

1. Objective of the Lab

The objective of this lab is to configure route failover on FortiGate. The primary goal is to ensure that traffic is routed through the primary internet link (port1) and switches to the backup link (port2) if the primary fails.

2. Topology

The topology involves a Local-FortiGate device with two interfaces connected to the internet:

- port1: Primary connection
- port2: Backup connection

3. Components Used

- FortiGate device with FortiOS 7.2
- Two internet connections
- A local client for traffic generation and testing

4. Steps of the Lab

- 1. Verify the Existing Routing Configuration:**
 1. Access the FortiGate GUI and navigate to `Network > Static Routes`.
 2. Check the current static routes and note the Distance and Priority values.
- 2. Configure a Second Default Route:**
 1. Add a new default route via port2 with an Administrative Distance of 20 and Priority of 5.
- 3. Modify Firewall Policies:**
 1. Enable logging on the `Full_Access` policy.
 2. Create a new policy named `Backup_Access` for traffic from port3 to port2 with NAT enabled.
- 4. View the Routing Table:**
 1. Verify that the second route is listed in the routing table database as inactive.
- 5. Configure Link Health Monitors:**
 1. Set up health monitors for both port1 and port2 using `ping` to verify link status.
- 6. Test the Route Failover:**
 1. Generate traffic and confirm it's using port1.
 2. Force failover by modifying the port1 monitor to ping an invalid IP.

7. Restore the Routing Table:

1. Revert the port1 monitor to a valid IP to restore it as the primary route.

5. Testing the Lab

- Open browser tabs on the local client and access multiple websites.
- Check the Log & Report > Forward Traffic section to confirm traffic routes through port1 initially.
- Force failover and check if traffic reroutes through port2.

6. The Results

- Before failover, traffic should route through port1.
- After failover is triggered, traffic will reroute through port2.
- When the primary route is restored, traffic returns to port1.

7. Configuration Done on the Devices

1-Adding the Second Default Route:

```
config router static
edit 2
set gateway 10.200.2.254
set device port2
set distance 20
set priority 5
next
end
```

2-Setting Up Link Health Monitors:

```
config system link-monitor
edit "port1-monitor"
set srcintf "port1"
set server "4.2.2.1"
set protocol ping
next
edit "port2-monitor"
set srcintf "port2"
set server "4.2.2.2"
set protocol ping
next
end
```

3-Forcing the Failover:

```
config system link-monitor
edit "port1-monitor"
  set server "10.200.1.13"
next
end
```