

Deployment guide:

1- Running the docker compse:

- Simple pull the repo into a folder and run # docker-compose up

2- Initialization the Replication and Creating BMG schema:

PS: Expressjs will keep giving an error till we create its schema as we are authenticating the connection

```
docker-compose exec mongo-primary mongo -u "root" -p "password"
rs.initiate({"_id" : "replica-set","members" : [{"_id" : 0,"host" : "mongo-
primary:27017"}, {"_id" : 1,"host" : "mongo-worker-1:27017"}, {"_id" : 2,"host" :
"mongo-worker-2:27017"}]});

conf = rs.config();
conf.members[0].priority = 2;
rs.reconfig(conf);

use admin;
db.createUser({user: "cluster_admin",pwd: "password",roles: [ { role:
"userAdminAnyDatabase", db: "admin" }, { "role" : "clusterAdmin", "db" : "admin" }
]});
db.auth("cluster_admin", "password");

use BMG;           //create BMG user and schema (this point is a must)
db.createUser({user: "bmguser",pwd: "password",roles: [ { role: "readWrite", db:
"BMG" } ]});
```

The above will simple do the next:

- Connect to the DB
- Initiate the replication between the mongo cluster
- Create cluster admin
- Create the BMG schema (This is a must)

3- Connecting to the application

- #docker inspect reactclient | grep "IPAddress" //getting the React container IP
- In the browser: <http://{IPAddress}:3000>

PS: Please note in case of deploying more than 1 cluster with swarm then we will need to have a proxy IP as a middle ware between the backend and the MongoDB containers and add that proxy in .env