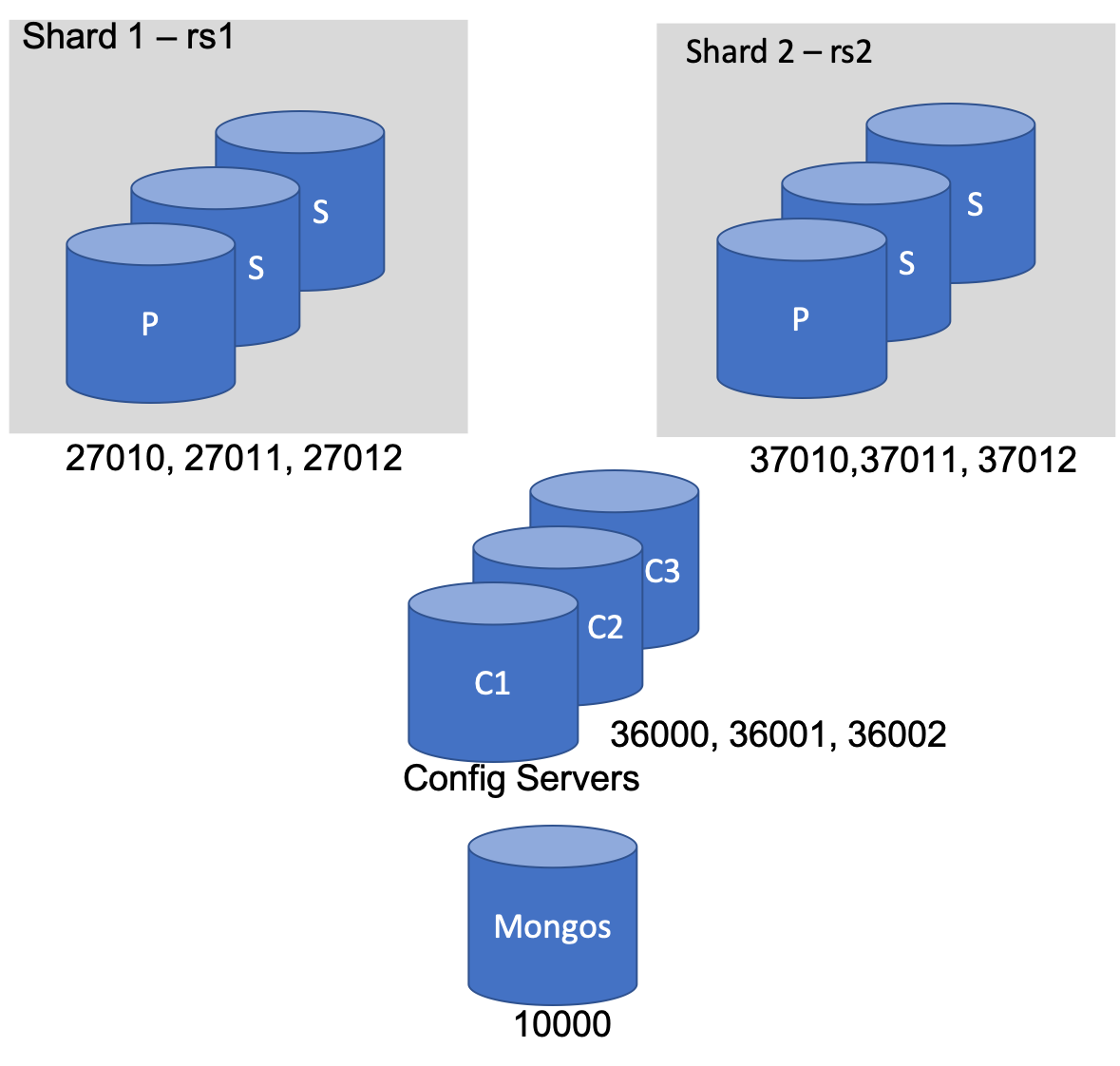
**Building a Sharded Cluster as shown below Architecture:**



bash-3.2# pwd

/Users/dbversity

bash-3.2#

bash-3.2# mkdir -p sh1d1 sh1d2 sh1d3 sh2d1 sh2d2 sh2d3 c1 c2 c3 log

bash-3.2#

bash-3.2# mongod --configsvr --replSet cfg --dbpath c1/ --logpath log/cfg.log --port 36000 --fork

about to fork child process, waiting until server is ready for connections.

forked process: 5246

child process started successfully, parent exiting

bash-3.2#

bash-3.2# mongod --configsvr --replSet cfg --dbpath c2/ --logpath log/cfg.log --port 36001 --fork

about to fork child process, waiting until server is ready for connections.

forked process: 5253

child process started successfully, parent exiting

bash-3.2#

bash-3.2# mongod --configsvr --replSet cfg --dbpath c3/ --logpath log/cfg.log --port 36002 --fork

about to fork child process, waiting until server is ready for connections.

forked process: 5256

child process started successfully, parent exiting

bash-3.2#

bash-3.2# mongo --port 36000 --quiet

MongoDB shell version v4.0.2

connecting to: mongodb://127.0.0.1:36000/

MongoDB server version: 4.0.2

>

> rs.initiate()

{

"info2" : "no configuration specified. Using a default configuration for the set",

"me" : "localhost:36000",

"ok" : 1,

"operationTime" : Timestamp(1548445660, 1),

"$gleStats" : {

"lastOpTime" : Timestamp(1548445660, 1),

"electionId" : ObjectId("000000000000000000000000")

},

"lastCommittedOpTime" : Timestamp(0, 0),

"$clusterTime" : {

"clusterTime" : Timestamp(1548445660, 1),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

cfg:SECONDARY>

cfg:SECONDARY>

cfg:SECONDARY>

cfg:SECONDARY>

cfg:SECONDARY>

cfg:PRIMARY>

cfg:PRIMARY>

cfg:PRIMARY>

cfg:PRIMARY> rs.status()

{

"set" : "cfg",

"date" : ISODate("2019-01-25T19:47:50.062Z"),

"myState" : 1,

"term" : NumberLong(1),

"syncingTo" : "",

"syncSourceHost" : "",

"syncSourceId" : -1,

"configsvr" : true,

"heartbeatIntervalMillis" : NumberLong(2000),

"optimes" : {

"lastCommittedOpTime" : {

"ts" : Timestamp(1548445666, 1),

"t" : NumberLong(1)

},

"readConcernMajorityOpTime" : {

"ts" : Timestamp(1548445666, 1),

"t" : NumberLong(1)

},

"appliedOpTime" : {

"ts" : Timestamp(1548445666, 1),

"t" : NumberLong(1)

},

"durableOpTime" : {

"ts" : Timestamp(1548445666, 1),

"t" : NumberLong(1)

}

},

"lastStableCheckpointTimestamp" : Timestamp(1548445663, 17),

"members" : [

{

"\_id" : 0,

"name" : "localhost:36000",

"health" : 1,

"state" : 1,

"stateStr" : "PRIMARY",

"uptime" : 125,

"optime" : {

"ts" : Timestamp(1548445666, 1),

"t" : NumberLong(1)

},

"optimeDate" : ISODate("2019-01-25T19:47:46Z"),

"syncingTo" : "",

"syncSourceHost" : "",

"syncSourceId" : -1,

"infoMessage" : "could not find member to sync from",

"electionTime" : Timestamp(1548445660, 2),

"electionDate" : ISODate("2019-01-25T19:47:40Z"),

"configVersion" : 1,

"self" : true,

"lastHeartbeatMessage" : ""

}

],

"ok" : 1,

"operationTime" : Timestamp(1548445666, 1),

"$gleStats" : {

"lastOpTime" : Timestamp(1548445660, 1),

"electionId" : ObjectId("7fffffff0000000000000001")

},

"lastCommittedOpTime" : Timestamp(1548445666, 1),

"$clusterTime" : {

"clusterTime" : Timestamp(1548445666, 1),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

cfg:PRIMARY>

cfg:PRIMARY>

cfg:PRIMARY>

cfg:PRIMARY> rs.add("localhost:36001")

{

"ok" : 1,

"operationTime" : Timestamp(1548445686, 1),

"$gleStats" : {

"lastOpTime" : {

"ts" : Timestamp(1548445686, 1),

"t" : NumberLong(1)

},

"electionId" : ObjectId("7fffffff0000000000000001")

},

"lastCommittedOpTime" : Timestamp(1548445683, 1),

"$clusterTime" : {

"clusterTime" : Timestamp(1548445686, 1),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

cfg:PRIMARY> rs.add("localhost:36002")

{

"ok" : 1,

"operationTime" : Timestamp(1548445689, 1),

"$gleStats" : {

"lastOpTime" : {

"ts" : Timestamp(1548445689, 1),

"t" : NumberLong(1)

},

"electionId" : ObjectId("7fffffff0000000000000001")

},

"lastCommittedOpTime" : Timestamp(1548445683, 1),

"$clusterTime" : {

"clusterTime" : Timestamp(1548445689, 1),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

cfg:PRIMARY>

cfg:PRIMARY>

cfg:PRIMARY> rs.status()

{

"set" : "cfg",

"date" : ISODate("2019-01-25T19:48:12.349Z"),

"myState" : 1,

"term" : NumberLong(1),

"syncingTo" : "",

"syncSourceHost" : "",

"syncSourceId" : -1,

"configsvr" : true,

"heartbeatIntervalMillis" : NumberLong(2000),

"optimes" : {

"lastCommittedOpTime" : {

"ts" : Timestamp(1548445689, 1),

"t" : NumberLong(1)

},

"readConcernMajorityOpTime" : {

"ts" : Timestamp(1548445689, 1),

"t" : NumberLong(1)

},

"appliedOpTime" : {

"ts" : Timestamp(1548445689, 1),

"t" : NumberLong(1)

},

"durableOpTime" : {

"ts" : Timestamp(1548445689, 1),

"t" : NumberLong(1)

}

},

"lastStableCheckpointTimestamp" : Timestamp(1548445663, 17),

"members" : [

{

"\_id" : 0,

"name" : "localhost:36000",

"health" : 1,

"state" : 1,

"stateStr" : "PRIMARY",

"uptime" : 147,

"optime" : {

"ts" : Timestamp(1548445689, 1),

"t" : NumberLong(1)

},

"optimeDate" : ISODate("2019-01-25T19:48:09Z"),

"syncingTo" : "",

"syncSourceHost" : "",

"syncSourceId" : -1,

"infoMessage" : "could not find member to sync from",

"electionTime" : Timestamp(1548445660, 2),

"electionDate" : ISODate("2019-01-25T19:47:40Z"),

"configVersion" : 3,

"self" : true,

"lastHeartbeatMessage" : ""

},

{

"\_id" : 1,

"name" : "localhost:36001",

"health" : 1,

"state" : 2,

"stateStr" : "SECONDARY",

"uptime" : 5,

"optime" : {

"ts" : Timestamp(1548445689, 1),

"t" : NumberLong(1)

},

"optimeDurable" : {

"ts" : Timestamp(1548445689, 1),

"t" : NumberLong(1)

},

"optimeDate" : ISODate("2019-01-25T19:48:09Z"),

"optimeDurableDate" : ISODate("2019-01-25T19:48:09Z"),

"lastHeartbeat" : ISODate("2019-01-25T19:48:11.862Z"),

"lastHeartbeatRecv" : ISODate("2019-01-25T19:48:10.379Z"),

"pingMs" : NumberLong(0),

"lastHeartbeatMessage" : "",

"syncingTo" : "localhost:36000",

"syncSourceHost" : "localhost:36000",

"syncSourceId" : 0,

"infoMessage" : "",

"configVersion" : 3

},

{

"\_id" : 2,

"name" : "localhost:36002",

"health" : 1,

"state" : 5,

"stateStr" : "STARTUP2",

"uptime" : 2,

"optime" : {

"ts" : Timestamp(0, 0),

"t" : NumberLong(-1)

},

"optimeDurable" : {

"ts" : Timestamp(0, 0),

"t" : NumberLong(-1)

},

"optimeDate" : ISODate("1970-01-01T00:00:00Z"),

"optimeDurableDate" : ISODate("1970-01-01T00:00:00Z"),

"lastHeartbeat" : ISODate("2019-01-25T19:48:11.860Z"),

"lastHeartbeatRecv" : ISODate("2019-01-25T19:48:10.481Z"),

"pingMs" : NumberLong(0),

"lastHeartbeatMessage" : "",

"syncingTo" : "localhost:36001",

"syncSourceHost" : "localhost:36001",

"syncSourceId" : 1,

"infoMessage" : "",

"configVersion" : 3

}

],

"ok" : 1,

"operationTime" : Timestamp(1548445689, 1),

"$gleStats" : {

"lastOpTime" : {

"ts" : Timestamp(1548445689, 1),

"t" : NumberLong(1)

},

"electionId" : ObjectId("7fffffff0000000000000001")

},

"lastCommittedOpTime" : Timestamp(1548445689, 1),

"$clusterTime" : {

"clusterTime" : Timestamp(1548445689, 1),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

cfg:PRIMARY>

cfg:PRIMARY>

cfg:PRIMARY> rs.status()

{

"set" : "cfg",

"date" : ISODate("2019-01-25T19:48:22.372Z"),

"myState" : 1,

"term" : NumberLong(1),

"syncingTo" : "",

"syncSourceHost" : "",

"syncSourceId" : -1,

"configsvr" : true,

"heartbeatIntervalMillis" : NumberLong(2000),

"optimes" : {

"lastCommittedOpTime" : {

"ts" : Timestamp(1548445696, 1),

"t" : NumberLong(1)

},

"readConcernMajorityOpTime" : {

"ts" : Timestamp(1548445696, 1),

"t" : NumberLong(1)

},

"appliedOpTime" : {

"ts" : Timestamp(1548445696, 1),

"t" : NumberLong(1)

},

"durableOpTime" : {

"ts" : Timestamp(1548445696, 1),

"t" : NumberLong(1)

}

},

"lastStableCheckpointTimestamp" : Timestamp(1548445663, 17),

"members" : [

{

"\_id" : 0,

"name" : "localhost:36000",

"health" : 1,

"state" : 1,

"stateStr" : "PRIMARY",

"uptime" : 157,

"optime" : {

"ts" : Timestamp(1548445696, 1),

"t" : NumberLong(1)

},

"optimeDate" : ISODate("2019-01-25T19:48:16Z"),

"syncingTo" : "",

"syncSourceHost" : "",

"syncSourceId" : -1,

"infoMessage" : "could not find member to sync from",

"electionTime" : Timestamp(1548445660, 2),

"electionDate" : ISODate("2019-01-25T19:47:40Z"),

"configVersion" : 3,

"self" : true,

"lastHeartbeatMessage" : ""

},

{

"\_id" : 1,

"name" : "localhost:36001",

"health" : 1,

"state" : 2,

"stateStr" : "SECONDARY",

"uptime" : 15,

"optime" : {

"ts" : Timestamp(1548445696, 1),

"t" : NumberLong(1)

},

"optimeDurable" : {

"ts" : Timestamp(1548445696, 1),

"t" : NumberLong(1)

},

"optimeDate" : ISODate("2019-01-25T19:48:16Z"),

"optimeDurableDate" : ISODate("2019-01-25T19:48:16Z"),

"lastHeartbeat" : ISODate("2019-01-25T19:48:21.882Z"),

"lastHeartbeatRecv" : ISODate("2019-01-25T19:48:20.397Z"),

"pingMs" : NumberLong(0),

"lastHeartbeatMessage" : "",

"syncingTo" : "localhost:36000",

"syncSourceHost" : "localhost:36000",

"syncSourceId" : 0,

"infoMessage" : "",

"configVersion" : 3

},

{

"\_id" : 2,

"name" : "localhost:36002",

"health" : 1,

"state" : 2,

"stateStr" : "SECONDARY",

"uptime" : 12,

"optime" : {

"ts" : Timestamp(1548445696, 1),

"t" : NumberLong(1)

},

"optimeDurable" : {

"ts" : Timestamp(1548445696, 1),

"t" : NumberLong(1)

},

"optimeDate" : ISODate("2019-01-25T19:48:16Z"),

"optimeDurableDate" : ISODate("2019-01-25T19:48:16Z"),

"lastHeartbeat" : ISODate("2019-01-25T19:48:21.882Z"),

"lastHeartbeatRecv" : ISODate("2019-01-25T19:48:21.625Z"),

"pingMs" : NumberLong(0),

"lastHeartbeatMessage" : "",

"syncingTo" : "localhost:36001",

"syncSourceHost" : "localhost:36001",

"syncSourceId" : 1,

"infoMessage" : "",

"configVersion" : 3

}

],

"ok" : 1,

"operationTime" : Timestamp(1548445696, 1),

"$gleStats" : {

"lastOpTime" : {

"ts" : Timestamp(1548445689, 1),

"t" : NumberLong(1)

},

"electionId" : ObjectId("7fffffff0000000000000001")

},

"lastCommittedOpTime" : Timestamp(1548445696, 1),

"$clusterTime" : {

"clusterTime" : Timestamp(1548445696, 1),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

cfg:PRIMARY>

cfg:PRIMARY>

cfg:PRIMARY> exit

bye

bash-3.2#

bash-3.2#

bash-3.2# mongos --help | grep config

--setParameter arg Set a configurable parameter

-f [ --config ] arg configuration file specifying

--configdb arg Connection string for communicating

with config servers:

<config replset name>/<host1:port>,<hos

--sslOnNormalPorts use ssl on configured ports

bash-3.2#

bash-3.2#

bash-3.2# mongos --configdb "cfg/localhost:36000,localhost:36001,localhost:36002" --port 10000 --logpath log/mongos.log --fork

about to fork child process, waiting until server is ready for connections.

forked process: 5266

child process started successfully, parent exiting

bash-3.2#

bash-3.2#

bash-3.2# ps -ef | grep mongo | grep -v grep | grep -v 27017

0 5246 1 0 1:15AM ?? 0:03.42 mongod --configsvr --replSet cfg --dbpath c1/ --logpath log/cfg.log --port 36000 --fork

0 5253 1 0 1:16AM ?? 0:03.31 mongod --configsvr --replSet cfg --dbpath c2/ --logpath log/cfg.log --port 36001 --fork

0 5256 1 0 1:16AM ?? 0:03.12 mongod --configsvr --replSet cfg --dbpath c3/ --logpath log/cfg.log --port 36002 --fork

0 5266 1 0 1:20AM ?? 0:00.11 mongos --configdb cfg/localhost:36000,localhost:36001,localhost:36002 --port 10000 --logpath log/mongos.log --fork

bash-3.2#

bash-3.2#

bash-3.2#

bash-3.2#

bash-3.2#

bash-3.2#

bash-3.2# mongod --help | grep shard

--shardsvr declare this is a shard db of a

bash-3.2#

bash-3.2#

bash-3.2# mongod --replSet rs1 --shardsvr --dbpath sh1d1/ --logpath log/mongod.log --port 27010 --fork

about to fork child process, waiting until server is ready for connections.

forked process: 5276

child process started successfully, parent exiting

bash-3.2#

bash-3.2# mongod --replSet rs1 --shardsvr --dbpath sh1d2/ --logpath log/mongod.log --port 27011 --fork

about to fork child process, waiting until server is ready for connections.

forked process: 5280

child process started successfully, parent exiting

bash-3.2#

bash-3.2# mongod --replSet rs1 --shardsvr --dbpath sh1d3/ --logpath log/mongod.log --port 27012 --fork

about to fork child process, waiting until server is ready for connections.

forked process: 5283

child process started successfully, parent exiting

bash-3.2#

bash-3.2#

bash-3.2# mongo --port 27010 --quiet

> rs.initiate()

{

"info2" : "no configuration specified. Using a default configuration for the set",

"me" : "localhost:27010",

"ok" : 1,

"operationTime" : Timestamp(1548446052, 1),

"$clusterTime" : {

"clusterTime" : Timestamp(1548446052, 1),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

rs1:SECONDARY>

rs1:SECONDARY>

rs1:SECONDARY>

rs1:SECONDARY>

rs1:PRIMARY>

rs1:PRIMARY>

rs1:PRIMARY> rs.status()

{

"set" : "rs1",

"date" : ISODate("2019-01-25T19:54:19.908Z"),

"myState" : 1,

"term" : NumberLong(1),

"syncingTo" : "",

"syncSourceHost" : "",

"syncSourceId" : -1,

"heartbeatIntervalMillis" : NumberLong(2000),

"optimes" : {

"lastCommittedOpTime" : {

"ts" : Timestamp(1548446054, 2),

"t" : NumberLong(1)

},

"readConcernMajorityOpTime" : {

"ts" : Timestamp(1548446054, 2),

"t" : NumberLong(1)

},

"appliedOpTime" : {

"ts" : Timestamp(1548446054, 2),

"t" : NumberLong(1)

},

"durableOpTime" : {

"ts" : Timestamp(1548446054, 2),

"t" : NumberLong(1)

}

},

"lastStableCheckpointTimestamp" : Timestamp(1548446054, 1),

"members" : [

{

"\_id" : 0,

"name" : "localhost:27010",

"health" : 1,

"state" : 1,

"stateStr" : "PRIMARY",

"uptime" : 75,

"optime" : {

"ts" : Timestamp(1548446054, 2),

"t" : NumberLong(1)

},

"optimeDate" : ISODate("2019-01-25T19:54:14Z"),

"syncingTo" : "",

"syncSourceHost" : "",

"syncSourceId" : -1,

"infoMessage" : "could not find member to sync from",

"electionTime" : Timestamp(1548446052, 2),

"electionDate" : ISODate("2019-01-25T19:54:12Z"),

"configVersion" : 1,

"self" : true,

"lastHeartbeatMessage" : ""

}

],

"ok" : 1,

"operationTime" : Timestamp(1548446054, 2),

"$clusterTime" : {

"clusterTime" : Timestamp(1548446054, 2),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

rs1:PRIMARY>

rs1:PRIMARY>

rs1:PRIMARY> rs.add("localhost:27011")

{

"ok" : 1,

"operationTime" : Timestamp(1548446078, 1),

"$clusterTime" : {

"clusterTime" : Timestamp(1548446078, 1),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

rs1:PRIMARY> rs.add("localhost:27012")

{

"ok" : 1,

"operationTime" : Timestamp(1548446081, 1),

"$clusterTime" : {

"clusterTime" : Timestamp(1548446081, 1),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

rs1:PRIMARY>

rs1:PRIMARY> rs.status()

{

"set" : "rs1",

"date" : ISODate("2019-01-25T19:54:48.033Z"),

"myState" : 1,

"term" : NumberLong(1),

"syncingTo" : "",

"syncSourceHost" : "",

"syncSourceId" : -1,

"heartbeatIntervalMillis" : NumberLong(2000),

"optimes" : {

"lastCommittedOpTime" : {

"ts" : Timestamp(1548446081, 1),

"t" : NumberLong(1)

},

"readConcernMajorityOpTime" : {

"ts" : Timestamp(1548446081, 1),

"t" : NumberLong(1)

},

"appliedOpTime" : {

"ts" : Timestamp(1548446081, 1),

"t" : NumberLong(1)

},

"durableOpTime" : {

"ts" : Timestamp(1548446081, 1),

"t" : NumberLong(1)

}

},

"lastStableCheckpointTimestamp" : Timestamp(1548446054, 1),

"members" : [

{

"\_id" : 0,

"name" : "localhost:27010",

"health" : 1,

"state" : 1,

"stateStr" : "PRIMARY",

"uptime" : 104,

"optime" : {

"ts" : Timestamp(1548446081, 1),

"t" : NumberLong(1)

},

"optimeDate" : ISODate("2019-01-25T19:54:41Z"),

"syncingTo" : "",

"syncSourceHost" : "",

"syncSourceId" : -1,

"infoMessage" : "could not find member to sync from",

"electionTime" : Timestamp(1548446052, 2),

"electionDate" : ISODate("2019-01-25T19:54:12Z"),

"configVersion" : 3,

"self" : true,

"lastHeartbeatMessage" : ""

},

{

"\_id" : 1,

"name" : "localhost:27011",

"health" : 1,

"state" : 2,

"stateStr" : "SECONDARY",

"uptime" : 9,

"optime" : {

"ts" : Timestamp(1548446081, 1),

"t" : NumberLong(1)

},

"optimeDurable" : {

"ts" : Timestamp(1548446081, 1),

"t" : NumberLong(1)

},

"optimeDate" : ISODate("2019-01-25T19:54:41Z"),

"optimeDurableDate" : ISODate("2019-01-25T19:54:41Z"),

"lastHeartbeat" : ISODate("2019-01-25T19:54:47.201Z"),

"lastHeartbeatRecv" : ISODate("2019-01-25T19:54:47.711Z"),

"pingMs" : NumberLong(0),

"lastHeartbeatMessage" : "",

"syncingTo" : "localhost:27010",

"syncSourceHost" : "localhost:27010",

"syncSourceId" : 0,

"infoMessage" : "",

"configVersion" : 3

},

{

"\_id" : 2,

"name" : "localhost:27012",

"health" : 1,

"state" : 2,

"stateStr" : "SECONDARY",

"uptime" : 6,

"optime" : {

"ts" : Timestamp(1548446081, 1),

"t" : NumberLong(1)

},

"optimeDurable" : {

"ts" : Timestamp(1548446081, 1),

"t" : NumberLong(1)

},

"optimeDate" : ISODate("2019-01-25T19:54:41Z"),

"optimeDurableDate" : ISODate("2019-01-25T19:54:41Z"),

"lastHeartbeat" : ISODate("2019-01-25T19:54:47.201Z"),

"lastHeartbeatRecv" : ISODate("2019-01-25T19:54:47.805Z"),

"pingMs" : NumberLong(0),

"lastHeartbeatMessage" : "",

"syncingTo" : "",

"syncSourceHost" : "",

"syncSourceId" : -1,

"infoMessage" : "",

"configVersion" : 3

}

],

"ok" : 1,

"operationTime" : Timestamp(1548446081, 1),

"$clusterTime" : {

"clusterTime" : Timestamp(1548446081, 1),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

rs1:PRIMARY>

rs1:PRIMARY>

rs1:PRIMARY> exit

bye

bash-3.2#

bash-3.2#

bash-3.2#

bash-3.2# mongod --replSet rs2 --shardsvr --dbpath sh2d1/ --logpath log/mongod.log --port 37010 --fork

about to fork child process, waiting until server is ready for connections.

forked process: 5289

child process started successfully, parent exiting

bash-3.2#

bash-3.2# mongod --replSet rs2 --shardsvr --dbpath sh2d2/ --logpath log/mongod.log --port 37011 --fork

about to fork child process, waiting until server is ready for connections.

forked process: 5292

child process started successfully, parent exiting

bash-3.2#

bash-3.2#

bash-3.2# mongod --replSet rs2 --shardsvr --dbpath sh2d3/ --logpath log/mongod.log --port 37012 --fork

about to fork child process, waiting until server is ready for connections.

forked process: 5295

child process started successfully, parent exiting

bash-3.2#

bash-3.2#

bash-3.2#

bash-3.2# mongo --port 37010 --quiet

> rs.initiate()

{

"info2" : "no configuration specified. Using a default configuration for the set",

"me" : "localhost:37010",

"ok" : 1,

"operationTime" : Timestamp(1548446172, 1),

"$clusterTime" : {

"clusterTime" : Timestamp(1548446172, 1),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

rs2:SECONDARY>

rs2:SECONDARY>

rs2:SECONDARY>

rs2:SECONDARY>

rs2:PRIMARY>

rs2:PRIMARY>

rs2:PRIMARY>

rs2:PRIMARY>

rs2:PRIMARY> rs.add("localhost:37011")

{

"ok" : 1,

"operationTime" : Timestamp(1548446188, 1),

"$clusterTime" : {

"clusterTime" : Timestamp(1548446188, 1),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

rs2:PRIMARY> rs.add("localhost:37012")

{

"ok" : 1,

"operationTime" : Timestamp(1548446191, 1),

"$clusterTime" : {

"clusterTime" : Timestamp(1548446191, 1),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

rs2:PRIMARY>

rs2:PRIMARY> rs.status()

{

"set" : "rs2",

"date" : ISODate("2019-01-25T19:56:35.357Z"),

"myState" : 1,

"term" : NumberLong(1),

"syncingTo" : "",

"syncSourceHost" : "",

"syncSourceId" : -1,

"heartbeatIntervalMillis" : NumberLong(2000),

"optimes" : {

"lastCommittedOpTime" : {

"ts" : Timestamp(1548446191, 1),

"t" : NumberLong(1)

},

"readConcernMajorityOpTime" : {

"ts" : Timestamp(1548446191, 1),

"t" : NumberLong(1)

},

"appliedOpTime" : {

"ts" : Timestamp(1548446191, 1),

"t" : NumberLong(1)

},

"durableOpTime" : {

"ts" : Timestamp(1548446191, 1),

"t" : NumberLong(1)

}

},

"lastStableCheckpointTimestamp" : Timestamp(1548446174, 1),

"members" : [

{

"\_id" : 0,

"name" : "localhost:37010",

"health" : 1,

"state" : 1,

"stateStr" : "PRIMARY",

"uptime" : 62,

"optime" : {

"ts" : Timestamp(1548446191, 1),

"t" : NumberLong(1)

},

"optimeDate" : ISODate("2019-01-25T19:56:31Z"),

"syncingTo" : "",

"syncSourceHost" : "",

"syncSourceId" : -1,

"infoMessage" : "could not find member to sync from",

"electionTime" : Timestamp(1548446172, 2),

"electionDate" : ISODate("2019-01-25T19:56:12Z"),

"configVersion" : 3,

"self" : true,

"lastHeartbeatMessage" : ""

},

{

"\_id" : 1,

"name" : "localhost:37011",

"health" : 1,

"state" : 2,

"stateStr" : "SECONDARY",

"uptime" : 6,

"optime" : {

"ts" : Timestamp(1548446191, 1),

"t" : NumberLong(1)

},

"optimeDurable" : {

"ts" : Timestamp(1548446191, 1),

"t" : NumberLong(1)

},

"optimeDate" : ISODate("2019-01-25T19:56:31Z"),

"optimeDurableDate" : ISODate("2019-01-25T19:56:31Z"),

"lastHeartbeat" : ISODate("2019-01-25T19:56:34.020Z"),

"lastHeartbeatRecv" : ISODate("2019-01-25T19:56:34.111Z"),

"pingMs" : NumberLong(2),

"lastHeartbeatMessage" : "",

"syncingTo" : "localhost:37010",

"syncSourceHost" : "localhost:37010",

"syncSourceId" : 0,

"infoMessage" : "",

"configVersion" : 3

},

{

"\_id" : 2,

"name" : "localhost:37012",

"health" : 1,

"state" : 2,

"stateStr" : "SECONDARY",

"uptime" : 3,

"optime" : {

"ts" : Timestamp(1548446191, 1),

"t" : NumberLong(1)

},

"optimeDurable" : {

"ts" : Timestamp(1548446191, 1),

"t" : NumberLong(1)

},

"optimeDate" : ISODate("2019-01-25T19:56:31Z"),

"optimeDurableDate" : ISODate("2019-01-25T19:56:31Z"),

"lastHeartbeat" : ISODate("2019-01-25T19:56:34.093Z"),

"lastHeartbeatRecv" : ISODate("2019-01-25T19:56:34.782Z"),

"pingMs" : NumberLong(1),

"lastHeartbeatMessage" : "",

"syncingTo" : "localhost:37010",

"syncSourceHost" : "localhost:37010",

"syncSourceId" : 0,

"infoMessage" : "",

"configVersion" : 3

}

],

"ok" : 1,

"operationTime" : Timestamp(1548446191, 1),

"$clusterTime" : {

"clusterTime" : Timestamp(1548446191, 1),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

rs2:PRIMARY> exit

bye

bash-3.2#

bash-3.2#

bash-3.2#

bash-3.2# ps -ef | grep mongo | grep -v grep | grep -v 27017

0 5246 1 0 1:15AM ?? 0:06.73 mongod --configsvr --replSet cfg --dbpath c1/ --logpath log/cfg.log --port 36000 --fork

0 5253 1 0 1:16AM ?? 0:06.86 mongod --configsvr --replSet cfg --dbpath c2/ --logpath log/cfg.log --port 36001 --fork

0 5256 1 0 1:16AM ?? 0:06.51 mongod --configsvr --replSet cfg --dbpath c3/ --logpath log/cfg.log --port 36002 --fork

0 5266 1 0 1:20AM ?? 0:00.60 mongos --configdb cfg/localhost:36000,localhost:36001,localhost:36002 --port 10000 --logpath log/mongos.log --fork

0 5276 1 0 1:23AM ?? 0:02.40 mongod --replSet rs1 --shardsvr --dbpath sh1d1/ --logpath log/mongod.log --port 27010 --fork

0 5280 1 0 1:23AM ?? 0:02.36 mongod --replSet rs1 --shardsvr --dbpath sh1d2/ --logpath log/mongod.log --port 27011 --fork

0 5283 1 0 1:23AM ?? 0:02.25 mongod --replSet rs1 --shardsvr --dbpath sh1d3/ --logpath log/mongod.log --port 27012 --fork

0 5289 1 0 1:25AM ?? 0:01.46 mongod --replSet rs2 --shardsvr --dbpath sh2d1/ --logpath log/mongod.log --port 37010 --fork

0 5292 1 0 1:25AM ?? 0:01.39 mongod --replSet rs2 --shardsvr --dbpath sh2d2/ --logpath log/mongod.log --port 37011 --fork

0 5295 1 0 1:25AM ?? 0:01.29 mongod --replSet rs2 --shardsvr --dbpath sh2d3/ --logpath log/mongod.log --port 37012 --fork

bash-3.2#

bash-3.2#

bash-3.2#

bash-3.2#

bash-3.2#

bash-3.2# mongo --port 10000 --quiet

mongos>

mongos> sh.status()

--- Sharding Status ---

sharding version: {

"\_id" : 1,

"minCompatibleVersion" : 5,

"currentVersion" : 6,

"clusterId" : ObjectId("5c4b67dfcc6b5ac561840e39")

}

shards:

active mongoses:

autosplit:

Currently enabled: yes

balancer:

Currently enabled: yes

Currently running: no

Failed balancer rounds in last 5 attempts: 0

Migration Results for the last 24 hours:

No recent migrations

databases:

{ "\_id" : "config", "primary" : "config", "partitioned" : true }

mongos>

mongos>

mongos> sh.addShard("rs1/localhost:27010,localhost:27011,localhost:27012")

{

"shardAdded" : "rs1",

"ok" : 1,

"operationTime" : Timestamp(1548446319, 7),

"$clusterTime" : {

"clusterTime" : Timestamp(1548446319, 7),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

mongos>

mongos> sh.status()

--- Sharding Status ---

sharding version: {

"\_id" : 1,

"minCompatibleVersion" : 5,

"currentVersion" : 6,

"clusterId" : ObjectId("5c4b67dfcc6b5ac561840e39")

}

shards:

{ "\_id" : "rs1", "host" : "rs1/localhost:27010,localhost:27011,localhost:27012", "state" : 1 }

active mongoses:

"4.0.2" : 1

autosplit:

Currently enabled: yes

balancer:

Currently enabled: yes

Currently running: no

Failed balancer rounds in last 5 attempts: 0

Migration Results for the last 24 hours:

No recent migrations

databases:

{ "\_id" : "config", "primary" : "config", "partitioned" : true }

mongos>

mongos> sh.addShard("rs2/localhost:37010,localhost:37011,localhost:37012")

{

"shardAdded" : "rs2",

"ok" : 1,

"operationTime" : Timestamp(1548446356, 6),

"$clusterTime" : {

"clusterTime" : Timestamp(1548446356, 6),

"signature" : {

"hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAA="),

"keyId" : NumberLong(0)

}

}

}

mongos> sh.status()

--- Sharding Status ---

sharding version: {

"\_id" : 1,

"minCompatibleVersion" : 5,

"currentVersion" : 6,

"clusterId" : ObjectId("5c4b67dfcc6b5ac561840e39")

}

shards:

{ "\_id" : "rs1", "host" : "rs1/localhost:27010,localhost:27011,localhost:27012", "state" : 1 }

{ "\_id" : "rs2", "host" : "rs2/localhost:37010,localhost:37011,localhost:37012", "state" : 1 }

active mongoses:

"4.0.2" : 1

autosplit:

Currently enabled: yes

balancer:

Currently enabled: yes

Currently running: no

Failed balancer rounds in last 5 attempts: 0

Migration Results for the last 24 hours:

No recent migrations

databases:

{ "\_id" : "config", "primary" : "config", "partitioned" : true }

mongos>

mongos>

mongos>