HA Configuration

7.7.700

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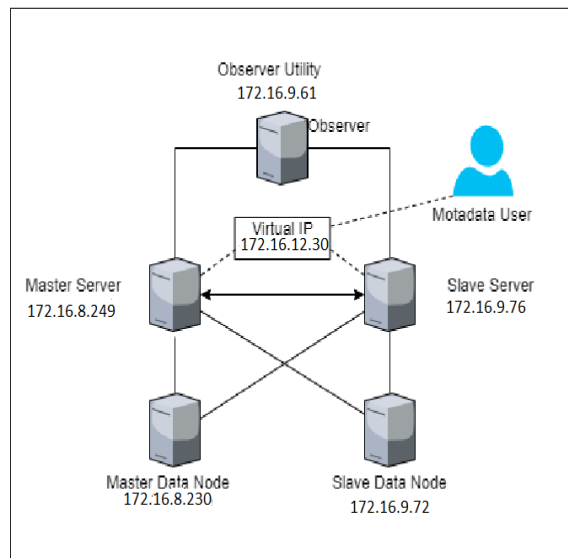
1.2 IP Addresses

- Master Server: 172.16.8.249
- Slave Server: 172.16.9.76
- Master Data Node: 172. 16.8.230
- Slave Data Node: 172.16.9.72
- Observer Utility: 172.16.9.61
- Virtual IP: 172.16.12.30

1.3 Diagram

2. Master Slave Configuration

2.1 Master Server Configuration

Please do required configuration in below mention configuration files:
- Cluster-conf.yml file.

- db-engine-conf.yml file.
- nsq-conf.yml file.

Note: *For NMS servers created with 7.7.500 ISO, motadata user will be default user, so while executing any command, user needs to add sudo first.*

2.2 Cluster-conf.yml file

```
motadata@ubuntu:/motadata/motadata/config$ cat cluster-conf.yml
installation-type: 1
target-hosts: 172.16.9.76,172.16.9.72
config-db-host: 172.16.8.249
master-host: 172.16.12.30
current-host: 172.16.8.249
query-backup-duration: 2
cluster-migration-strict-bind: false
config-db-batch-size: null
config-db-flush-time: null
motadata-observer-host: 172.16.9.61
```

1. Connect with Master Server – 172.16.8.249
2. Open */motadata/motadata/config/cluster-conf.yml file.*
3. Configure installation type to 1.
4. Configure target hosts with slave and slave data Node IP: 172.16.9.76, 172.16.9.72
5. Config-db-host with Master IP: 172.16.8.249
6. Configure Master-host with VIP: 172.16.12.30
7. Conifgure Current-host with Master server's IP: 172.16.8.249
8. Configure motadata-observer-host with observer's IP: 172.16.9.61
9. Save and Exit the file.

Note: *In case of Multi box server setup i.e. Master-DN, observer, slave Master-DN. "report-db-host" parameter is not required*

2.3 DB-engine-conf.yml file

```
#db engine host
host: 172.16.8.230

#other replicated clickhouse hosts
replication-host: 172.16.9.72

#db engine port
port: 8123

connection-timeout: 60

query-connection-timeout: 200

#ssl connection parameter can be enabled/disabled
ssl-connection: "disabled"

#default ssl port
ssl-port: 8444

#default clickhouse-ssl certificate path
ssl-certificate-path: "/etc/clickhouse-server/server.crt"
```

1. Open /motadata/motadata/config/db-engine-conf.yml file.

2. Configure host IP with Master data node IP: 172.16.8.230.
3. Configuration replication-host with slave data node IP: 172.16.9.72

2.4 Nsq-conf.yml file

1. Open /motadata/motadata/config/nsq-conf.yml file.
2. Configure host with master server's VIP: 172.16.12.30.

```
# nsq host
host: 172.16.12.30
#nsq port
port: 4150
#nsq lookupd port
lookupd-port: 4160
#nsq lookup port
lookup-port: 4161
#nsq http port
lookup-http-port: 4151
#nsq message in memory
message-queue-size: 20000
#nsq message timeout (seconds)
message-timeout: 600
#nsq message size(bytes)
max-message-size: 200000000
#metric db insert batch size
metric-db-batch-size: 20000
#nsq consumer helper threads
max-message-helper: 4
#nsq message in memory when cluster enabled
cluster-message-queue-size: 0
#ssl connection
ssl-connection: disabled
#ssl port
ssl-port: 4152
```

3. Slave Server Configuration

Please do required configuration in below mention configuration files:

- Cluster-conf.yml file.
- db-engine-conf.yml file.
- nsq-conf.yml file.

3.1. Cluster-conf.yml

```
installation-type: 2
target-hosts: 172.16.8.249,172.16.8.230
config-db-host: 172.16.9.76
master-host: 172.16.12.30
current-host: 172.16.9.76
query-backup-duration: 2
cluster-migration-strict-bind: false
config-db-batch-size: null
config-db-flush-time: null
motadata-observer-host: 172.16.9.61
```

1. Connect with the slave server – 172.16.9.76.
2. Open /motadata/motadata/config/cluster-conf.yml file.
3. Configure installation type to 2
4. Configure target hosts with Master server and Master data node IP: 172.16.8.249, 172.16.8.230
5. Configure config-db-host with slave master's IP: 172.16.9.76
6. Configure master-host with master server's VIP: 172.16.12.30
7. Current-host to slave master server's IP: 172.16.9.76
8. motadata-observer-host to Obserer's IP: 172.16.9.61
9. Save and Exit the file.

3.2. DB-engine-conf.yml

```
motadata@ubuntu:/motadata/motadata/config$ cat db-engine-conf.yml
#db engine host
host: 172.16.9.72

#other replicated clickhouse hosts
replication-host: 172.16.8.230

#db engine port
port: 8123

connection-timeout: 60

query-connection-timeout: 200

#ssl connection parameter can be enabled/disabled
ssl-connection: "disabled"

#default ssl port
ssl-port: 8444

#default clickhouse-ssl certificate path
ssl-certificate-path: "/etc/clickhouse-server/server.crt"
```

1. Open /motadata/motadata/config/db-engine-conf.yml file.
2. Configure host with slave data node IP: 172.16.9.72
3. Configure replication-host with master data node IP: 172.16.8.230

3.3 Nsq-conf.yml

```
motadata@ubuntu:/motadata/motadata/config$ cat nsq-conf.yml
# nsq host
host: 172.16.12.30
#nsq port
port: 4150
#nsq lookupd port
lookupd-port: 4160
#nsq lookup port
lookup-port: 4161
#nsq http port
lookup-http-port: 4151
#nsq message in memory
message-queue-size: 20000
#nsq message timeout (seconds)
message-timeout: 600
#nsq message size(bytes)
max-message-size: 200000000
#metric db insert batch size
metric-db-batch-size: 20000
#nsq consumer helper threads
max-message-helper: 4
#nsq message in memory when cluster enabled
cluster-message-queue-size: 0
#ssl connection
ssl-connection: disabled
#ssl port
ssl-port: 4152
```

1. Open /motadata/motadata/config/nsq-conf.yml file.
2. Configure host with master server's VIP: 172.16.12.30.

4. Master-Slave Data Node

4.1 Configure Master Data Node

Please do required configuration in below mentioned configuration file:
- Cluster-conf.yml file.

4.2 Cluster-conf.yml

```
motadata@ubuntu:/motadata/motadata/config$ cat cluster-conf.yml
installation-type: 2
report-db-host: 172.16.8.230
master-host: 172.16.12.30
current-host: 172.16.8.230
query-backup-duration: 2
```

1. Connect with the master data node IP – 172.16.8.230.
2. Open */motadata/motadata/config/cluster-conf.yml file.*
3. Configure installation type to 2.
4. Configure master-host with master server's VIP: 172.16.12.30
5. Configure current-host with master data node IP: 172.16.8.230
6. Configure report-db-host with master data node IP: 172.16.8.230
7. Save and exit the file.

4.3 Configure Slave Data Node

- Please do the required configuration in the below mentioned configuration file: Cluster-conf.yml file.

4.4 Cluster-conf.yml

```
motadata@ubuntu:/motadata/motadata/config$ cat cluster-conf.yml
installation-type: 2
report-db-host: 172.16.9.72
master-host: 172.16.12.30
current-host: 172.16.9.72
query-backup-duration: 2
```

1. Connect with the slave data node IP – 172.16.9.72.
2. Open /motadata/motadata/config/cluster-conf.yml file.
3. Configure installation type to 2.
4. Configure report-db-host with slave data node IP – 172.16.9.72
5. Configure master-host with master server's VIP: 172.16.12.130
6. Configure current-host to slave server's IP: 172.16.9.72
7. Save and Exit the file.

4.5 Configure Observer Utility

4.5.1 Observer-conf.yml

```
vip-ip: 172.16.12.30
dns-server-type: ''
dns-zone: ''
dns-host: ''
dns-tsig-key-value: ''
dns-password: ''
report-db-host: 172.16.8.230,172.16.9.72
current-observer-host: 172.16.9.61
reconnect-time: '60'
down-target-host: ''
log-retention-days: '2'
config-db-host: 172.16.8.249,172.16.9.76
dns-time-to-live: '3600'
dns-timeout: '30'
ssh-port: '22'
target-host: 172.16.9.76:8080
rpe-target-host: ''
dns-tsig-key-algorithm: ''
dns-username: ''
rpe-observer-enable: disable
dns-switch-over: disable
dns-port: ''
ssh-username: ''
vip-command: sudo ifconfig ens160:2 172.16.12.30 netmask 255.255.255.0 up
dns-server-ip: ''
schedule-duration: '10'
dns-tsig-key-name: ''
current-master-host: 172.16.8.249:8080
observer-ssh-username: motadata
~
~
~
```

For motadata user use the normal Observer-conf.yml file.

1. Configure conf-db-host with Master Server IP and Slave Server IPs: 172.16.8.249, 172.16.9.76.
2. Configure report-db-host with master data node IP and slave data node IP: 172.16.8.230, 172.16.9.72.
3. Configure current-observer-host with observer's server IP: 172.16.9.61.
4. Configure current-master-host with master server IP and port number: 172.16.8.249:8080
5. Configure target-host with slave server IP and port number: 172.16.9.76:8080.
6. Configure Observer-ssh-username : motadata
7. Configure VIP : 172.16.12.30
8. Configure vip-command: sudo ifconfig ens160:2 172.16.12.30 netmask 255.255.255.0 up

For custom and root user make the below changes:

Custom User:

ssh-username:

172.16.8.249|custom_user,172.16.9.76|custom_user,172.16.8.230|custom_user,172.16.9.72|custom_user

observer-ssh-username: custom_user

```
vip-ip: 172.16.12.30
dns-server-type: ''
dns-zone: ''
dns-host: ''
dns-tsig-key-value: ''
dns-password: ''
report-db-host: 172.16.8.230,172.16.9.72
current-observer-host: 172.16.9.61
reconnect-time: '60'
down-target-host: ''
log-retention-days: '2'
config-db-host: 172.16.8.249,172.16.9.76
dns-time-to-live: '3600'
dns-timeout: '30'
ssh-port: '22'
target-host: 172.16.9.76:8080
rpe-target-host: ''
dns-tsig-key-algorithm: ''
dns-username: ''
rpe-observer-enable: disable
dns-switch-over: disable
dns-port: ''
ssh-username: 172.16.8.249|custom_user,172.16.9.76|custom_user,172.16.8.230|custom_user,172.16.9.72|custom_user
vip-command: sudo  ifconfig ens160:2 172.16.12.30 netmask 255.255.255.0 up
dns-server-ip: ''
schedule-duration: '10'
dns-tsig-key-name: ''
current-master-host: 172.16.8.249:8080
observer-ssh-username: custom_user
~
```

Root User:

ssh-username: 172.16.8.249|root,172.16.9.76|root,172.16.8.230|root,172.16.9.72|root

observer-ssh-username: root

```
vip-ip: 172.16.12.30
dns-server-type: ''
dns-zone: ''
dns-host: ''
dns-tsig-key-value: ''
dns-password: ''
report-db-host: 172.16.8.230,172.16.9.72
current-observer-host: 172.16.9.61
reconnect-time: '60'
down-target-host: ''
log-retention-days: '2'
config-db-host: 172.16.8.249,172.16.9.76
dns-time-to-live: '3600'
dns-timeout: '30'
ssh-port: '22'
target-host: 172.16.9.76:8080
rpe-target-host: ''
dns-tsig-key-algorithm: ''
dns-username: ''
rpe-observer-enable: disable
dns-switch-over: disable
dns-port: ''
ssh-username: 172.16.8.249|root,172.16.9.76|root,172.16.8.230|root,172.16.9.72|root
vip-command: sudo  ifconfig ens160:2 172.16.12.30 netmask 255.255.255.0 up
dns-server-ip: ''
schedule-duration: '10'
dns-tsig-key-name: ''
current-master-host: 172.16.8.249:8080
observer-ssh-username: root
~
```

4.5.2 nsq-conf.yml

1. Configure host with master server's VIP: 172.16.12.30

```
motadata@ubuntu:/motadata/motadata/config$ cat nsq-conf.yml
lookupd-port: '4160'
max-message-size: '10000000'
port: '4150'
message-timeout: '100000'
lookup-port: '4161'
host: 172.16.12.30
lookup-http-port: '4151'
message-queue-size: '20000'
```
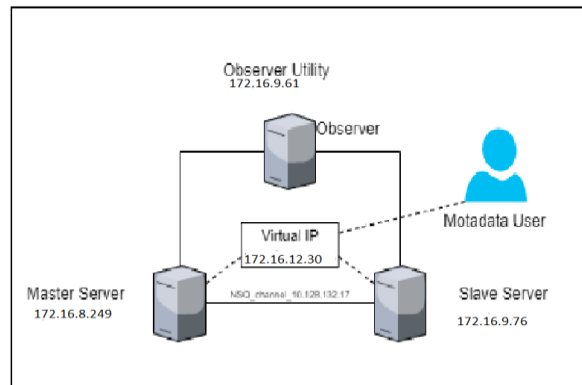
5. Stand Alone Scenario

5.1 HA configuration

5.1.1 IP Address

- Master Server: 172.16.8.249
- Slave Server: 172.16.9.76
- Observer Utility: 172.16.9.61
- Virtual IP: 172.16.12.30

5.1.2 Diagram

5.2 Master Server Configuration

Please do required configuration in below mention configuration file:
- Cluster-conf.yml file.
- db-engine-conf.yml file.
- nsq-conf.yml file.

5.2.1 Cluster-conf.yml file

```
motadata@ubuntu:/motadata/motadata/config$ cat cluster-conf.yml
installation-type: 1
target-hosts: 172.16.9.76
config-db-host: 172.16.8.249
master-host: 172.16.12.30
current-host: 172.16.8.249
query-backup-duration: 2
cluster-migration-strict-bind: false
config-db-batch-size: null
config-db-flush-time: null
motadata-observer-host: 172.16.9.61
report-db-host: 172.16.8.249
```

1. Connect with Master Server – 172.16.8.249.

2. Open /motadata/motadata/config/cluster-conf.yml file.

3. Configure installation type to 1.

4. Configure target hosts with slave server's IP: 172.16.9.76

5. Configure Config-db-host with master server's IP: 172.16.8.249

6. Configure report-db-host with master server's IP: 172.16.8.249

7. Configure Master-host with VIP: 172.16.12.30

8. Configure Current-host with master server's IP: 172.16.8.249

9. Configure motadata-oberver-host with Observer's IP: 172.16.9.61

10. Save and Exit the file.

5.2.2 DB-engine-conf.yml file

```
motadata@ubuntu:/motadata/motadata/config$ cat db-engine-conf.yml
#db engine host
host: localhost

#other replicated clickhouse hosts
replication-host: 172.16.9.76

#db engine port
port: 8123

connection-timeout: 60

query-connection-timeout: 200

#ssl connection parameter can be enabled/disabled
ssl-connection: "disabled"

#default ssl port
ssl-port: 8444

#default clickhouse-ssl certificate path
ssl-certificate-path: "/etc/clickhouse-server/server.crt"
```

1. Open /motadata/motadata/config/db-engine-conf.yml file.

2. Configure host IP: localhost.

3. Configure replication-host with slave server's IP: 172.16.9.76

5.2.3 Nsq-conf.yml file

```
motadata@ubuntu:/motadata/motadata/config$ cat nsq-conf.yml
# nsq host
host: 172.16.12.30
#nsq port
port: 4150
#nsq lookupd port
lookupd-port: 4160
#nsq lookup port
lookup-port: 4161
#nsq http port
lookup-http-port: 4151
#nsq message in memory
message-queue-size: 20000
#nsq message timeout (seconds)
message-timeout: 600
#nsq message size(bytes)
max-message-size: 200000000
#metric db insert batch size
metric-db-batch-size: 20000
#nsq consumer helper threads
max-message-helper: 4
#nsq message in memory when cluster enabled
cluster-message-queue-size: 0
#ssl connection
ssl-connection: disabled
#ssl port
```

1. Open */motadata/motadata/config/nsq-conf.yml* file.

2. Configure host to master server VIP: 172.16.12.30

5.3 Slave Server Configuration

Please do required configuration in below mention configuration files:

- Cluster-conf.yml file.
- db-engine-conf.yml file.
- nsq-conf.yml file.

5.3.1 Cluster-conf.yml file

```
motadata@ubuntu:/motadata/motadata/config$ cat cluster-conf.yml
installation-type: 2
target-hosts: 172.16.8.249
config-db-host: 172.16.9.76
report-db-host: 172.16.9.76
master-host: 172.16.12.30
current-host: 172.16.9.76
query-backup-duration: 2
cluster-migration-strict-bind: false
config-db-batch-size: null
config-db-flush-time: null
motadata-observer-host: 172.16.9.61
```

1. Connect with Slave Server – 172.16.9.76.

2. Open /motadata/motadata/config/cluster-conf.yml file.

3. Configure installation type to 2.

4. Configure target hosts with master server's IP: 172.16.8.249

5. Configure config-db-host with slave server's IP: 172.16.9.76

6. Configure report-db-host with slave server's IP: 172.16.9.76

7. Configure Master-host with VIP: 172.16.12.30

8. Add *Motadata-observer-host* parameter and configure it with observer's IP: 172.16.9.61

9. Configure Current-host with slave server's IP: 172.16.9.76

10. Save and Exit the file.

5.3.2 DB-engine-conf.yml file

```
motadata@ubuntu:/motadata/motadata/config$ cat db-engine-conf.yml
#db engine host
host: localhost

#other replicated clickhouse hosts
replication-host: 172.16.8.249

#db engine port
port: 8123

connection-timeout: 60

query-connection-timeout: 200

#ssl connection parameter can be enabled/disabled
ssl-connection: "disabled"

#default ssl port
ssl-port: 8444

#default clickhouse-ssl certificate path
ssl-certificate-path: "/etc/clickhouse-server/server.crt"
```

1. Open */motadata/motadata/config/db-engine-conf.yml* file.

2. Configure host IP: localhost.

3. Configure replication-host with master server's IP: 172.16.8.249

5.3.3 Nsq-conf.yml file

```
motadata@ubuntu:/motadata/motadata/config$ cat nsq-conf.yml
# nsq host
host: 172.16.12.30
#nsq port
port: 4150
#nsq lookupd port
lookupd-port: 4160
#nsq lookup port
lookup-port: 4161
#nsq http port
lookup-http-port: 4151
#nsq message in memory
message-queue-size: 20000
#nsq message timeout (seconds)
message-timeout: 600
#nsq message size(bytes)
max-message-size: 200000000
#metric db insert batch size
metric-db-batch-size: 20000
#nsq consumer helper threads
max-message-helper: 4
#nsq message in memory when cluster enabled
cluster-message-queue-size: 0
#ssl connection
ssl-connection: disabled
#ssl port
ssl-port: 4152
```

1. Open /motadata/motadata/config/nsq-conf.yml file.

2. Configure host to master server VIP: 172.16.12.30

5.4 Configure Observer Utility

5.4.1 Observer-conf.yml file

```
1  vip-ip: 172.16.12.30
2  report-db-host: 172.16.8.249,172.16.9.76
3  current-observer-host: 172.16.9.61
4  reconnect-time: '60'
5  down-target-host: ''
6  log-retention-days: '2'
7  config-db-host: 172.16.8.249,172.16.9.76
8  ssh-port: '22'
9  target-host: 172.16.8.249:8080
10 rpe-target-host: ''
11 vip-command: sudo ifconfig ens160:2 172.16.12.30 netmask 255.255.255.0 up
12 schedule-duration: '10'
13 current-master-host: 172.16.9.76:8080
14 observer-ssh-username: motadata
```

For motadata user use the normal Observer-conf.yml file.

1. Configure conf-db-host with master and slave server IP's: 172.16.8.249, 172.16.9.76.
2. Configure report-db-host with master and slave server IP's: 172.16.8.249, 172.16.9.76.
3. Configure current-observer-host with observer's IP: 172.16.9.61.
4. Configure current-master-host with master IP with port: 172.16.8.249:8080
5. Configure target-host with slave servers' IP with port: 172.16.9.76:8080.
6. Observer-ssh-username: motadata
7. Configure VIP : 172.16.12.30
8. Configure vip-command: sudo ifconfig ens160:2 172.16.12.30 netmask 255.255.255.0 up

For custom and root user make the below changes:

Custom User:

ssh-username: 172.16.8.249|custom_user,172.16.9.76|custom_user

observer-ssh-username: custom_user

```
vip-ip: 172.16.12.30
dns-server-type: ''
dns-zone: ''
dns-host: ''
dns-tsig-key-value: ''
dns-password: ''
report-db-host: 172.16.8.249,172.16.9.76
current-observer-host: 172.16.9.61
reconnect-time: '60'
down-target-host: ''
log-retention-days: '2'
config-db-host: 172.16.8.249,172.16.9.76
dns-time-to-live: '3600'
dns-timeout: '30'
ssh-port: '22'
target-host: 172.16.8.249:8080
rpe-target-host: ''
dns-tsig-key-algorithm: ''
dns-username: ''
rpe-observer-enable: disable
dns-switch-over: disable
dns-port: ''
ssh-username: 172.16.8.249|custom_user,172.16.9.76|custom_user
vip-command: sudo  ifconfig ens160:2 172.16.12.30 netmask 255.255.255.0 up
dns-server-ip: ''
schedule-duration: '10'
dns-tsig-key-name: ''
current-master-host: 172.16.9.76:8080
observer-ssh-username: custom_user
~
```

Root User:

ssh-username: 172.16.8.249|root,172.16.9.76|root

observer-ssh-username: root

```
vip-ip: 172.16.12.30
dns-server-type: ''
dns-zone: ''
dns-host: ''
dns-tsig-key-value: ''
dns-password: ''
report-db-host: 172.16.8.249,172.16.9.76
current-observer-host: 172.16.9.61
reconnect-time: '60'
down-target-host: ''
log-retention-days: '2'
config-db-host: 172.16.8.249,172.16.9.76
dns-time-to-live: '3600'
dns-timeout: '30'
ssh-port: '22'
target-host: 172.16.8.249:8080
rpe-target-host: ''
dns-tsig-key-algorithm: ''
dns-username: ''
rpe-observer-enable: disable
dns-switch-over: disable
dns-port: ''
ssh-username: 172.16.8.249|root,172.16.9.76|root
vip-command: sudo  ifconfig ens160:2 172.16.12.30 netmask 255.255.255.0 up
dns-server-ip: ''
schedule-duration: '10'
dns-tsig-key-name: ''
current-master-host: 172.16.9.76:8080
observer-ssh-username: root
~
```

5.4.2 nsq-conf.yml file

```
motadata@ubuntu:/motadata/motadata/config$ cat nsq-conf.yml
lookupd-port: '4160'
max-message-size: '10000000'
port: '4150'
message-timeout: '100000'
lookup-port: '4161'
host: 172.16.12.30
lookup-http-port: '4151'
message-queue-size: '20000'
```

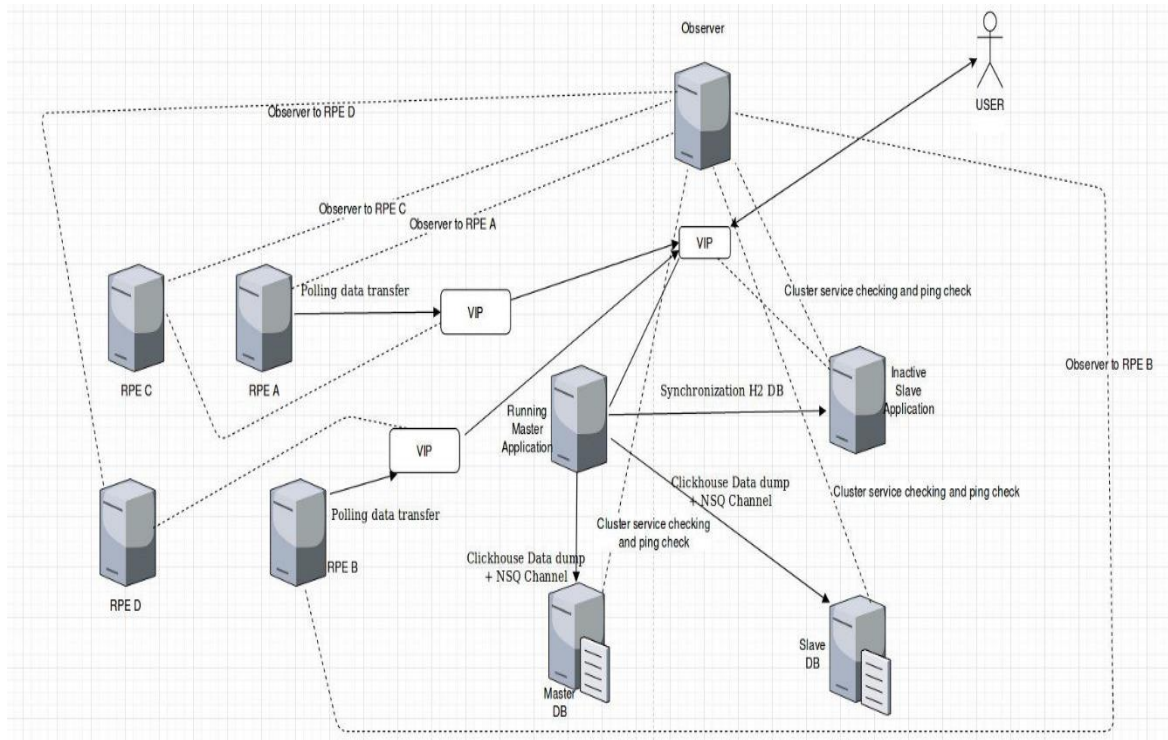1. Configure host to master VIP: 172.16.12.30

6. RPE HA Configuration

6.1 IP Address

- Master server: 172.16.8.249
- Master RPE : 172.16.8.246
- Master Data Node: 172.16.8.230
- Observer IP : 172.16.9.61
- Virtual IP : 172.16.12.30
- Slave Master: 172.16.9.76
- Slave Data Node: 172.16.9.72
- Slave RPE: 172.16.9.60
- VIP RPE : 172.16.12.29

6.2 Diagram

6.3. Active/Passive RPE Configuration

Please do required configuration in below mention configuration file:

• rpe-conf.yml

6.3.3 Active RPE Configuration

```
#https rpe master host
host: 172.16.12.30

#https rpe master server port
port: 443

#rpe client host
rpe-host: 172.16.12.29

#rpe physical ip which need to be configured in case of RPE HA
rpe-physical-address: 172.16.8.246

#reconnection time in seconds used to try for connection after disconnection from master serve
reconnect-time: 30

#disconnection duration in hours, Must be between 1-24,default is 1
disconnect-duration: 1

#certificate file name, used to communicate between rpe master and client
certificate-file-name: keystore.jks

#used to consider rpe-client goes offline. value should be 1-60(minutes), default is 10.
rpe-status-duration: 10

# Constant to display rpe version in the health screen
rpe-version-no: "7.7.500"
~
~
~
~
~
~
```

1. Open /motadata/motadata/config/rpe-conf.yml file.

2. Configure host with master VIP: 172.16.12.30 (Master Application VIP)
3. Configure rpe-host with rpe-vip : 172.16.12.29 (VIP assigned to Active/Passive RPE)
4. Configure rpe-physical-address with active RPE IP : 172.16.8.246(Active RPE server IP)

6.3.4 Passive RPE Configuration

```
#https rpe master host
host: 172.16.12.30

#https rpe master server port
port: 443

#rpe client host
rpe-host: 172.16.12.29

#rpe physical ip which need to be configured in case of RPE HA
rpe-physical-address: 172.16.9.60

#reconnection time in seconds used to try for connection after disconnection from master server
reconnect-time: 30

#disconnection duration in hours, Must be between 1-24,default is 1
disconnect-duration: 1

#certificate file name, used to communicate between rpe master and client
certificate-file-name: keystore.jks

#used to consider rpe-client goes offline. value should be 1-60(minutes), default is 10.
rpe-status-duration: 10

# Constant to display rpe version in the health screen
rpe-version-no: "7.7.500"
```

1. Open /motadata/motadata/config/rpe-conf.yml file.
2. Configure host with master host IP : 172.16.12.30 (Master Application VIP)
3. Configure rpe-host with VIP of RPE: 172.16.12.29 (VIP assigned to Active/Passive RPE)
4. Configure rpe-physical-address of active RPE server IP : 172.16.9.60 (Active RPE server IP)

Note: Do the same configuration for multiple RPE's pair. Need to assign vip to active RPE's manually for the first time, before observer is started.

6.4 Master Slave Server Configuration

Please do required configuration in below mention configuration file:

*   motadata-conf.yml

```
# [0 = standalone, 1 = rpe master, 2 = rpe client]
# introduced new attribute to defined type of installation of motadata, default value is 0.
installation-type: 1

#provide the local motadata host address
motadata-host : localhost

#provide ssh port for local host connection
motadata-ssh-port: 22

availability-reachability: no

#python metric process depends on number of devices default is 2
motadata-python-metric-processes: 2

#python ping process depends on number of devices default is 1
motadata-python-ping-processes: 1

motadata-python-fault-metric-processes: 1
```

1. Open /motadata/motadata/config/motadata-conf.yml file.
2. Configure Installation-type as : 1

6.4.1 RPE-conf.yml file

1. Open /motadata/motadata/config/rpe-conf.yml file.
2. host: 172.16.12.30 (Master Application VIP)
3. rpe-host: 172.16.10.29(VIP of RPE)

Note: Do all the above same configuration in the slave server also.

6.5 Observer Server Configuration

Please do the required configuration in the below mentioned configuration file:
- observer-conf.yml
- rpe-conf.yml

6.5.1 Observer-conf.yml file

For motadata user use the normal Observer-conf.yml file.

1. Open /motadata/motadata/config/observer-conf.yml file.
2. rpe-observer-enable: enable (enable this flag)

For custom and root user make the below changes:

Custom User:

ssh-username:

172.16.8.249|custom_user,172.16.9.76|custom_user,172.16.8.246|custom_user,172.16.9.60|custom_user12.182|custom_user

observer-ssh-username: custom_user

```
vip-ip: 172.16.12.30
dns-server-type: ''
dns-zone: ''
dns-host: ''
dns-tsig-key-value: ''
dns-password: ''
report-db-host: 172.16.8.249,172.16.9.76
current-observer-host: 172.16.9.61
reconnect-time: '60'
down-target-host: ''
log-retention-days: '2'
config-db-host: 172.16.8.249,172.16.9.76
dns-time-to-live: '3600'
dns-timeout: '30'
ssh-port: '22'
target-host: 172.16.8.249:8080
rpe-target-host: ''
dns-tsig-key-algorithm: ''
dns-username: ''
rpe-observer-enable: enable
dns-switch-over: disable
dns-port: ''
ssh-username: 172.16.8.249|custom_user,172.16.9.76|custom_user,172.16.8.246|custom_user,172.16.9.60|custom_user
vip-command: sudo  ifconfig ens160:2 172.16.12.30 netmask 255.255.255.0 up
dns-server-ip: ''
schedule-duration: '10'
dns-tsig-key-name: ''
current-master-host: 172.16.9.76:8080
observer-ssh-username: custom_user
~
~
```

Root user:

ssh-username: 172.16.8.249|root,172.16.9.76|root,172.16.8.246|root,172.16.9.60|root

observer-ssh-username: root

```
vip-ip: 172.16.12.30
dns-server-type: ''
dns-zone: ''
dns-host: ''
dns-tsig-key-value: ''
dns-password: ''
report-db-host: 172.16.8.249,172.16.9.76
current-observer-host: 172.16.9.61
reconnect-time: '60'
down-target-host: ''
log-retention-days: '2'
config-db-host: 172.16.8.249,172.16.9.76
dns-time-to-live: '3600'
dns-timeout: '30'
ssh-port: '22'
target-host: 172.16.8.249:8080
rpe-target-host: ''
dns-tsig-key-algorithm: ''
dns-username: ''
rpe-observer-enable: enable
dns-switch-over: disable
dns-port: ''
ssh-username: 172.16.8.249|root,172.16.9.76|root,172.16.8.246|root,172.16.9.60|root
vip-command: sudo  ifconfig ens160:2 172.16.12.30 netmask 255.255.255.0 up
dns-server-ip: ''
schedule-duration: '10'
dns-tsig-key-name: ''
current-master-host: 172.16.9.76:8080
observer-ssh-username: root
~
```

6.5.2 rpe-conf.yml file

```
dns-server-type: ''
rpe-host-vips: 172.16.12.29
dns-username: ''
dns-zone: ''
max-rpe-ping-check-timeout: '3'
rpe-dns-host: ''
rpe-current-hosts: 172.16.8.246-ens160
rpe-schedule-duration: '10'
dns-tsig-key-value: ''
dns-password: ''
reconnect-time: '30'
dns-port: ''
down-target-host: ''
dns-server-ip: ''
rpe-target-hosts: 172.16.9.60-ens160
dns-tsig-key-name: ''
dns-time-to-live: '3600'
max-rpe-ping-check-retry-count: '3'
dns-timeout: '30'
current-master-host: 172.16.12.30
certificate-file-name: keystore.jks
dns-tsig-key-algorithm: ''
```

1. Open /motadata/motadata/config/rpe-conf.yml file.
2. Configure rpe-host-vips: 172.16.12.29 (VIP of pair of Active/Passive RPE)
3. Configure rpe-target-hosts with passive RPE: 172.16.9.60-ens160 (This field is for passive RPE)
4. Configure max-rpe-ping-check-timeout: 3 (Default value is 3. Value less than 3 will not be counted)
5. Configure rpe-current-hosts with active RPE IP : 172.16.8.246-ens160 (This field is for active RPE)
6. rpe-schedule-duration: 10 (the heartbeat check time, at this interval the observer will go for verifying services on rpe server)
7. reconnect-time: 30 (time for which the observer will wait , before switching over)
8. max-rpe-ping-check-retry-count: 3 (Default value is 3. Value less than 3 will not be counted)
9. current-master-host: 172.16.12.30 (Master Application VIP)

Note: We need to maintain sequence in rpe-conf.yml in observer server.

7. H2 Configuration

Follow below steps in both the server i.e master and slave server to access H2 GUI.

1. Open */motadata/motadata/config/h2-conf.yml* file
2. Set webserver-allow: "yes"
3. Provide current server IP for the web console connection. Ex- webserver-ip: "172.16.9.76"

```
#h2 database host
host: 172.16.9.76

# max database connection
max-config-db-connection: 5

ssl-connection: "disabled"

h2-migration: "enabled"

#To access H2 Web console, possible values are yes & no
webserver-allow: "yes"

#Provide current server IP for the web console connection
webserver-ip: "172.16.9.76"
~
~
~
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~
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~
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~
~
~
~
~
~
```

Note: Follow above steps in both the server's i.e. master and slave server to turn on GUI access of H2.

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