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Introduction

This is an generic example of how to configure NAT when there are multiple ISP's for internet connectivity and we want proper Failover i.e when Primary ISP goes down then Secondary takes over with correct NAT happening using the secondary ISP's public ip address

Design



Configuration

```
interface FastEthernet0/0
```

```
Description Primary link ISP1
```

```
ip address 12.x.x.x 255.255.255.240
```

```
ip nat outside
```

```
interface FastEthernet1/0
```

```
Description Secondary link ISP2
```

```
ip address 76.x.x.x. 255.255.255.0
```

```
ip nat outside
```

```
interface FastEthernet1/1
```

```
Description Inside LAN segment
```

```
ip address 172.168.60.1 255.255.255.0
```

NAT_failover_with_DUAL_ISP_on_a_router_Configuration_Example

```
ip nat inside
```

```
access-list 100 permit ip 172.168.60.0 0.0.0.255 any
```

```
route-map isp1 permit 10
```

```
match ip address 100
```

```
match interface FastEthernet0/0
```

```
route-map isp2 permit 10
```

```
match ip address 100
```

```
match interface FastEthernet1/0
```

```
ip nat inside source route-map isp1 interface FastEthernet0/0 overload
```

```
ip nat inside source route-map isp2 interface FastEthernet1/0 overload
```

```
ip route 0.0.0.0 0.0.0.0 12.y.y.y -----> Primary Default route pointing towards Next hop ip of ISP1
```

```
ip route 0.0.0.0 0.0.0.0 76.y.y.y 10 -----> Backup Default route with higher AD (10) pointing towards Next hop ip of ISP2
```

- ♦ the above example shows how we can perform Failover for PAT (Port Address Translation) for the traffic going out to Internet. By using route-maps and "match interface" option, we can achieve failover for Static NAT translation as well which is generally configured when services are hosted out to the internet like webserver or exchange server hosted inside accessible from Internet

```
route-map isp1static permit 10
```

```
match interface FastEthernet0/0
```

```
route-map isp2static permit 10
```

```
match interface FastEthernet1/0
```

```
ip nat inside source static 172.168.60.2 12.x.x.x route-map isp1static
```

```
ip nat inside source static 172.168.60.2 76.x.x.x route-map isp2static
```

Related show Commands

sh run | inc ip nat; sh route-map

Related Information

http://www.cisco.com/en/US/tech/tk648/tk361/technologies_configuration_example09186a0080950834.shtml