

## Policy-based routing internet

*Very Big Problem to our interface NAT BGP multihoming not working !!*

```
/ip firewall mangle
```

```
add action=mark-routing chain=prerouting disabled=yes new-routing-mark=to-ks  
passthrough=yes src-address=103.152.237.0/24
```

```
add action=mark-routing chain=prerouting disabled=yes new-routing-mark=to-ks  
passthrough=yes src-address=10.254.128.0/17
```

```
/ip firewall mangle
```

```
add action=mark-routing chain=prerouting disabled=yes new-routing-mark=to-ks  
passthrough=yes src-address=103.156.66.0/24
```

```
add action=mark-routing chain=prerouting disabled=yes new-routing-mark=to-ks  
passthrough=yes src-address=103.156.66.0/24
```

```
/ip route
```

```
add bgp-as-path=59362 bgp-local-pref=250 bgp-origin=igp check-gateway=ping disabled=yes  
distance=1 gateway=45.251.228.145 routing-mark=to-ks scope=40
```

```
/ip firewall nat
```

```
add action=src-nat chain=srcnat comment="ROUTER CCR 1036 4S" disabled=yes  
out-interface=Link3-INT src-address=10.254.128.0/17 to-addresses=103.152.237.80/28
```

```
-----  
  
/ip address
```

```
add address=172.16.0.1/16 broadcast=172.16.255.255 comment="" disabled=no  
interface=Local network=172.16.0.0
```

```
add address=192.168.1.2/24 broadcast=192.168.1.255 comment="" disabled=no  
interface=WAN1 network=192.168.1.0
```

```
add address=192.168.2.2/24 broadcast=192.168.2.255 comment="" disabled=no  
interface=WAN2 network=192.168.2.0
```

```
/ip firewall mangle
```

```
add action=mark-connection chain=input comment="" disabled=no in-interface=WAN1  
new-connection-mark=WAN1_conn passthrough=yes
```

```
add action=mark-connection chain=input comment="" disabled=no in-interface=WAN2  
new-connection-mark=WAN2_conn passthrough=yes
```

```
add action=mark-routing chain=output comment="" connection-mark=WAN1_conn disabled=no
new-routing-mark=to_WAN1 passthrough=yes
add action=mark-routing chain=output comment="" connection-mark=WAN2_conn disabled=no
new-routing-mark=to_WAN2 passthrough=yes
```

```
add action=accept chain=prerouting comment="" disabled=no dst-address=114.31.14.184/30
add action=accept chain=prerouting comment="" disabled=no dst-address=202.126.123.168/29
```

```
add action=mark-connection chain=prerouting comment="" disabled=no dst-address-type=!local
new-connection-mark=WAN1_conn passthrough=yes
per-connection-classifier=both-addresses-and-ports:2/0 src-address=192.168.0.0/22
```

```
add action=mark-connection chain=prerouting comment="" disabled=no dst-address-type=!local
new-connection-mark=WAN2_conn passthrough=yes
per-connection-classifier=both-addresses-and-ports:2/1 src-address=192.168.0.0/22
```

```
add action=mark-routing chain=prerouting comment="" connection-mark=WAN1_conn
disabled=no new-routing-mark=to_WAN1 passthrough=yes
add action=mark-routing chain=prerouting comment="" connection-mark=WAN2_conn
disabled=no new-routing-mark=to_WAN2 passthrough=yes
```

```
/ip firewall nat
```

```
add action=masquerade chain=srcnat comment="" disabled=no out-interface=WAN1
src-address=192.168.0.0/22
add action=masquerade chain=srcnat comment="" disabled=no out-interface=WAN2
src-address=192.168.0.0/22
```

```
/ip route
```

```
add check-gateway=ping disabled=no distance=1 dst-address=0.0.0.0/0 gateway=114.31.14.185
routing-mark=to_WAN1 scope=30 target-scope=10
add check-gateway=ping disabled=no distance=2 dst-address=0.0.0.0/0
gateway=202.126.123.169 routing-mark=to_WAN2 scope=30 target-scope=10
add check-gateway=ping disabled=no distance=1 dst-address=0.0.0.0/0 gateway=114.31.14.185
scope=30 target-scope=10
add check-gateway=ping comment="" disabled=no distance=2 dst-address=0.0.0.0/0
gateway=202.126.123.169 scope=30 target-scope=10
```

<https://aacable.wordpress.com/?s=load+balance>

```
/ip firewall mangle
add action=mark-connection chain=input in-interface=WAN1
new-connection-mark=WAN1_conn
add action=mark-connection chain=input in-interface=WAN2
new-connection-mark=WAN2_conn
add action=mark-routing chain=output connection-mark=WAN1_conn
new-routing-mark=to_WAN1
add action=mark-routing chain=output connection-mark=WAN2_conn
new-routing-mark=to_WAN2
add chain=prerouting dst-address=180.234.213.120/30
add chain=prerouting dst-address=202.86.217.148/30
add action=mark-connection chain=prerouting dst-address-type=!local
new-connection-mark=WAN1_conn per-connection-classifier=both-addresses-and-ports:2/0
add action=mark-connection chain=prerouting dst-address-type=!local
new-connection-mark=WAN2_conn per-connection-classifier=both-addresses-and-ports:2/1
add action=mark-routing chain=prerouting connection-mark=WAN1_conn
new-routing-mark=to_WAN1
add action=mark-routing chain=prerouting connection-mark=WAN2_conn
new-routing-mark=to_WAN2
```

```
/ip route
add check-gateway=ping distance=1 gateway=180.234.213.121 routing-mark=to_WAN1
add check-gateway=ping distance=2 gateway=202.86.217.149 routing-mark=to_WAN2
add check-gateway=ping distance=1 gateway=180.234.213.121
add check-gateway=ping distance=2 gateway=202.86.217.149
```

```
/ip firewall nat
add action=masquerade chain=srcnat out-interface=WAN1 src-address=192.168.5.0/24
add action=masquerade chain=srcnat out-interface=WAN2 src-address=192.168.5.0/24
```

=====

Regarding 2 wan pppoe LB, sample working config is attached. Hope it may help you.

Code: [Select all](#)

```
### make sure to change the src-address list to match you or use
address-list feature, 172.16.0.0/16 is our pppoe client ip pool
/ip firewall mangle
  add action=accept chain=prerouting disabled=no in-interface=pppoe-out1
add action=accept chain=prerouting disabled=no in-interface=pppoe-out2

# Mark connection
add action=mark-connection chain=prerouting disabled=no
dst-address-type=!local new-connection-mark=wan1_conn passthrough=yes
per-connection-classifier=both-addresses-and-ports:2/0
src-address=172.16.0.0/16
add action=mark-connection chain=prerouting disabled=no
dst-address-type=!local new-connection-mark=wan2_conn passthrough=yes
per-connection-classifier=both-addresses-and-ports:2/1
src-address=172.16.0.0/16

# Routing marks
add action=mark-routing chain=prerouting connection-mark=wan1_conn
disabled=no new-routing-mark=to_wan1 passthrough=yes
src-address=172.16.0.0/16
add action=mark-routing chain=prerouting connection-mark=wan2_conn
disabled=no new-routing-mark=to_wan2 passthrough=yes
src-address=172.16.0.0/16

### NATTING both WAN connection for PPPoE IP Pool users only
/ip firewall nat
add action=masquerade chain=srcnat disabled=no out-interface=pppoe-out1
src-address=172.16.0.0/16
add action=masquerade chain=srcnat disabled=no out-interface=pppoe-out2
src-address=172.16.0.0/16

### Setting Default Routes for MARKED packets (zaib)
/ip route
add check-gateway=ping disabled=no distance=1 dst-address=0.0.0.0/0
gateway=pppoe-out1 routing-mark=to_wan1 scope=30 target-scope=10
add check-gateway=ping disabled=no distance=1 dst-address=0.0.0.0/0
```

```
gateway=pppoe-out2 routing-mark=to_wan2 scope=30 target-scope=10
# Setting default routes for non marked packets if any
add check-gateway=ping disabled=no distance=1 dst-address=0.0.0.0/0
gateway=pppoe-out1 scope=30 target-scope=10
add check-gateway=ping disabled=no distance=2 dst-address=0.0.0.0/0
gateway=pppoe-out2 scope=30 target-scope=10
```