Configuring Automatic Failover

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Description

After installing a new backup ISP for one of our branch offices, automatic failover needs to be configured on the edge router so that there is seamless redundancy in case of a failure of ISP 1. This will be done by configuring IP SLA and changing the static default routes on the edge router.

Roles and Responsibilities

- Don Chen: perform the necessary configurations. Test the configurations and automatic failover. Perform the backout plan if necessary.

Prerequisites

- Must be done during scheduled outage or out of usual business hours.
- Have the logins to the edge router.

Step-by-Step Instructions

1. Remote into the edge router and login.
2. Enter privileged exec mode.
3. Type "write mem". Wait for it finish saving.
4. Type "show ip int br". Make note of the interface with the ip address 76.113.49.2. This interface connects to ISP 1.
5. Within the command below, replace <ISP 1 interface> with the interface that we found in the previous step. Then copy and past that into the CLI.

conf t
ip sla 1

```
icmp-echo 8.8.8.8 source-int <ISP 1 interface>
timeout 2000
threshold 1000
frequency 5
exit
ip sla schedule 1 start-time now life forever
track 1 ip sla 1 reachability
no ip route 0.0.0.0 0.0.0.0 76.113.49.1
ip route 0.0.0.0 0.0.0.0 76.113.49.1 track 1
ip route 0.0.0.0 0.0.0.0 91.33.56.1 10
end
write mem
```

Post Procedure Verification

1. Use "show ip route" to verify that the destination of the default route is 76.113.49.1
2. Ping 8.8.8.8 to verify the reachability of the internet.
3. Use "show ip int br" to determine the interface connected to ISP 1.
4. Shutdown the interface connected to ISP 1.
5. Use "show ip route" to verify that the destination of the default route is 91.33.56.1
6. Ping 8.8.8.8 to verify the reachability of the internet.
7. Turn back on the interface connected to ISP 1.
8. Type "write mem" while in privileged exec mode.

Backout Plan

1. Remote into the edge router.
2. Enter privileged exec mode.
3. Copy and paste these commands into the CLI:

```
Conf t
ip route 0.0.0.0 0.0.0.0 76.113.49.1
no ip route 0.0.0.0 0.0.0.0 76.113.49.1 track 1
no ip route 0.0.0.0 0.0.0.0 91.33.56.1 10
no ip sla schedule 1 start-time now life forever
end
write mem
```

4. Ping 8.8.8.8 to verify reachability of the internet.