# Pega freeStorageSize

O script abaixo verifica a quantidade de bytes que existe livre em cada collection (funciona para sharding e para replica-set). Serve para analisarmos em quais collections vale a pena rodar compact para liberar disco.

## Opção 1: Valor por collection e total do cluster (usa `stats`)

```
// vai printar o valor disponível para cada collection e tb o valor TOTAL disponível no cluster


var totalSize = 0;
var totalSizeColl = 0;
var totalReusableSize = 0;
var totalIndexSize = 0;
db.getMongo().getDBNames().forEach(function (d) {
{
        db.getSiblingDB(d).getCollectionInfos( {type: 'collection'}).forEach(function (v1) {
            var coll = v1.name;
            var stat = db.getSiblingDB(d).getCollection(coll).stats();
            var namespace = stat.ns;
            var count = stat.count;
            var storageSize = stat.storageSize/1024/1024/1024;
            var IdxSize = stat.totalIndexSize/1024/1024/1024;
            var reusableSize = stat.wiredTiger["block-manager"]["file bytes available for reuse"]/1024/1024/1024
            totalSizeColl += storageSize;
            totalReusableSize += reusableSize;
            totalIndexSize += IdxSize;
            totalSize = totalIndexSize + totalSizeColl;
            printjson({
                'namespace': namespace,
                'count': count,
                'storageSizeColl': storageSize ,
                'file bytes available for reuse': reusableSize,
                'Index Size': IdxSize,
                'Total Size': storageSize+IdxSize
            });
        });
    }
});

print("\nTotal Storage Size: " + totalSize + " GB"),("Total Reusable Size: " + totalReusableSize + " GB");


```

## Opção 2:

Outras opções (trazendo apenas total por collection)

```
use admin;


var serverStatus = db.runCommand(
   {
     serverStatus: 1
   }
)

//printjson(serverStatus.process)
if (serverStatus.process == 'mongod')
{
    db.runCommand( { listDatabases: 1 } ).databases.forEach(function (BD) {

    if(BD.name == 'config' || BD.name =='admin' || BD.name == 'replset' || BD.name == 'local')
    {
       // print("Não pra ver nada")
    }
    else {
        db = db.getSiblingDB(BD.name);
        print(" ");
        print("****************************** DATABASE: " + BD.name + " ************************")

        var coll_stats;
        db.getCollectionNames().forEach(function(collname) {
        if (/system/i.test(collname))
        {}
        else
        {
            print("************************ " + collname + " ************************");
            coll_stats = db[collname].stats();
            print( "freeStorageSize: " + coll_stats.freeStorageSize + " bytes");
        }
        });
    }
});

}
else
{
    db.runCommand( { listDatabases: 1 } ).databases.forEach(function (BD) {

    if(BD.name == 'config' || BD.name =='admin' || BD.name == 'replset' || BD.name == 'local')
    {
       // print("Não pra ver nada")
    }
    else {
        db = db.getSiblingDB(BD.name);
        print(" ");
        print("****************************** DATABASE: " + BD.name + " ************************")

        db.getCollectionNames().forEach(function(collname) {
        if (/system/i.test(collname))
        {}
        else
        {
            print("************************ " + collname + " ************************");
            coll_stats = db[collname].stats();
```

```
            var obj = coll_stats.shards ;

                Object.entries(obj).forEach(([key, value]) => {
                    console.log("freeStorageSize: ", value.freeStorageSize + " bytes");
                });
            }
            });

    }
});
}
```

## Opção 3: Usa `runCommand( { collStats :  collname  })`

```
use admin;


var serverStatus = db.runCommand(
   {
     serverStatus: 1
   }
)

//printjson(serverStatus.process)
if (serverStatus.process == 'mongod')
{
    db.runCommand( { listDatabases: 1 } ).databases.forEach(function (BD) {

    if(BD.name == 'config' || BD.name =='admin' || BD.name == 'replset' || BD.name == 'local')
    {
       // print("Não pra ver nada")
    }
    else {
        db = db.getSiblingDB(BD.name);
        print(" ");
        print("****************************** DATABASE: " + BD.name + " ************************")

        var coll_stats;
        db.getCollectionNames().forEach(function(collname) {
        if (/system/i.test(collname))
        {}
        else
        {
            print("********************** " + collname + " ************************");
//            coll_stats = db[collname].stats();
            coll_stats = db.runCommand( { collStats :  collname  })
            print( "freeStorageSize: " + coll_stats.freeStorageSize + " bytes");
        }
        });
    }
});

}
else
{
    db.runCommand( { listDatabases: 1 } ).databases.forEach(function (BD) {
```

```
43
44      if(BD.name == 'config' || BD.name =='admin' || BD.name == 'replset' || BD.name == 'local')
45      {
46         // print("Não pra ver nada")
47      }
48      else {
49          db = db.getSiblingDB(BD.name);
50          print(" ");
51          print("****************************** DATABASE: " + BD.name + " ************************")
52
53          db.getCollectionNames().forEach(function(collname) {
54          if (/system/i.test(collname))
55          {}
56          else
57          {
58              print("********************** " + collname + " ************************");
59              //coll_stats = db[collname].stats();
60
61              coll_stats = db.runCommand( { collStats :  collname  })
62              var obj = coll_stats.shards ;
63
64                  Object.entries(obj).forEach(([key, value]) => {
65                      console.log("freeStorageSize: ", value.freeStorageSize + " bytes");
66                  });
67              }
68              });
69
70      }
71  });
72  }
```