### Setting up a 3-node replica set of MongoDB on Ubuntu 18.04 Server

**Step 1: Install MongoDB on Each Node – If not done yet, if yes go to Step 2**

**Add the MongoDB Repository**

1. Import the MongoDB public GPG Key:

wget -qO - https://www.mongodb.org/static/pgp/server-4.4.asc | sudo apt-key add -

1. Create a list file for MongoDB:

echo "deb [ arch=amd64,arm64 ] https://repo.mongodb.org/apt/ubuntu bionic/mongodb-org/4.4 multiverse" | sudo tee /etc/apt/sources.list.d/mongodb-org-4.4.list

1. Update the package database:

sudo apt-get update

**Install MongoDB**

1. Install MongoDB packages:

sudo apt-get install -y mongodb-org

**Step 2: Configure the Replica Set**

**Update MongoDB Configuration File**

1. Open the MongoDB configuration file /etc/mongod.conf and update the following settings:

net:

bindIp: 0.0.0.0

replication:

replSetName: "rs0"

1. Repeat the above steps on all three nodes.

**Start MongoDB Service**

1. Start the MongoDB service on each node:

sudo systemctl start mongod

1. Enable MongoDB to start on boot:

sudo systemctl enable mongod

**Step 3: Initialize the Replica Set**

**Connect to MongoDB Shell**

1. On one of the nodes, connect to the MongoDB shell:

mongo

**Initiate the Replica Set**

1. Initiate the replica set:

rs.initiate()

**Add Members to the Replica Set**

1. Add the other two nodes to the replica set:

rs.add("mongodb2:27017")

rs.add("mongodb3:27017")

**Check the Replica Set Configuration**

1. Check the replica set status:

rs.status()