

在LVS-NAT模型中，RS的网关要指向Director的DIP，同时Director也需要有一个对外的VIP。利用keepalived实现LVS-NAT模型需要定义两个VRRP实例，即当有一台Director发生故障时，对外的VIP和对内的DIP可以同步的流动到backup身份的Director。定义一个VRRP组，在组内的虚拟实例VI_1和VI_2属于同一个组，当一个vrrp_instance实例发生故障并IP流动时，另一个vrrp_instance的IP也发生流动。

说明：RS的网关要指向DIP

Director1:192.168.1.150;;

Director2:192.168.1.151;

VIP:192.168.1.149;

DIP:192.168.2.1;

RS1:192.168.2.2

RS2:192.168.2.3

负载均衡器配置

Director1配置

```
1  ! Configuration File for keepalived
2  global_defs {
3      notification_email {
4          acassen@firewall.loc
5          failover@firewall.loc
6          sysadmin@firewall.loc
7      }
8      notification_email_from
        Alexandre.Cassen@firewall.loc
9      smtp_server 192.168.200.1
10     smtp_connect_timeout 30
11     router_id LVS_DEVEL
12 }
13 vrrp_script monitor {
```

```
14     script "[[ -f /etc/keepalived/down ]] && exit 1  
    || exit 0"  
15     interval 1  
16     weight -20  
17 }  
18 vrrp_sync_group VG_1 {  
19     group {  
20         VI_1  
21         VI_2  
22     }  
23 }  
24 vrrp_instance VI_1 {  
25     state MASTER  
26     interface eno16777736  
27     virtual_router_id 51  
28     priority 100  
29     advert_int 1  
30     authentication {  
31         auth_type PASS  
32         auth_pass 1111  
33     }  
34     virtual_ipaddress {  
35         192.168.1.149/24  
36     }  
37     track_script {  
38         monitor  
39     }  
40 }  
41 vrrp_instance VI_2 {  
42     state MASTER  
43     interface eno33554984  
44     virtual_router_id 52  
45     priority 100  
46     advert_int 1  
47     authentication {  
48         auth_type PASS  
49         auth_pass 1112  
50     }
```

```
51     virtual_ipaddress {
52         192.168.2.1/24 brd 192.168.2.255
53     }
54     track_script {
55         monitor
56     }
57 }
58 virtual_server 192.168.1.149 80 {
59     delay_loop 6
60     lb_algo rr
61     lb_kind NAT
62     protocol TCP
63
64     real_server 192.168.2.2 80 {
65         weight 1
66         HTTP_GET {
67             url {
68                 path /
69                 status_code 200
70             }
71             connect_timeout 3
72             nb_get_retry 3
73             delay_before_retry 3
74         }
75     }
76     real_server 192.168.2.3 80 {
77         weight 1
78         HTTP_GET {
79             url {
80                 path /
81                 status_code 200
82             }
83             connect_timeout 3
84             nb_get_retry 3
85             delay_before_retry 3
86         }
87     }
88 }
```

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8      notification_email_from
Alexandre.Cassen@firewall.loc
9      smtp_server 192.168.200.1
10     smtp_connect_timeout 30
11     router_id LVS_DEVEL
12 }
13 vrrp_script monitor {
14     script "[[ -f /etc/keepalived/down ]] && exit 1
|| exit 0"
15     interval 1
16     weight -20
17 }
18 vrrp_sync_group VG_1 {
19     group {
20         VI_1
21         VI_2
22     }
23 }
24 vrrp_instance VI_1 {
25     state BACKUP
26     interface eno16777736
27     virtual_router_id 51
28     priority 90
29     advert_int 1
30     authentication {
31         auth_type PASS
32         auth_pass 1111
33     }
34     virtual_ipaddress {
```

```
35     192.168.1.149/24
36 }
37 track_script {
38     monitor
39 }
40 }
41 vrrp_instance VI_2 {
42     state BACKUP
43     interface eno33554984
44     virtual_router_id 52
45     priority 90
46     advert_int 1
47     authentication {
48         auth_type PASS
49         auth_pass 1112
50     }
51     virtual_ipaddress {
52         192.168.2.1/24 brd 192.168.2.255
53     }
54     track_script {
55         monitor
56     }
57 }
58 virtual_server 192.168.1.149 80 {
59     delay_loop 6
60     lb_algo rr
61     lb_kind NAT
62     protocol TCP
63     real_server 192.168.2.2 80 {
64         weight 1
65         HTTP_GET {
66             url {
67                 path /
68                 status_code 200
69             }
70             connect_timeout 3
71             nb_get_retry 3
72             delay_before_retry 3
```

```
73     }
74 }
75 real_server 192.168.2.3 80 {
76     weight 1
77     HTTP_GET {
78         url {
79             path /
80             status_code 200
81         }
82         connect_timeout 3
83         nb_get_retry 3
84         delay_before_retry 3
85     }
86 }
87 }
```