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## Introduction

This document describes how to configure the tracking of static route using IP Service Level Agreement (SLA).

Contributed Gaurav Mahajan, Cisco TAC Engineer.

## Prerequisites

### Requirements

Cisco recommends that you have knowledge of static routing.

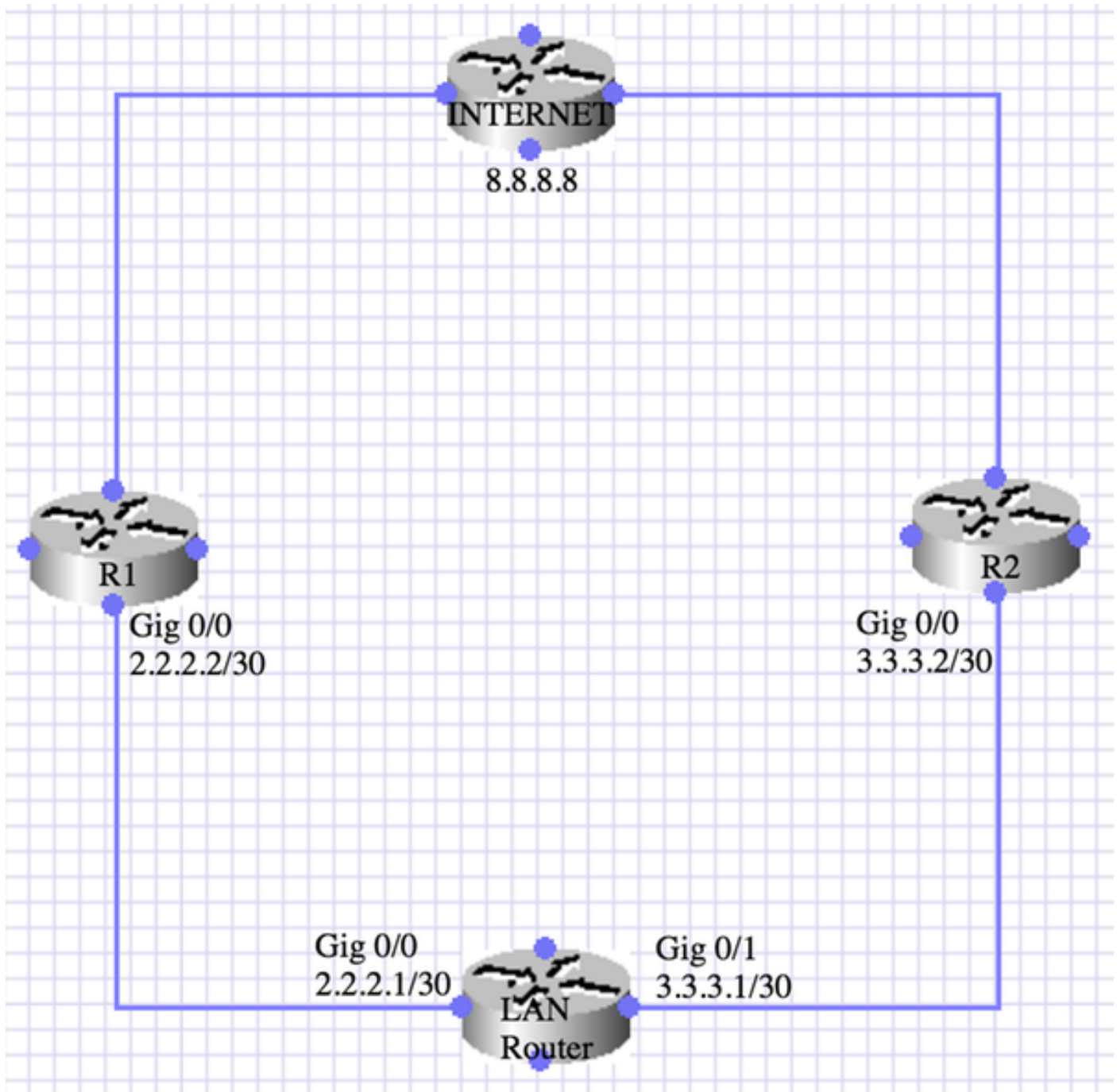
### Components Used

The information in this document is based on Cisco IOS<sup>®</sup> Software Release 15.2(4)M4

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, make sure that you understand the potential impact of any command.

## Configure

### Network Diagram



## Configurations

### LAN Router

When track 1 is up traffic to internet goes from Primary Router R1.

```
LAN#show ip route
```

```
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
       + - replicated route, % - next hop override
```

```
Gateway of last resort is 2.2.2.2 to network 0.0.0.0
```

```

S* 0.0.0.0/0 [1/0] via 2.2.2.2
2.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C    2.2.2.0/30 is directly connected, GigabitEthernet0/0
L    2.2.2.1/32 is directly connected, GigabitEthernet0/0
3.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C    3.3.3.0/30 is directly connected, GigabitEthernet0/1
L    3.3.3.1/32 is directly connected, GigabitEthernet0/1
20.0.0.0/30 is subnetted, 1 subnets
S    20.20.20.0 [1/0] via 2.2.2.2LAN#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
ia - IS-IS inter area, * - candidate default, U - per-user static route
o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
+ - replicated route, % - next hop override

```

Gateway of last resort is 2.2.2.2 to network 0.0.0.0

```

S* 0.0.0.0/0 [1/0] via 2.2.2.2
2.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C    2.2.2.0/30 is directly connected, GigabitEthernet0/0
L    2.2.2.1/32 is directly connected, GigabitEthernet0/0
3.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C    3.3.3.0/30 is directly connected, GigabitEthernet0/1
L    3.3.3.1/32 is directly connected, GigabitEthernet0/1
20.0.0.0/30 is subnetted, 1 subnets
S    20.20.20.0 [1/0] via 2.2.2.2LAN#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
ia - IS-IS inter area, * - candidate default, U - per-user static route
o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
+ - replicated route, % - next hop override

```

Gateway of last resort is 2.2.2.2 to network 0.0.0.0

```

S* 0.0.0.0/0 [1/0] via 2.2.2.2
2.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C    2.2.2.0/30 is directly connected, GigabitEthernet0/0
L    2.2.2.1/32 is directly connected, GigabitEthernet0/0
3.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C    3.3.3.0/30 is directly connected, GigabitEthernet0/1
L    3.3.3.1/32 is directly connected, GigabitEthernet0/1
20.0.0.0/30 is subnetted, 1 subnets
S    20.20.20.0 [1/0] via 2.2.2.2

```

## Verify

Use this section in order to confirm that your configuration works properly.

Ping and traceroute goes to internet from Primary router

```

LAN#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2

```

ia - IS-IS inter area, \* - candidate default, U - per-user static route  
o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP  
+ - replicated route, % - next hop override

Gateway of last resort is 2.2.2.2 to network 0.0.0.0

**S\* 0.0.0.0/0 [1/0] via 2.2.2.2**

2.0.0.0/8 is variably subnetted, 2 subnets, 2 masks  
C 2.2.2.0/30 is directly connected, GigabitEthernet0/0  
L 2.2.2.1/32 is directly connected, GigabitEthernet0/0  
3.0.0.0/8 is variably subnetted, 2 subnets, 2 masks  
C 3.3.3.0/30 is directly connected, GigabitEthernet0/1  
L 3.3.3.1/32 is directly connected, GigabitEthernet0/1  
20.0.0.0/30 is subnetted, 1 subnets  
S 20.20.20.0 [1/0] via 2.2.2.2

**In case of any Issue in primary link will bring down the track 1.**

LAN#show ip route

Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP  
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area  
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2  
E1 - OSPF external type 1, E2 - OSPF external type 2  
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2  
ia - IS-IS inter area, \* - candidate default, U - per-user static route  
o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP  
+ - replicated route, % - next hop override

Gateway of last resort is 2.2.2.2 to network 0.0.0.0

**S\* 0.0.0.0/0 [1/0] via 2.2.2.2**

2.0.0.0/8 is variably subnetted, 2 subnets, 2 masks  
C 2.2.2.0/30 is directly connected, GigabitEthernet0/0  
L 2.2.2.1/32 is directly connected, GigabitEthernet0/0  
3.0.0.0/8 is variably subnetted, 2 subnets, 2 masks  
C 3.3.3.0/30 is directly connected, GigabitEthernet0/1  
L 3.3.3.1/32 is directly connected, GigabitEthernet0/1  
20.0.0.0/30 is subnetted, 1 subnets  
S 20.20.20.0 [1/0] via 2.2.2.2

**When track 1 goes down traffic goes from secondary router R2**

LAN#show ip route

Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP  
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area  
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2  
E1 - OSPF external type 1, E2 - OSPF external type 2  
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2  
ia - IS-IS inter area, \* - candidate default, U - per-user static route  
o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP  
+ - replicated route, % - next hop override

Gateway of last resort is 3.3.3.2 to network 0.0.0.0

**S\* 0.0.0.0/0 [10/0] via 3.3.3.2**

2.0.0.0/8 is variably subnetted, 2 subnets, 2 masks  
C 2.2.2.0/30 is directly connected, GigabitEthernet0/0  
L 2.2.2.1/32 is directly connected, GigabitEthernet0/0  
3.0.0.0/8 is variably subnetted, 2 subnets, 2 masks  
C 3.3.3.0/30 is directly connected, GigabitEthernet0/1  
L 3.3.3.1/32 is directly connected, GigabitEthernet0/1  
20.0.0.0/30 is subnetted, 1 subnets  
S 20.20.20.0 [1/0] via 2.2.2.2

LAN#show ip route  
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP  
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area

N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2  
E1 - OSPF external type 1, E2 - OSPF external type 2  
i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2  
ia - IS-IS inter area, \* - candidate default, U - per-user static route  
o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP  
+ - replicated route, % - next hop override

Gateway of last resort is 3.3.3.2 to network 0.0.0.0

**S\* 0.0.0.0/0 [10/0] via 3.3.3.2**

2.0.0.0/8 is variably subnetted, 2 subnets, 2 masks  
C 2.2.2.0/30 is directly connected, GigabitEthernet0/0  
L 2.2.2.1/32 is directly connected, GigabitEthernet0/0  
3.0.0.0/8 is variably subnetted, 2 subnets, 2 masks  
C 3.3.3.0/30 is directly connected, GigabitEthernet0/1  
L 3.3.3.1/32 is directly connected, GigabitEthernet0/1  
20.0.0.0/30 is subnetted, 1 subnets  
S 20.20.20.0 [1/0] via 2.2.2.2LAN#show ip route

Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP

D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area

N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2

E1 - OSPF external type 1, E2 - OSPF external type 2

i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2

ia - IS-IS inter area, \* - candidate default, U - per-user static route

o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP

+ - replicated route, % - next hop override

Gateway of last resort is 3.3.3.2 to network 0.0.0.0

**S\* 0.0.0.0/0 [10/0] via 3.3.3.2**

2.0.0.0/8 is variably subnetted, 2 subnets, 2 masks  
C 2.2.2.0/30 is directly connected, GigabitEthernet0/0  
L 2.2.2.1/32 is directly connected, GigabitEthernet0/0  
3.0.0.0/8 is variably subnetted, 2 subnets, 2 masks  
C 3.3.3.0/30 is directly connected, GigabitEthernet0/1  
L 3.3.3.1/32 is directly connected, GigabitEthernet0/1  
20.0.0.0/30 is subnetted, 1 subnets  
S 20.20.20.0 [1/0] via 2.2.2.2

## Troubleshoot

There is currently no specific troubleshooting information available for this configuration.