USER ACCEPTANCE TEST DOCUMENT

DC & DRC

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# KERNEL OPTIMIZATION

**Description:**

Kernel optimizations as required by Redis server

**Note:**

Check on all servers

Run command as sudo user

## Memory-related kernel parameters

**Command:**

|  |
| --- |
| sysctl vm.overcommit\_memory |

**Sample Output:**

|  |
| --- |
| [root@dc-redis-cl-02 ~]# sysctl vm.overcommit\_memory  vm.overcommit\_memory = 1 |

**Actual Output:**

|  |
| --- |
|  |

**Result:**

|  |  |  |
| --- | --- | --- |
| **Location** | **Server Name** | **OK / NOK** |
| DC | dc-redis-cl-01 | OK |
| dc-redis-cl-02 | OK |
| dc-redis-cl-03 | OK |
| DRC | drc-redis-cl-01 | OK |
| drc-redis-cl-02 | OK |
| drc-redis-cl-03 | OK |

**Remarks:**

None

## Network-related kernel parameters

**Command:**

|  |
| --- |
| sysctl net.core.somaxconn net.ipv4.tcp\_max\_syn\_backlog |

**Sample Output:**

|  |
| --- |
| [root@dc-redis-cl-02 ~]# sysctl net.core.somaxconn net.ipv4.tcp\_max\_syn\_backlog  net.core.somaxconn = 65535  net.ipv4.tcp\_max\_syn\_backlog = 65535 |

**Actual Output:**

|  |
| --- |
|  |

**Result:**

|  |  |  |
| --- | --- | --- |
| **Location** | **Server Name** | **OK / NOK** |
| DC | dc-redis-cl-01 | OK |
| dc-redis-cl-02 | OK |
| dc-redis-cl-03 | OK |
| DRC | drc-redis-cl-01 | OK |
| drc-redis-cl-02 | OK |
| drc-redis-cl-03 | OK |

**Remarks:**

None

# REDIS-SERVER INSTALLATION

**Description:**

Check installation location of Redis binaries

Check installed version of redis-server

Check status and autostart flag of redis-master and redis-slave services

Check ports use by redis services

**Note:**

Check on all servers

Run command as sudo user

## Location of Redis Binaries

**Command:**

|  |
| --- |
| whereis redis-server  whereis redis-benchmark  whereis redis-cli |

**Sample output:**

|  |
| --- |
| [root@dc-redis-cl-02 ~]# whereis redis-server  redis-server: /usr/local/bin/redis-server  [root@dc-redis-cl-02 ~]# whereis redis-benchmark  redis-benchmark: /usr/local/bin/redis-benchmark  [root@dc-redis-cl-02 ~]# whereis redis-cli  redis-cli: /usr/local/bin/redis-cli |

**Actual Output:**

|  |
| --- |
|  |

**Result:**

|  |  |  |
| --- | --- | --- |
| **Location** | **Server Name** | **OK / NOK** |
| DC | dc-redis-cl-01 | OK |
| dc-redis-cl-02 | OK |
| dc-redis-cl-03 | OK |
| DRC | drc-redis-cl-01 | OK |
| drc-redis-cl-02 | OK |
| drc-redis-cl-03 | OK |

**Remarks:**

None

## Installed redis-server Version

**Command:**

|  |
| --- |
| redis-server --version |

**Sample Output:**

|  |
| --- |
| [root@dc-redis-cl-02 ~]# redis-server --version  Redis server v=7.0.11 sha=00000000:0 malloc=jemalloc-5.2.1 bits=64 build=8ea3979dcea46477 |

**Actual Output:**

|  |
| --- |
|  |

**Note:**

Installed version might be newer, please write down installed version.

**Result:**

|  |  |  |
| --- | --- | --- |
| **Location** | **Server Name** | **Version** |
| DC | dc-redis-cl-01 | 7.0.11 |
| dc-redis-cl-02 | 7.0.11 |
| dc-redis-cl-03 | 7.0.11 |
| DRC | drc-redis-cl-01 | 7.0.11 |
| drc-redis-cl-02 | 7.0.11 |
| drc-redis-cl-03 | 7.0.11 |

**Remarks:**

None

## Service Status and Autostart

**Description:**

Service active status must be active

Service autostart status must be enabled

**Command:**

|  |
| --- |
| systemctl status redis-master  systemctl status redis-slave |

**Sample Output:**

|  |
| --- |
| [root@dc-redis-cl-03 ~]# systemctl status redis-master  ● redis-master.service - Redis data structure server - redis-master  Loaded: loaded (/etc/systemd/system/redis-master.service; enabled; vendor preset: disabled)  Active: active (running) since Wed 2023-05-10 13:02:51 WIB; 6 days ago  Docs: https://redis.io/documentation  Main PID: 17464 (redis-server)  Status: "MASTER <-> REPLICA sync: Finished with success. Ready to accept connections in read-write mode."  Tasks: 6 (limit: 1645251)  Memory: 9.1M  CGroup: /system.slice/redis-master.service  └─17464 /usr/local/bin/redis-server 127.0.0.1:7000 [cluster]  [root@dc-redis-cl-03 ~]# systemctl status redis-slave  ● redis-slave.service - Redis data structure server - redis-slave  Loaded: loaded (/etc/systemd/system/redis-slave.service; enabled; vendor preset: disabled)  Active: active (running) since Wed 2023-05-10 15:00:12 WIB; 6 days ago  Docs: https://redis.io/documentation  Main PID: 19216 (redis-server)  Status: "MASTER <-> REPLICA sync: Finished with success. Ready to accept connections in read-write mode."  Tasks: 6 (limit: 1645251)  Memory: 12.5M  CGroup: /system.slice/redis-slave.service  └─19216 /usr/local/bin/redis-server 127.0.0.1:7001 [cluster] |

**Note:**

Check green highlight marking in above sample for service running status

Check yellow highlight marking in above sample for service autostart flag status

**Actual Output:**

|  |
| --- |
|  |

**Result:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Location** | **Server Name** | **Node** | **OK / NOK** | |
| **Active** | **Autostart** |
| DC | dc-redis-cl-01 | redis-master | OK | OK |
| redis-slave | OK | OK |
| dc-redis-cl-02 | redis-master | OK | OK |
| redis-slave | OK | OK |
| dc-redis-cl-03 | redis-master | OK | OK |
| redis-slave | OK | OK |
| DRC | drc-redis-cl-01 | redis-master | OK | OK |
| redis-slave | OK | OK |
| drc-redis-cl-02 | redis-master | OK | OK |
| redis-slave | OK | OK |
| drc-redis-cl-03 | redis-master | OK | OK |
| redis-slave | OK | OK |

**Remarks:**

None

## Redis-Server Open Ports

**Description:**

Check all ports used by redis-master and redis-slave services

**Command:**

|  |
| --- |
| ss -nlp | grep redis-server |

**Sample output:**

|  |
| --- |
| [root@dc-redis-cl-03 ~]# ss -nlp | grep redis-server  tcp LISTEN 0 511 172.28.200.237:7000 0.0.0.0:\* users:(("redis-server",pid=2141,fd=7))  tcp LISTEN 0 511 127.0.0.1:7000 0.0.0.0:\* users:(("redis-server",pid=2141,fd=6))  tcp LISTEN 0 511 172.28.200.237:7001 0.0.0.0:\* users:(("redis-server",pid=2142,fd=7))  tcp LISTEN 0 511 127.0.0.1:7001 0.0.0.0:\* users:(("redis-server",pid=2142,fd=6))  tcp LISTEN 0 511 172.28.200.237:17000 0.0.0.0:\* users:(("redis-server",pid=2141,fd=10))  tcp LISTEN 0 511 127.0.0.1:17000 0.0.0.0:\* users:(("redis-server",pid=2141,fd=9))  tcp LISTEN 0 511 172.28.200.237:17001 0.0.0.0:\* users:(("redis-server",pid=2142,fd=10))  tcp LISTEN 0 511 127.0.0.1:17001 0.0.0.0:\* users:(("redis-server",pid=2142,fd=9)) |

**Note:**

IP address 127.0.0.1 is for service running in localhost

Port 17000 and 17001 are used for cluster communication between nodes.

**Actual Output:**

|  |
| --- |
|  |

**Result:**

|  |  |  |
| --- | --- | --- |
| **Location** | **Server Name** | **OK / NOK** |
| DC | dc-redis-cl-01 | OK |
| dc-redis-cl-02 | OK |
| dc-redis-cl-03 | OK |
| DRC | drc-redis-cl-01 | OK |
| drc-redis-cl-02 | OK |
| drc-redis-cl-03 | OK |

**Remark:**

None

# REDIS REPLICATION

**Description:**

There are three pairs master-slave replications

We will check each pair replication status

**Note:**

Can be run on any server

## DC Location

### Master1 - Slave1 Pair

**Description:**

Node master1: 172.28.200.235:7000

Node slave1: 172.28.200.236:7001

**Command:**

|  |
| --- |
| redis-cli -h 172.28.200.235 -p 7000 -a SomePassw0rd --no-auth-warning info replication  redis-cli -h 172.28.200.236 -p 7001 -a SomePassw0rd --no-auth-warning info replication |

**Sample output:**

|  |
| --- |
| [root@dc-redis-cl-03 ~]# redis-cli -h 172.28.200.235 -p 7000 -a SomePassw0rd --no-auth-warning info replication  # Replication  role:master  connected\_slaves:1  slave0:ip=172.28.200.236,port=7001,state=online,offset=29088302,lag=0  ...  [output truncated]  [root@dc-redis-cl-03 ~]# redis-cli -h 172.28.200.236 -p 7001 -a SomePassw0rd --no-auth-warning info replication  # Replication  role:slave  master\_host:172.28.200.235  master\_port:7000  master\_link\_status:up  ...  [output truncated] |

**Actual Output:**

|  |
| --- |
|  |

### Master2 - Slave2 Pair

**Description:**

Node Master2: 172.28.200.236:7000

Node Slave2: 172.28.200.237:7001

**Command:**

|  |
| --- |
| redis-cli -h 172.28.200.236 -p 7000 -a SomePassw0rd --no-auth-warning info replication  redis-cli -h 172.28.200.237 -p 7001 -a SomePassw0rd --no-auth-warning info replication |

**Actual Output:**

|  |
| --- |
|  |

### Master3 - Slave3 Pair

**Description:**

Node Master3: 172.28.200.237:7000

Node Slave3: 172.28.200.235:7001

**Command:**

|  |
| --- |
| redis-cli -h 172.28.200.237 -p 7000 -a SomePassw0rd --no-auth-warning info replication  redis-cli -h 172.28.200.235 -p 7001 -a SomePassw0rd --no-auth-warning info replication |

**Actual Output:**

|  |
| --- |
|  |

## DRC Location

### Master1 - Slave1 Pair

**Description:**

Node master1: 172.28.100.235:7000

Node slave1: 172.28.100.236:7001

**Command:**

|  |
| --- |
| redis-cli -h 172.28.100.235 -p 7000 -a SomePassw0rd --no-auth-warning info replication  redis-cli -h 172.28.100.236 -p 7001 -a SomePassw0rd --no-auth-warning info replication |

**Actual Output:**

|  |
| --- |
|  |

### Master2 - Slave2 Pair

Node Master2: 172.28.100.236:7000

Node Slave2: 172.28.100.237:7001

**Command:**

|  |
| --- |
| redis-cli -h 172.28.100.236 -p 7000 -a SomePassw0rd --no-auth-warning info replication  redis-cli -h 172.28.100.237 -p 7001 -a SomePassw0rd --no-auth-warning info replication |

**Actual Output:**

|  |
| --- |
|  |

### Master3 - Slave3 Pair

Node Master3: 172.28.100.237:7000

Node Slave3: 172.28.100.235:7001

**Command:**

|  |
| --- |
| redis-cli -h 172.28.100.237 -p 7000 -a SomePassw0rd --no-auth-warning info replication  redis-cli -h 172.28.100.235 -p 7001 -a SomePassw0rd --no-auth-warning info replication |

**Actual Output:**

|  |
| --- |
|  |

**Result:**

|  |  |  |
| --- | --- | --- |
| **Location** | **Master - Slave Pair** | **OK / NOK** |
| DC | master1 - slave1 | OK |
| master2 - slave2 | OK |
| master3 - slave3 | OK |
| DRC | master1 - slave1 | OK |
| master2 - slave2 | OK |
| master3 - slave3 | OK |

**Remark:**

None

# REDIS CLUSTER

## Cluster Information

**Description:**

Check status of Redis cluster

**Note:**

Can be run on any server

### DC Location

**Command:**

|  |
| --- |
| redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster info |

**Sample output:**

|  |
| --- |
| [root@dc-redis-cl-03 ~]# redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster info  cluster\_state:ok  cluster\_slots\_assigned:16384  cluster\_slots\_ok:16384  cluster\_slots\_pfail:0  cluster\_slots\_fail:0  cluster\_known\_nodes:6  cluster\_size:3  ...  [output truncated] |

**Actual Output:**

|  |
| --- |
|  |

### DRC Location

**Command:**

|  |
| --- |
| redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster info |

**Actual Output:**

|  |
| --- |
|  |

**Result:**

|  |  |
| --- | --- |
| **Location** | **OK / NOK** |
| DC | OK |
| DRC | OK |

**Remark:**

None

## Cluster Nodes and Slots Allocation

**Description:**

Check nodes and slots allocation within Redis cluster

**Note:**

Can be run on any server

### DC Location

**Command:**

|  |
| --- |
| redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster nodes |

**Sample Output:**

|  |
| --- |
| [root@dc-redis-cl-03 ~]# redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster nodes  562668241828b5778eff4aa6ff4d5cdc4424efac 172.28.200.235:7001@17001 slave b1a719aa0b8016d4745650fe62938ecb6471657f 0 1684291930955 20 connected  7fa59cc16bf650ffa17108f8e4eb023e8cd18be3 172.28.200.236:7001@17001 slave 37a53f3fb4604aee23514144c0b9d7cb138e4f34 0 1684291930052 16 connected  bbcc283501b43990a333e5ddf01ac1466588aeb9 172.28.200.237:7001@17001 slave 91747e7a6715afeb606cb61378c07a65d07016e1 0 1684291928949 18 connected  b1a719aa0b8016d4745650fe62938ecb6471657f 172.28.200.237:7000@17000 myself,master - 0 1684291928000 20 connected 10923-16383  91747e7a6715afeb606cb61378c07a65d07016e1 172.28.200.236:7000@17000 master - 0 1684291929550 18 connected 5461-10922  37a53f3fb4604aee23514144c0b9d7cb138e4f34 172.28.200.235:7000@17000 master - 0 1684291930453 16 connected 0-5460 |

**Actual Output:**

|  |
| --- |
|  |

### DRC Location

**Command:**

|  |
| --- |
| redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster nodes |

**Actual Output:**

|  |
| --- |
|  |

**Result:**

|  |  |
| --- | --- |
| **Location** | **OK / NOK** |
| DC | OK |
| DRC | OK |

**Remark:**

None

# FUNCTIONAL TEST

## SET Command

**Description:**

Set key-value pair in Redis

**Note:**

Run commands from server2

### DC Location

**Command:**

|  |
| --- |
| set\_create.sh > set\_test.txt  redis-cli -p 7000 -c -a SomePassw0rd --no-auth-warning < set\_test.txt |

**Output Sample:**

|  |
| --- |
| [root@dc-redis-cl-02 ~]# redis-cli -c -p 7000 -a SomePassw0rd --no-auth-warning < set\_test.txt  [output truncated]  ...  -> Redirected to slot [11919] located at 172.28.200.237:7000  OK  OK  -> Redirected to slot [3789] located at 172.28.200.235:7000  OK  -> Redirected to slot [7916] located at 172.28.200.236:7000  OK  -> Redirected to slot [12035] located at 172.28.200.237:7000  OK  OK  OK  OK  -> Redirected to slot [7799] located at 172.28.200.236:7000  OK  -> Redirected to slot [3670] located at 172.28.200.235:7000  OK |

**Actual Output:**

|  |
| --- |
|  |

### DRC Location

**Command:**

|  |
| --- |
| set\_create.sh > set\_test.txt  redis-cli -p 7000 -c -a SomePassw0rd --no-auth-warning < set\_test.txt |

**Actual Output:**

|  |
| --- |
|  |

**Result:**

|  |  |
| --- | --- |
| **Location** | **OK / NOK** |
| DC | OK |
| DRC | OK |

**Remark:**

None

## GET Command

**Description:**

Get value from a key in Redis

**Note:**

Run commands from server2

### DC Location

**Command:**

|  |
| --- |
| get\_create.sh > get\_test.txt  redis-cli -p 7000 -c -a SomePassw0rd --no-auth-warning < get\_test.txt |

**Output sample:**

|  |
| --- |
| [root@dc-redis-cl-02 ~]# redis-cli -c -p 7000 -a SomePassw0rd --no-auth-warning < set\_test.txt  [output truncated]  ...  -> Redirected to slot [11919] located at 172.28.200.237:7000  "value16374"  "value16375"  -> Redirected to slot [3789] located at 172.28.200.235:7000  "value16376"  -> Redirected to slot [7916] located at 172.28.200.236:7000  "value16377"  -> Redirected to slot [12035] located at 172.28.200.237:7000  "value16378"  "value16379"  "value16380"  "value16381"  -> Redirected to slot [7799] located at 172.28.200.236:7000  "value16382"  -> Redirected to slot [3670] located at 172.28.200.235:7000  "value16383" |

**Actual Output:**

|  |
| --- |
|  |

### DRC Location

**Command:**

|  |
| --- |
| get\_create.sh > get\_test.txt  redis-cli -p 7000 -c -a SomePassw0rd --no-auth-warning < get\_test.txt |

**Actual Output:**

|  |
| --- |
|  |

**Note:**

Compare slot number order with previous SET output

**Result:**

|  |  |
| --- | --- |
| **Location** | **OK / NOK** |
| DC | OK |
| DRC | OK |

**Remark:**

None

# HIGH AVAILABILITY (HA)

**Description:**

When server1 went down - node master1 and slave3 will be downed, node slave1 on server2 will take over master role from node master1.

### DC Location

Stop redis-master and redis-slave service on server1 (run command as sudo user)

**Command:**

|  |
| --- |
| systemctl stop redis-master  systemctl stop redis-slave |

From server2 check cluster information and nodes

**Command:**

|  |
| --- |
| redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster info  redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster nodes |

**Sample Output:**

|  |
| --- |
| [root@dc-redis-cl-02 ~]# redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster info  cluster\_state:ok  cluster\_slots\_assigned:16384  cluster\_slots\_ok:16384  cluster\_slots\_pfail:0  cluster\_slots\_fail:0  ...  [output truncated]  [root@dc-redis-cl-02 ~]# redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster nodes  7fa59cc16bf650ffa17108f8e4eb023e8cd18be3 172.28.200.236:7001@17001 master - 0 1684305103431 23 connected 0-5460  562668241828b5778eff4aa6ff4d5cdc4424efac 172.28.200.235:7001@17001 slave,fail b1a719aa0b8016d4745650fe62938ecb6471657f 1684305050227 1684305048219 20 disconnected  37a53f3fb4604aee23514144c0b9d7cb138e4f34 172.28.200.235:7000@17000 master,fail - 1684305047716 1684305045207 22 disconnected  b1a719aa0b8016d4745650fe62938ecb6471657f 172.28.200.237:7000@17000 master - 0 1684305103000 20 connected 10923-16383  91747e7a6715afeb606cb61378c07a65d07016e1 172.28.200.236:7000@17000 myself,master - 0 1684305102000 18 connected 5461-10922  bbcc283501b43990a333e5ddf01ac1466588aeb9 172.28.200.237:7001@17001 slave 91747e7a6715afeb606cb61378c07a65d07016e1 0 1684305104435 18 connected |

**Actual Output:**

|  |
| --- |
|  |

SET and GET all slots when server1 status is down

**Note:**

Must be able to set and get all slots with one server down (server1)

From server2

**Command:**

|  |
| --- |
| redis-cli -p 7000 -c -a SomePassw0rd --no-auth-warning < set\_test.txt  redis-cli -p 7000 -c -a SomePassw0rd --no-auth-warning < get\_test.txt |

**Sample output:**

|  |
| --- |
| [root@dc-redis-cl-02 ~]# redis-cli -c -p 7000 -a SomePassw0rd --no-auth-warning < set\_test.txt  [output truncated]  ...  -> Redirected to slot [11919] located at 172.28.200.237:7000  OK  OK  -> Redirected to slot [3789] located at 172.28.200.236:7001  OK  -> Redirected to slot [7916] located at 172.28.200.236:7000  OK  -> Redirected to slot [12035] located at 172.28.200.237:7000  OK  OK  OK  OK  -> Redirected to slot [7799] located at 172.28.200.236:7000  OK  -> Redirected to slot [3670] located at 172.28.200.236:7001  OK  [root@dc-redis-cl-02 ~]# redis-cli -c -p 7000 -a SomePassw0rd --no-auth-warning < get\_test.txt  [output truncated]  ...  -> Redirected to slot [11919] located at 172.28.200.237:7000  "value16374"  "value16375"  -> Redirected to slot [3789] located at 172.28.200.236:7001  "value16376"  -> Redirected to slot [7916] located at 172.28.200.236:7000  "value16377"  -> Redirected to slot [12035] located at 172.28.200.237:7000  "value16378"  "value16379"  "value16380"  "value16381"  -> Redirected to slot [7799] located at 172.28.200.236:7000  "value16382"  -> Redirected to slot [3670] located at 172.28.200.236:7001  "value16383" |

**Actual Output:**

|  |
| --- |
|  |

### DRC Location

Stop redis-master and redis-slave service on server1 (run command as sudo user)

**Command:**

|  |
| --- |
| systemctl stop redis-master  systemctl stop redis-slave |

From server2 check cluster information and nodes

**Command:**

|  |
| --- |
| redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster info  redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster nodes |

**Actual Output:**

|  |
| --- |
|  |

SET and GET all slots when server1 status is down

**Note:**

Must be able to set and get all slots with one server down (server1)

From server2

**Command:**

|  |
| --- |
| redis-cli -p 7000 -c -a SomePassw0rd --no-auth-warning < set\_test.txt  redis-cli -p 7000 -c -a SomePassw0rd --no-auth-warning < get\_test.txt |

**Actual Output:**

|  |
| --- |
|  |

**Result:**

|  |  |
| --- | --- |
| **Location** | **OK / NOK** |
| DC | OK |
| DRC | OK |

**Remark:**

None

# LOG ROTATION

**Description:**

Check configuration of logrotate, log files shall be rotated every day and will be kept for 28 days

### DC Location

**Notes:**

Check on all servers

**Command:**

|  |
| --- |
| cat /etc/logrotate.conf  crontab -e  ls -l /opt/redis/log |

**Sample output:**

|  |
| --- |
| [root@dc-redis-cl-02 ~]# cat /etc/logrotate.conf  [output truncated]  ...  /opt/redis/log/master.log {  daily  missingok  rotate 28  compress  create 0660 redis redis  }  /opt/redis/log/slave.log {  daily  missingok  rotate 28  compress  create 0660 redis redis  }  /opt/redis/log/recycle.log {  daily  missingok  rotate 28  compress  create 0660 redis redis  }  [root@dc-redis-cl-02 ~]# crontab -e  \* 0 \* \* \* /usr/sbin/logrotate /etc/logrotate.conf  [root@dc-redis-cl-01 ~]# ls -l /opt/redis/log  total 2396  -rw-rw----. 1 redis redis 0 May 19 00:00 master.log  -rw-------. 1 redis redis 362840 May 12 00:00 master.log-20230512.gz  -rw-rw----. 1 redis redis 98878 May 12 23:59 master.log-20230513.gz  -rw-rw----. 1 redis redis 100167 May 13 23:59 master.log-20230514.gz  -rw-rw----. 1 redis redis 99613 May 14 23:59 master.log-20230515.gz  -rw-rw----. 1 redis redis 100542 May 16 00:00 master.log-20230516.gz  -rw-rw----. 1 redis redis 100395 May 16 23:59 master.log-20230517.gz  -rw-rw----. 1 redis redis 656834 May 17 13:30 master.log-20230518.gz  -rw-rw----. 1 redis redis 20 May 18 00:00 master.log-20230519.gz  -rw-rw----. 1 redis redis 11651 May 19 15:15 recycle.log  -rw-rw----. 1 root root 1552 May 12 00:00 recycle.log-20230512.gz  -rw-rw----. 1 redis redis 979 May 13 00:00 recycle.log-20230513.gz  -rw-rw----. 1 redis redis 978 May 14 00:00 recycle.log-20230514.gz  -rw-rw----. 1 redis redis 986 May 15 00:00 recycle.log-20230515.gz  -rw-rw----. 1 redis redis 971 May 16 00:00 recycle.log-20230516.gz  -rw-rw----. 1 redis redis 984 May 17 00:00 recycle.log-20230517.gz  -rw-rw----. 1 redis redis 1028 May 18 00:00 recycle.log-20230518.gz  -rw-rw----. 1 redis redis 1009 May 19 00:00 recycle.log-20230519.gz  -rw-rw----. 1 redis redis 0 May 19 00:00 slave.log  -rw-------. 1 redis redis 267838 May 11 23:59 slave.log-20230512.gz  -rw-rw----. 1 redis redis 102920 May 12 23:59 slave.log-20230513.gz  -rw-rw----. 1 redis redis 102581 May 13 23:59 slave.log-20230514.gz  -rw-rw----. 1 redis redis 102702 May 14 23:59 slave.log-20230515.gz  -rw-rw----. 1 redis redis 102728 May 15 23:59 slave.log-20230516.gz  -rw-rw----. 1 redis redis 102292 May 17 00:00 slave.log-20230517.gz  -rw-rw----. 1 redis redis 62648 May 17 13:30 slave.log-20230518.gz  -rw-rw----. 1 redis redis 20 May 18 00:00 slave.log-20230519.gz |

**Actual Output:**

|  |
| --- |
|  |

### DRC Location

**Notes:**

Check on all servers

**Command:**

|  |
| --- |
| cat /etc/logrotate.conf  crontab -e  ls -l /opt/redis/log |

**Actual Output:**

|  |
| --- |
|  |

**Result:**

|  |  |  |
| --- | --- | --- |
| **Location** | **Server Name** | **OK / NOK** |
| DC | dc-redis-cl-01 | OK |
| dc-redis-cl-02 | OK |
| dc-redis-cl-03 | OK |
| DRC | drc-redis-cl-01 | OK |
| drc-redis-cl-02 | OK |
| drc-redis-cl-03 | OK |

**Remark:**

None

# RECYCLE SCRIPT

**Description:**

Script recycle.sh will check current role of slave node every 15 minutes. If current role is master, script will check status its master. If its master is up with role of slave, this script will flip the role between them.

### DC Location

Reboot server1

**Command:**

|  |
| --- |
| reboot |

From server2 check cluster information and nodes

**Command:**

|  |
| --- |
| redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster info  redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster nodes |

**Sample output:**

|  |
| --- |
| [root@drc-redis-cl-02 ~]# redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster info  cluster\_state:ok  cluster\_slots\_assigned:16384  cluster\_slots\_ok:16384  cluster\_slots\_pfail:0  cluster\_slots\_fail:0  cluster\_known\_nodes:6  cluster\_size:3  ...  [output truncated]  [root@drc-redis-cl-02 ~]# redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster nodes  b573d0ccf2d44e1732e7be512000cd4635985096 172.28.100.237:7000@17000 master - 0 1684484626000 3 connected 10923-16383  7f566f07b7150d353178af1a0c479947271f6569 172.28.100.237:7001@17001 slave 46f204a90cec85ae435385db81d56b727b1ac84f 0 1684484627000 10 connected  a17de6059c9c59ed90210e1948f036e02520ce72 172.28.100.235:7000@17000 master,fail - 1684484546657 1684484545000 8 connected  8bf5ae941f76c90dc83a9f91aa2bdf8a9bc2e0b3 172.28.100.235:7001@17001 slave,fail b573d0ccf2d44e1732e7be512000cd4635985096 1684484547661 1684484546000 3 connected  edd1c028651f175a6c81e27ac18fbf8d9f5b2514 172.28.100.236:7001@17001 master - 0 1684484627885 11 connected 0-5460  46f204a90cec85ae435385db81d56b727b1ac84f 172.28.100.236:7000@17000 myself,master - 0 1684484626000 10 connected 5461-10922  [root@drc-redis-cl-02 ~]# redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster nodes  b573d0ccf2d44e1732e7be512000cd4635985096 172.28.100.237:7000@17000 master - 0 1684484690060 3 connected 10923-16383  7f566f07b7150d353178af1a0c479947271f6569 172.28.100.237:7001@17001 slave 46f204a90cec85ae435385db81d56b727b1ac84f 0 1684484689056 10 connected  a17de6059c9c59ed90210e1948f036e02520ce72 172.28.100.235:7000@17000 slave edd1c028651f175a6c81e27ac18fbf8d9f5b2514 0 1684484690000 11 connected  8bf5ae941f76c90dc83a9f91aa2bdf8a9bc2e0b3 172.28.100.235:7001@17001 slave b573d0ccf2d44e1732e7be512000cd4635985096 0 1684484691063 3 connected  edd1c028651f175a6c81e27ac18fbf8d9f5b2514 172.28.100.236:7001@17001 master - 0 1684484690000 11 connected 0-5460  46f204a90cec85ae435385db81d56b727b1ac84f 172.28.100.236:7000@17000 myself,master - 0 1684484689000 10 connected 5461-10922  [root@drc-redis-cl-02 ~]# redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster nodes  b573d0ccf2d44e1732e7be512000cd4635985096 172.28.100.237:7000@17000 master - 0 1684485040053 3 connected 10923-16383  7f566f07b7150d353178af1a0c479947271f6569 172.28.100.237:7001@17001 slave 46f204a90cec85ae435385db81d56b727b1ac84f 0 1684485039000 10 connected  a17de6059c9c59ed90210e1948f036e02520ce72 172.28.100.235:7000@17000 master - 0 1684485041056 12 connected 0-5460  8bf5ae941f76c90dc83a9f91aa2bdf8a9bc2e0b3 172.28.100.235:7001@17001 slave b573d0ccf2d44e1732e7be512000cd4635985096 0 1684485039050 3 connected  edd1c028651f175a6c81e27ac18fbf8d9f5b2514 172.28.100.236:7001@17001 slave a17de6059c9c59ed90210e1948f036e02520ce72 0 1684485040000 12 connected  46f204a90cec85ae435385db81d56b727b1ac84f 172.28.100.236:7000@17000 myself,master - 0 1684485040000 10 connected 5461-10922 |

**Actual Output:**

|  |
| --- |
|  |

Check script configuration

**Command:**

|  |
| --- |
| cat /opt/redis/script/recycle.sh  crontab -e |

**Sample Output:**

|  |
| --- |
| [root@dc-redis-cl-02 ~]# cat /opt/redis/script/recycle.sh  #!/bin/bash  host\_ip=172.28.200.236  master\_port=7000  slave\_port=7001  master\_service\_name=redis-master  slave\_service\_name=redis-slave  my\_master\_ip=172.28.200.235  my\_master\_port=7000  master\_auth=SomePassw0rd  ...  [output truncated]  [root@dc-redis-cl-02 ~]# crontab -e  \*/15 \* \* \* \* /opt/redis/script/recycle.sh >> /opt/redis/log/recycle.log |

**Actual Output:**

|  |
| --- |
|  |

### DRC Location

Reboot server1

**Command:**

|  |
| --- |
| reboot |

From server2 check cluster information and nodes

**Command:**

|  |
| --- |
| redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster info  redis-cli -p 7000 -a SomePassw0rd --no-auth-warning cluster nodes |

**Actual Output:**

|  |
| --- |
|  |

Check script configuration

**Command:**

|  |
| --- |
| cat /opt/redis/script/recycle.sh  crontab -e |

**Actual Output:**

|  |
| --- |
|  |

**Result:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Location** | **Script Functionality**  **(OK/NOK)** | **Script Configuration** | |
| **Server Name** | **OK / NOK** |
| DC | OK | dc-redis-cl-01 | OK |
| dc-redis-cl-02 | OK |
| dc-redis-cl-03 | OK |
| DRC | OK | drc-redis-cl-01 | OK |
| drc-redis-cl-02 | OK |
| drc-redis-cl-03 | OK |

**Remark:**

None

# ATTENDEES AND APPROVALS

**UAT Session Attendees:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Full Name** | **Company / Position** | **Contact** | **Sign** |
| 1 | Donny Hariady | ICT / Engineer | 081808901098 |  |
| 2 | Nicky Darmawan | ICT / Engineer | 081218875715 |  |
| 3 |  |  |  |  |

**Approvals:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Full Name** | **Company / Position** | **Contact** | **Sign** |
| 1 | Chairul Manalu | ICT / Manager | 08118890615 |  |
|  |  |  |  |  |

# ATTACHMENTS