# REDIS NEW CLUSTER INSTALLATION STEPS

Server List

Istanbul :

01 - server01.test.com : 10.10.10.61

- OS : RHEL 7

- Memory : 128 GB

- Data Dir : 553 GB (/data)

- Redis Ports : 6379(Master\_shard01), 7379(Slave\_shard04)

- Redis Cl. Bus Ports : 16379(Master\_shard01), 17379(Slave\_shard04)

- Redis Binary Dir : /data/redis/redis-4.0.11/

- Redis Config Dir : /data/redis/test/

- Redis Data Dir : /data/redis/test/

02 - server02.test.com :10.10.10.62

- OS : RHEL 7

- Memory : 128 GB

- Data Dir : 553 GB (/data)

- Redis Ports : 6379(Master\_shard02), 7379(Slave\_shard05)

- Redis Cl. Bus Ports : 16379(Master\_shard02), 17379(Slave\_shard05)

- Redis Binary Dir : /data/redis/redis-4.0.11/

- Redis Config Dir : /data/redis/test/

- Redis Data Dir : /data/

03 - server03.test.com :10.10.10.63

- OS : RHEL 7

- Memory : 128 GB

- Data Dir : 553 GB (/data)

- Redis Ports : 6379(Master\_shard03), 7379(Slave\_shard06)

- Redis Cl. Bus Ports : 16379(Master\_shard03), 17379(Slave\_shard06)

- Redis Binary Dir : /data/redis/redis-4.0.11/

- Redis Config Dir : /data/redis/test/

- Redis Data Dir : /data/

Ankara :

04 - server20.test.com : 20.20.20.50

- OS : RHEL 7

- Memory : 128 GB

- Data Dir : 553 GB (/data)

- Redis Ports : 6379(Master\_shard04), 7379(Slave\_shard01)

- Redis Cl. Bus Ports : 16379(Master\_shard04), 17379(Slave\_shard01)

- Redis Binary Dir : /data/redis/redis-4.0.11/

- Redis Config Dir : /data/redis/test/

- Redis Data Dir : /data/redis/test/

05 - server21.test.com : 20.20.20.51

- OS : RHEL 7

- Memory : 128 GB

- Data Dir : 553 GB (/data)

- Redis Ports : 6379(Master\_shard05), 7379(Slave\_shard02)

- Redis Cl. Bus Ports : 16379(Master\_shard05), 17379(Slave\_shard02)

- Redis Binary Dir : /data/redis/redis-4.0.11/

- Redis Config Dir : /data/redis/test/

- Redis Data Dir : /data/redis/test/

06 - server21.test.com : 20.20.20.52

- OS : RHEL 7

- Memory : 128 GB

- Data Dir : 553 GB (/data)

- Redis Ports : 6379(Master\_shard06), 7379(Slave\_shard03)

- Redis Cl. Bus Ports : 16379(Master\_shard06), 17379(Slave\_shard03)

- Redis Binary Dir : /data/redis/redis-4.0.11/

- Redis Config Dir : /data/redis/test/

- Redis Data Dir : /data/redis/test/

1. Download redis version 4.0.11 for each Redis cluster server.

2. Compile redis on all Redis cluster server

3. Configure firewall rules for Redis ports for each redis cluster server.

4. Change required kernel parameters for all redis server

5. Configure Redis config file for Redis cluster server

6. Start redis master and slave instance on all Redis cluster server

7. Make Redis Cluster using with redis\_trip command.

8. Add slave nodes for all redis masters.

REDIS INSTALLATION

1- Set kernel Parameters

--ALL

vi /etc/sysctl.conf

vm.overcommit\_memory = 1

echo never > /sys/kernel/mm/transparent\_hugepage/enabled

2- Directory createtions

--ALL

mkdir -p /data/redis/test

mkdir -p /data/redis\_4.0\_bin/

3- Compile binaries

--ALL

cd /data/redis\_4.0\_bin/

tar -xvf redis-4.0.11.tar.gz

mv redis-4.0.11/\* .

rmdir redis-4.0.11/

make

make test

4- Configure Config Files

--ALL

vi /home/testadmin/.bash\_profile

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PATH=$PATH:$HOME/.local/bin:$HOME/bin:/data/redis\_4.0\_bin/src

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. /home/testadmin/.bash\_profile

cd /data/redis/test/

vi redisTestMaster01.conf

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bind 10.10.10.61

port 6379

unixsocket "/tmp/redisMaster01.sock"

pidfile "/var/run/redis\_6379\_Master01.pid"

dbfilename "dumpMaster01.rdb"

cluster-enabled yes

cluster-config-file nodesMaster01.conf

cluster-node-timeout 5000

appendonly yes

appendfilename "appendonlyMaster01.aof"

appendfsync everysec

maxmemory 50GB

daemonize yes

logfile "/data/redis/test/redisMaster01.log"

cluster-slave-validity-factor 0

cluster-migration-barrier 1

requirepass "\*\*\*\*\*\*\*\*\*\*"

masterauth "\*\*\*\*\*\*\*\*\*\*"

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vi redisTestSlave04.conf

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bind 10.10.10.61

port 7379

unixsocket "/tmp/redisSlave04.sock"

pidfile "/var/run/redis\_7379\_Slave04.pid"

dbfilename "dumpSlave04.rdb"

cluster-enabled yes

cluster-config-file nodesSlave04.conf

cluster-node-timeout 5000

appendonly yes

appendfilename "appendonlySlave04.aof"

appendfsync everysec

maxmemory 50GB

daemonize yes

logfile "/data/redis/test/redisSlave04.log"

cluster-slave-validity-factor 0

cluster-migration-barrier 1

requirepass "\*\*\*\*\*\*\*\*\*\*"

masterauth "\*\*\*\*\*\*\*\*\*\*"

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5 – Start Redis Servers

---ALL

redis-server redisTestMaster01.conf

redis-server redisTestSlave04.conf

6- Create Redis Cluster

yum install ruby

yum install ruby.gems

scl enable rh-ruby22 bash

gem install redis

--ALL

> cluster meet MASTER\_IP MASTER\_PORT

--One Instance

redis-trib.rb create node01 node02 node03 node04 node05 node06

--ALL Slave

> cluster replicate MASTER\_NODE\_ID

Examples:

redis-cli -h 10.10.10.61 -p 7379 -c

CLUSTER MEET 20.20.20.50 6379

CLUSTER REPLICATE aafacdd9dcc8286b8197a3b2f80cd8a9bd19b2f7

redis-cli -h 10.10.10.62 -p 7379 -a \*\*\*\*\*\*\*\*\*\* -c

CLUSTER MEET 20.20.20.50 6379

CLUSTER REPLICATE 215f8534eb2eadc7db88fbc2bae1ca0a7b08590b

redis-trib.rb create 10.10.10.61:6379 10.10.10.62:6379 10.10.10.63:6379 20.20.20.50:6379 20.20.20.51:6379 20.20.20.52:6379