

Nested IP SLA config

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This is a Cisco IOS IP SLA config which allows you to monitor whether your internet connection is alive or not. It is supposed to be configured on your internet edge router if you have primary and backup connection to the internet. It also suits when you have two edge routers and would like to dynamically advertise internet availability to the internal corporate LAN through OSPF (tweak OSPF metric on the second box accordingly).

IP SLA used with nested, hierarchical configuration with multiple checks. Primary 0/0 static tied to a high level 'track 1' and disappears from routing table when 2 out of 5 targets are down and installed back when 3 out of 5 targets are up.

10.x.x.x considered as various internet resources (targets) with 100% availability. I would highly recommend you to point those IPs with static routes (marked 'SLA' below) to prevent SLA checks execution through unwanted channel/ISP.

192.168.x.1 as ISP gateways.

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```
track 1 list threshold percentage
object 11
object 12
object 13
object 14
object 15
threshold percentage down 40 up 60
!
track 11 ip sla 11 reachability
delay down 30 up 30
!
track 12 ip sla 12 reachability
delay down 30 up 30
!
track 13 ip sla 13 reachability
delay down 30 up 30
!
track 14 ip sla 14 reachability
delay down 30 up 30
!
track 15 ip sla 15 reachability
delay down 30 up 30
!
!
ip sla 11
icmp-echo 10.1.1.1 source-interface GigabitEthernet0/0
request-data-size 1000
threshold 200
timeout 300
frequency 6
!
ip sla 12
```

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```
icmp-echo 10.2.2.2 source-interface GigabitEthernet0/0
request-data-size 1000
threshold 200
timeout 300
frequency 6
!
ip sla 13
icmp-echo 10.3.3.3 source-interface GigabitEthernet0/0
request-data-size 1000
threshold 200
timeout 300
frequency 6
!
ip sla 14
icmp-echo 10.4.4.4 source-interface GigabitEthernet0/0
request-data-size 1000
threshold 200
timeout 300
frequency 6
!
ip sla 15
icmp-echo 10.5.5.5 source-interface GigabitEthernet0/0
request-data-size 1000
threshold 200
timeout 300
frequency 6
ip sla group schedule 1 11-15 schedule-period 30 frequency range 3-5 start-time now life forever
!
router ospf 1
default-information originate metric 10 metric-type 1
!
ip route 0.0.0.0 0.0.0.0 GigabitEthernet0/0 192.168.1.1 track 1 name INET-PRI
ip route 0.0.0.0 0.0.0.0 GigabitEthernet0/1 192.168.2.1 250 name INET-BACKUP
ip route 10.1.1.1 255.255.255.255 gi0/0 192.0.1.1 name SLA
ip route 10.2.2.2 255.255.255.255 gi0/0 192.0.1.1 name SLA
ip route 10.3.3.3 255.255.255.255 gi0/0 192.0.1.1 name SLA
ip route 10.4.4.4 255.255.255.255 gi0/0 192.0.1.1 name SLA
ip route 10.5.5.5 255.255.255.255 gi0/0 192.0.1.1 name SLA
```