

Basis Data Lanjut – Tugas 4

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Prodi : D3 - Manajemen Informatika

Replikasi database MongoDB

```
C:\Users\ASUS A455L'>mongo --nodb
```

```
> replicaSet = new ReplSetTest({"nodes" : 3});  
Starting new replica set -- unknown name
```

```
> replicaSet.startSet()
```

```
> conn1 = new Mongo("localhost:20000")  
connection to localhost:20000  
> primaryDB = conn1.getDB("test")  
test  
>
```

```

> primaryDB.isMaster()
{
  "hosts" : [
    "DESKTOP-NCAD9I8:20000",
    "DESKTOP-NCAD9I8:20001",
    "DESKTOP-NCAD9I8:20002"
  ],
  "setName" : "__unknown_name__",
  "setVersion" : 2,
  "ismaster" : true,
  "secondary" : false,
  "primary" : "DESKTOP-NCAD9I8:20000",
  "me" : "DESKTOP-NCAD9I8:20000",
  "electionId" : ObjectId("7fffffff0000000000000001"),
  "lastWrite" : {
    "opTime" : {
      "ts" : Timestamp(1556208610, 3),
      "t" : NumberLong(1)
    },
    "lastWriteDate" : ISODate("2019-04-25T16:10:10Z"),
    "majorityOpTime" : {
      "ts" : Timestamp(1556208610, 3),
      "t" : NumberLong(1)
    },
    "majorityWriteDate" : ISODate("2019-04-25T16:10:10Z")
  },
  "maxBsonObjectSize" : 16777216,
  "maxMessageSizeBytes" : 48000000,
  "maxWriteBatchSize" : 100000,
  "localTime" : ISODate("2019-04-25T16:24:13.442Z"),

```

Memasukkan data

```

> for (i=0; i<4; i++) {primaryDB.coll.insert({count: i})}
WriteResult({ "nInserted" : 1 })
> primaryDB.coll.count()
4

```

Mencoba koneksi ke secondaryDB dan akan muncul pesan error ketika akan melihat data

```

> conn2 = new Mongo("localhost:20001")
connection to localhost:20001
> secondaryDB = conn2.getDB("test")
test
> secondaryDB.coll.find()
Error: error: {
  "operationTime" : Timestamp(1556210469, 5),
  "ok" : 0,
  "errmsg" : "not master and slaveOk=false",
  "code" : 13435,
  "codeName" : "NotMasterNoSlaveOk",
  "$clusterTime" : {
    "clusterTime" : Timestamp(1556210469, 5),
    "signature" : {
      "hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAAA="),
      "keyId" : NumberLong(0)
    }
  }
}

```

Melihat data dari primaryDB melalui secondaryDB

```
> conn2.setSlaveOk()
> secondaryDB.coll.find()
{ "_id" : ObjectId("5cc1e32543139357892a0e69"), "count" : 1 }
{ "_id" : ObjectId("5cc1e32543139357892a0e68"), "count" : 0 }
{ "_id" : ObjectId("5cc1e32543139357892a0e6b"), "count" : 3 }
{ "_id" : ObjectId("5cc1e32543139357892a0e6a"), "count" : 2 }
> secondaryDB.coll.count()
4
```

Memasukkan data ke secondaryDB akan menyebabkan error

```
> secondaryDB.coll.insert({"count" : 5})
WriteCommandError({
  "operationTime" : Timestamp(1556210469, 5),
  "ok" : 0,
  "errmsg" : "not master",
  "code" : 10107,
  "codeName" : "NotMaster",
  "$clusterTime" : {
    "clusterTime" : Timestamp(1556210469, 5),
    "signature" : {
      "hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAAA="),
      "keyId" : NumberLong(0)
    }
  }
})
```

Melihat hasil error terakhir

```
> secondaryDB.runCommand({"getLastError" : 1})
{
  "connectionId" : 14,
  "err" : "not master",
  "code" : 10107,
  "codeName" : "NotMaster",
  "n" : 0,
  "ok" : 1,
  "operationTime" : Timestamp(1556210469, 5),
  "$clusterTime" : {
    "clusterTime" : Timestamp(1556210469, 5),
    "signature" : {
      "hash" : BinData(0,"AAAAAAAAAAAAAAAAAAAAAAAAAAAA="),
      "keyId" : NumberLong(0)
    }
  }
}
```

Membuat secondaryDB dijalankan dengan isMaster

```
> secondaryDB.isMaster()
{
  "hosts" : [
    "DESKTOP-NCAD9I8:20000",
    "DESKTOP-NCAD9I8:20001",
    "DESKTOP-NCAD9I8:20002"
  ],
  "setName" : "__unknown_name__",
  "setVersion" : 2,
  "ismaster" : true,
  "secondary" : false,
  "primary" : "DESKTOP-NCAD9I8:20001",
  "me" : "DESKTOP-NCAD9I8:20001",
  "electionId" : ObjectId("7fffffff0000000000000002"),
  "lastWrite" : {
    "opTime" : {
      "ts" : Timestamp(1556211747, 2),
      "t" : NumberLong(2)
    },
    "lastWriteDate" : ISODate("2019-04-25T17:02:27Z"),
    "majorityOpTime" : {
      "ts" : Timestamp(1556211747, 2),
      "t" : NumberLong(2)
    },
    "majorityWriteDate" : ISODate("2019-04-25T17:02:27Z")
  },
  "maxBsonObjectSize" : 16777216,
  "maxMessageSizeBytes" : 48000000,
  "maxWriteBatchSize" : 100000,
  "localTime" : ISODate("2019-04-25T17:14:13.137Z"),
```