

Start MongoDB server

```
C:\Program Files\MongoDB\Server\3.6\bin\mongod.exe
2018-02-20T19:28:31.635-0800 I CONTROL [initandlisten] **      Read and write access to data and configuration is
unrestricted.
2018-02-20T19:28:31.635-0800 I CONTROL [initandlisten]
2018-02-20T19:28:31.635-0800 I CONTROL [initandlisten] ** WARNING: This server is bound to localhost.
2018-02-20T19:28:31.636-0800 I CONTROL [initandlisten] **      Remote systems will be unable to connect to this
server.
2018-02-20T19:28:31.636-0800 I CONTROL [initandlisten] **      Start the server with --bind_ip <address> to specify
which IP
2018-02-20T19:28:31.637-0800 I CONTROL [initandlisten] **      addresses it should serve responses from, or with
--bind_ip_all to
2018-02-20T19:28:31.637-0800 I CONTROL [initandlisten] **      bind to all interfaces. If this behavior is desired,
start the
2018-02-20T19:28:31.638-0800 I CONTROL [initandlisten] **      server with --bind_ip 127.0.0.1 to disable this warning.
2018-02-20T19:28:31.638-0800 I CONTROL [initandlisten]
2018-02-20T19:28:31.638-0800 I CONTROL [initandlisten]
2018-02-20T19:28:31.639-0800 I CONTROL [initandlisten] ** WARNING: The file system cache of this machine is configured
to be greater than 40% of the total memory. This can lead to increased memory pressure and poor performance.
2018-02-20T19:28:31.640-0800 I CONTROL [initandlisten] See http://dochub.mongodb.org/core/wt-windows-system-file-cache
2018-02-20T19:28:31.641-0800 I CONTROL [initandlisten]
2018-02-20T22:28:31.889-0500 I FTDC [initandlisten] Initializing full-time diagnostic data capture with directory
'./data/db/diagnostic.data'
2018-02-20T22:28:31.892-0500 I NETWORK [initandlisten] waiting for connections on port 27017
```

Starting mongo shell that is not connected to any mongod

```
Microsoft Windows [Version 10.0.16299.248]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\mereddydivyareddy>cd C:\Program Files\MongoDB\Server\3.6\bin

C:\Program Files\MongoDB\Server\3.6\bin>start Mongod

C:\Program Files\MongoDB\Server\3.6\bin>start Mongod

C:\Program Files\MongoDB\Server\3.6\bin> mongo --nodb
MongoDB shell version v3.6.2
>
```

Create replica set by

```
replicaSet = new ReplSetTest({"nodes" : 3})
```

```
> replicaSet = new ReplSetTest({"nodes" : 3})
```

Start the replication processes :

```
nodes : [ ]  
}  
> replicaSet.startSet()
```

```
ReplSetTest Starting...  
Resetting db path '/data/db/___unknown_name___-0'  
2018-02-20T23:02:52.206-0500 E QUERY [thread1] Error: Caught std::exception of type class boost::filesystem::filesystem_error: boost::filesystem::remove: The process cannot access the file because it is being used by another process: "/data/db/___unknown_name___-0/collection-0--2353415141256918807.wt" :  
MongoRunner.runMongod@src/mongo/shell/servers.js:721:17  
ReplSetTest/this.start@src/mongo/shell/replsettest.js:1784:20  
ReplSetTest/this.startSet@src/mongo/shell/replsettest.js:500:24  
@(shell):1:1  
>
```

replicaSet.initiate()

```
"use strict";  
  
var master;  
assert.soonNoExcept(function() {  
    return (master = self.getPrimary());  
}, "waiting for master", timeout);  
  
return master;  
},  
"name" : "___unknown_name___",  
"useHostName" : true,  
"host" : "DESKTOP-7F7GG1M",  
"oplogSize" : 40,  
"useSeedList" : false,  
"keyFile" : undefined,  
"protocolVersion" : undefined,  
"waitForKeys" : undefined,  
"nodeOptions" : {  
    "n0" : undefined,  
    "n1" : undefined,  
    "n2" : undefined  
},  
"ports" : [  
    20000,  
    20001,  
    20002  
],  
"nodes" : [ ]  
}
```

port Numbers are :

20000

20001

20002

```
> conn1 = new Mongo("localhost:20000")
connection to localhost:20000
```

```
> primaryDB = conn1.getDB("test")
test
```

```
> primaryDB.isMaster()
```

```
{
  "hosts" : [
    "Vellanna-PC:20000",
    "Vellanna-PC:20001",
    "Vellanna-PC:20002"
  ],
  "setName" : "__unknown_name__",
  "setVersion" : 2,
  "ismaster" : true,
  "secondary" : false,
  "primary" : "Vellanna-PC:20000",
  "me" : "Vellanna-PC:20000",
  "electionId" : ObjectId("7fffffff00000000000000000001")
}
```

Insertion:

```
> for (i=0; i<1000; i++) { primaryDB.coll.insert({count: i}) }
WriteResult({ "nInserted" : 1 })
> primaryDB.coll.count()
1000
```

Connecting to DB-port 2:

```
> conn2 = new Mongo("localhost:20001")
connection to localhost:20001
```

Test:

```
> secondaryDB = conn2.getDB("test")
test
```

Find:

```
> secondaryDB.coll.find()
Error: error: {
  "operationTime" : Timestamp(1519179265, 254),
  "ok" : 0,
  "errmsg" : "not master and slaveOk=false",
  "code" : 13435,
  "codeName" : "NotMasterNoSlaveOk",
  "$clusterTime" : {
    "clusterTime" : Timestamp(1519179265, 254),
    "signature" : {
      "hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA"),

```

```
> conn2.setSlaveOk()
```

```
> secondaryDB.coll.find()
{ "_id" : ObjectId("5a8cd6000d28dd6b39694651"), "count" : 1 }
{ "_id" : ObjectId("5a8cd6000d28dd6b39694659"), "count" : 9 }
{ "_id" : ObjectId("5a8cd6000d28dd6b39694661"), "count" : 17 }
{ "_id" : ObjectId("5a8cd6000d28dd6b39694665"), "count" : 21 }
{ "_id" : ObjectId("5a8cd6000d28dd6b39694672"), "count" : 34 }
```

```
> secondaryDB.coll.count()
1000
> secondaryDB.coll.insert({"count" : 1001})
WriteResult({ "writeError" : { "code" : 10107, "errmsg" : "not master" } })
> secondaryDB.runCommand({"getLastError" : 1})
{
  "connectionId" : 7,
  "err" : "not master",
  "code" : 10107,
  "codeName" : "NotMaster",
  "n" : 0,
  "ok" : 1,
  "operationTime" : Timestamp(1519179265, 254),
  "$clusterTime" : {
    "clusterTime" : Timestamp(1519179265, 254),
    "signature" : {
      "hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAAA="),
      "keyId" : NumberLong(0)
    }
  }
}
```

```
> primaryDB.printReplicationInfo()
configured oplog size: 40MB
log length start to end: 121secs (0.03hrs)
oplog first event time: Tue Feb 20 2018 22
oplog last event time: Tue Feb 20 2018 22
now: Tue Feb 20 2018 22
```

```
> primaryDB.printSlaveReplicationInfo()
source: Yellanna-PC:20001
syncdTo: Tue Feb 20 2018 22:12:02 GMT-0500 (Eastern Standard Time)
0 secs (0 hrs) behind the primary
source: Yellanna-PC:20002
syncdTo: Tue Feb 20 2018 22:12:02 GMT-0500 (Eastern Standard Time)
0 secs (0 hrs) behind the primary
```

primary Shutdown and secondary becomes master:

```

> primaryDB.adminCommand({"shutdown" : 1})
2018-02-20T21:39:32.725-0500 E QUERY [thread1] Error: error doing query: failed: network error while attempting to run command 'shu
DB.prototype.runCommand@src/mongo/shell/db.js:168:1
DB.prototype.adminCommand@src/mongo/shell/db.js:186:16
@(shell):1:1
>
>
> secondaryDB.isMaster()
{
  "hosts" : [
    "Yellanna-PC:20000",
    "Yellanna-PC:20001",
    "Yellanna-PC:20002"
  ],
  "setName" : "__unknown_name__",
  "setVersion" : 2,
  "ismaster" : false,
  "secondary" : true,
  "primary" : "Yellanna-PC:20002",
  "me" : "Yellanna-PC:20001",
  "lastWrite" : {
    "opTime" : {
      "ts" : Timestamp(1519180787, 1),
      "t" : NumberLong(2)
    },
    "lastWriteDate" : ISODate("2018-02-21T02:39:47Z"),
  },
}

```

replication information:

```

> secondaryDB.printReplicationInfo()
configured oplog size: 40MB
log length start to end: 1923secs (0
oplog first event time: Tue Feb 20
oplog last event time: Tue Feb 20
now: Tue Feb 20
>
> secondaryDB.printSlaveReplicationI
source: Yellanna-PC:20000
syncedTo: Wed Dec 31 1969 19
1519180787 secs (421994.66 h
source: Yellanna-PC:20001
syncedTo: Tue Feb 20 2018 21
0 secs (0 hrs) behind the pr

```

Stopping:

```

Fused it.
d20002| 2018-02-20T23:01:12.708-0500 I ASIO [NetworkInterfaceASIO-RS-0] Dropping all pooled connections to Yellanna-PC:20001 d
d20002| 2018-02-20T23:01:12.708-0500 I REPL [rsBackgroundSync] Replication producer stopped after oplog fetcher finished retur
ries and re-evaluating our sync source.
d20002| 2018-02-20T23:01:12.709-0500 I REPL [eventTerminate] Stopping replication storage threads
d20002| 2018-02-20T23:01:12.713-0500 D REPL_HB [replexec-0] Received response to heartbeat (requestId: 8371) from Yellanna-PC:200
d20002| 2018-02-20T23:01:12.714-0500 D REPL_HB [replexec-0] Received response to heartbeat (requestId: 8373) from Yellanna-PC:200
d20002| 2018-02-20T23:01:12.715-0500 I FTDC [eventTerminate] Shutting down full-time diagnostic data capture
d20002| 2018-02-20T23:01:12.747-0500 I STORAGE [WTOplogJournalThread] oplog journal thread loop shutting down
d20002| 2018-02-20T23:01:12.748-0500 I STORAGE [eventTerminate] WiredTigerKVEngine shutting down
d20002| 2018-02-20T23:01:14.261-0500 I STORAGE [eventTerminate] shutdown: removing fs lock...
d20002| 2018-02-20T23:01:14.262-0500 I CONTROL [eventTerminate] now exiting
d20002| 2018-02-20T23:01:14.262-0500 I CONTROL [eventTerminate] shutting down with code:0
2018-02-20T23:01:14.315-0500 I - [thread1] shell: stopped mongo program on port 20002
ReplSetTest stop *** Mongod in port 20002 shutdown with code (0) ***
ReplSetTest stopSet deleting all dbpaths
ReplSetTest stopSet *** Shut down repl set - test worked ***

```