set, the specified node may have become primary):

```
mongo --port 27012 -u "m103-admin" -p "m103-pass" --authent

□ copy
```

Shutting down node:

```
use admin
db.shutdownServer()
```

Restarting node with new configuration:

| mongod -f node2.conf | □ сору |
|--|---------------|
| Stepping down current primary: | |
| rs.stepDown() | □ сору |
| Adding new shard to cluster from mongos: | |
| sh.addShard("m103-repl/192.168.103.100:27012") | |

```
sh.addShard("m103-repl/192.168.103.100:27012")
```