Policy based routing linux:

Create table:

Edit /etc/iproute2/rt_tables Insert table ID and table name e.g.

201 input202 output

Create a Rule:

ip rule add from <source address> lookup e.g.

ip rule add from 1.1.1.1 iif eth1 lookup input ip rule add from 2.2.2.2 iif eth2 lookup output

These rules are temporary. In order to make it permanent, add the rule in the /etc/network/interface file as follows

post-up ip rule add from 1.1.1.1 iif eno3 lookup input post-up ip rule add from 2.2.2.2 iif eno4 lookup output

Check the rules:

ip rule list

Create action for the rule or add routes in respective tables:

Send it to openstack bridge interface ip route add default via (virtual router1 ip) table input ip route add default via (virtual router2 ip) table output

These routes are temporary. In order to make it permanent, add the routes in the /etc/network/interface file as follows

post-up ip route add default dev br-ex table input post-up ip route add default dev br-ex table output

Check actions associated with the tables:

ip route show table input ip route show table output

Dashmeet topology:

ip route show table input: default via 172.24.4.4 dev br-ex ip route show table output: default via 172.24.4.29 dev br-ex

sudo ip route add default via 172.24.4.4 table input sudo ip route add default via 172.24.4.29 table output

*************	Note	***************

The rules are designed to make the forward traffic enter the service chain deployed in openstack via virtual router1 and make the reverse traffic enter the service chain via virtual router2.

This is done to ensure that the forward traffic is exactly opposite to that of the reverse traffic.