HA proxy Installation and configuration

172.16.118.213 mta1.jalindia.co.in
172.16.118.214 mta2.jalindia.co.in
172.16.118.211 haproxy1.jalindia.co.in
172.16.118.212 haproxy2.jalindia.co.in
172.16.118.232 Virtual IP

Reference Doc -
https://wiki.zimbra.com/wiki/Zimbra_Proxy_HA

Configure Local repo

Add below entry in /etc/hosts
172.16.118.213 mta1.jalindia.co.in
172.16.118.214 mta2.jalindia.co.in
172.16.118.211 haproxy1.jalindia.co.in
172.16.118.212 haproxy2.jalindia.co.in

Install HA proxy package

1. **yum install haproxy**

Install keepalived package

1. **yum install keepalived**

Move existing haproxy file to .bkp

1. **mv /etc/haproxy/haproxy.conf /etc/haproxy/haproxy.conf.bkp**

Create new file

1. **vi /etc/haproxy/haproxy.conf**

Add below configuration
global

```
    log /dev/log local0
    log /dev/log local1 notice
    chroot  /var/lib/haproxy
    stats socket /run/admin.sock mode 660 level admin
    stats timeout 30s
    user haproxy
    group haproxy
    daemon
    tune.ssl.default-dh-param       2048

defaults
    log global
    mode http
    option httplog
    option  dontlognull
    option http-server-close
    option forwardfor
    timeout connect 5000ms
    timeout client 50000ms
    timeout server 50000ms

frontend https-in
    bind *:443 ssl crt /etc/haproxy/certs/bundle.pem
    default_backend nginx-backend

backend nginx-backend
    balance roundrobin
    http-request add-header X-Forwarded-Proto https
    http-request add-header X-Forwarded-Port 443
    option forwardfor
    http-response add-header Cache-Control no-cache
    cookie SERVER_USED insert indirect nocache
    server nginx1 172.16.118.213:443 check ssl verify none
    server nginx2 172.16.118.214:443 check ssl verify none
```

```
frontend smtp
        bind *:25
        mode tcp
        log global
        option tcplog
        default_backend bk_smtp

backend bk_smtp
        mode tcp
        log global
        balance leastconn
        option tcplog
        server mta1 172.16.118.213:25 check port 25
        server mta2 172.16.118.214:25 check port 25

frontend submission
        bind *:587
        mode tcp
        default_backend bk_submission

backend bk_submission
        mode tcp
        server submit1 172.16.118.213:587 check port 587
        server submit2 172.16.118.214:587 check port 587

frontend imap
        bind *:143
        mode tcp
        default_backend bk_imap

backend bk_imap
        mode tcp
        balance leastconn
        server imap1 172.16.118.213:143 check port 143
        server imap2 172.16.118.214:143 check port 143
```

```
frontend pop3
        bind *:110
        mode tcp
        default_backend bk_pop3s

backend bk_pop3s
        mode tcp
        balance leastconn
        stick store-request src
        stick-table type ip size 200k expire 30m
        server pop3s1 172.16.118.213:995 check port 995
        server pop3s2 172.16.118.214:995 check port 995
```

mv existing keepalived configuration file to .bkp

1. **mv /etc/keepalived/keepalived.conf /etc/keepalived/keepalived.conf.bkp**

Create new conf file

1. **vi /etc/keepalived/keepalived.conf**

Add below configuration

```
[root@ha2 ~]# cat /etc/keepalived/keepalived.conf
global_defs {
        router_id ha2
}

vrrp_script haproxy_healthcheck {
    script "/usr/bin/pgrep haproxy"
    interval 2
    weight -2
    fall 2
    rise 2
}

vrrp_instance VI_1 {
    state MASTER
    interface ens33
    virtual_router_id 51
    priority 101
    advert_int 1
    authentication {
        auth_type PASS
        auth_pass redhat
 }
 virtual_ipaddress {
    10.1.100.7
 }
 track_script {
     haproxy_healthcheck
 }
}

[root@ha2 ~]#
```

Change 10.1.100.7 to our virtual IP 172.16.118.232

Generate certificates via openssl command

and change ssl file path in haproxy configuration file

Restart service
systemctl restart keepalived haproxy
systemctl status keepalived haproxy

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