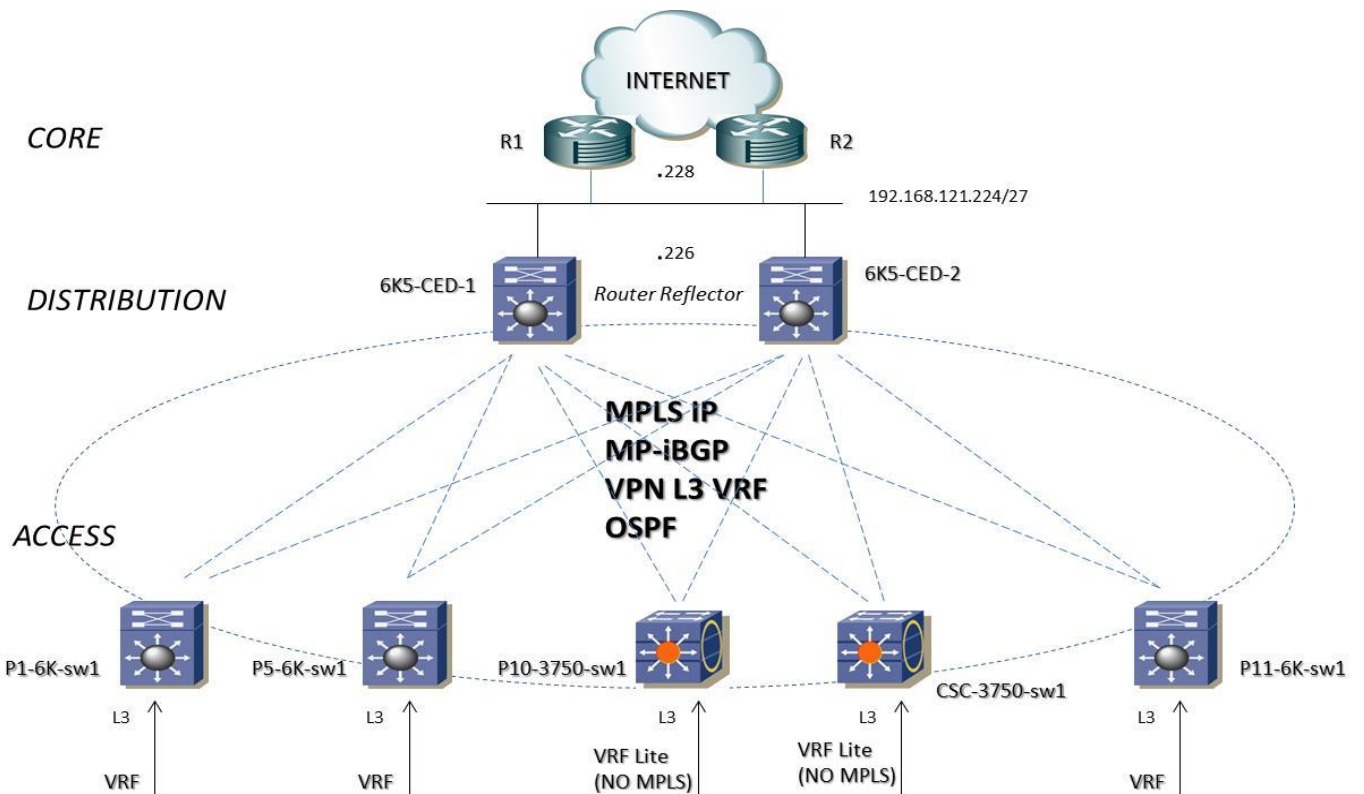


Il presente documento mette in evidenza il ruolo del route-target import export in tecnologia CISCO, applicato tra VRF ed inoltre la configurazione VRF-LITE AS-OVERRIDE

L'architettura di riferimento è la seguente:



Configuration Guide:

**6K5-CED-sw1 & 6K5-CED-sw2**

```
ip vrf TO-INTERNET
rd 65001:110
route-target export 65001:110
route-target import 65001:110
route-target import 65001:10
route-target import 65001:20
route-target import 65001:30
route-target import 65001:40
route-target import 65001:50
route-target import 65001:60
route-target import 65001:70
route-target import 65001:80
route-target import 65001:90
route-target import 65001:100
```

!

segue ./.

```
interface Vlan350
ip vrf forwarding TO-INTERNET
ip address a.b.c.225 255.255.255.224
standby 121 ip a.b.c.226
standby 121 priority 150
standby 121 preempt
!
router bgp 65001
address-family vpnv4
neighbor REFLECTOR activate
neighbor REFLECTOR send-community extended
neighbor CLIENT activate
neighbor CLIENT route-reflector-client
neighbor CLIENT send-community extended
neighbor a.b.c.198 peer-group REFLECTOR
neighbor a.b.c.199 peer-group CLIENT
neighbor a.b.c.200 peer-group CLIENT
neighbor a.b.c.201 peer-group CLIENT
exit-address-family
!
address-family ipv4 vrf TO-INTERNET
redistribute connected
redistribute static
default-information originate
no auto-summary
no synchronization
exit-address-family
!
ip route vrf TO-INTERNET 0.0.0.0 0.0.0.0 a.b.c.228
```

**P1-6K-sw1 – P5-6K-sw1 – P11-6K-sw1**

```
ip vrf 1
rd 65001:10
route-target export 65001:10
route-target import 65001:10
route-target import 65001:110
!
ip vrf 2
rd 65001:70
route-target export 65001:70
route-target import 65001:70
route-target import 65001:110
!
```

```
ip vrf 3
rd 65001:50
route-target export 65001:50
route-target import 65001:50
route-target import 65001:110
!
ip vrf 4
rd 65001:60
route-target export 65001:60
route-target import 65001:60
route-target import 65001:110
!
ip vrf 5
rd 65001:100
route-target export 65001:100
route-target import 65001:100
route-target import 65001:110
!
ip vrf 6
rd 65001:20
route-target export 65001:20
route-target import 65001:20
route-target import 65001:110
!
ip vrf 7
rd 65001:30
route-target export 65001:30
route-target import 65001:30
route-target import 65001:110
!
ip vrf 8
rd 65001:40
route-target export 65001:40
route-target import 65001:40
route-target import 65001:110
!
ip vrf 9
rd 65001:80
route-target export 65001:80
route-target import 65001:80
route-target import 65001:110
!
ip vrf 10
rd 65001:90
route-target export 65001:90
route-target import 65001:90
route-target import 65001:110
!
```

```
router bgp 65001
no bgp default ipv4-unicast
bgp log-neighbor-changes
neighbor a.b.c.197 remote-as 65001
neighbor a.b.c.197 update-source Loopback100
neighbor a.b.c.198 remote-as 65001
neighbor a.b.c.198 update-source Loopback100
!
address-family vpnv4
neighbor a.b.c.197 activate
neighbor a.b.c.197 send-community extended
neighbor a.b.c.198 activate
neighbor a.b.c.198 send-community extended
exit-address-family
!
address-family ipv4 vrf 1
redistribute connected
no auto-summary
no synchronization
exit-address-family
!
address-family ipv4 vrf 2
redistribute connected
no auto-summary
no synchronization
exit-address-family
!
address-family ipv4 vrf 3
redistribute connected
no auto-summary
no synchronization
exit-address-family
!
address-family ipv4 vrf 4
redistribute connected
no auto-summary
no synchronization
exit-address-family
!
address-family ipv4 vrf 5
redistribute connected
no auto-summary
no synchronization
exit-address-family
!
address-family ipv4 vrf 6
redistribute connected
no auto-summary
no synchronization
exit-address-family
```

```
!  
address-family ipv4 vrf 7  
redistribute connected  
no auto-summary  
no synchronization  
exit-address-family  
!  
address-family ipv4 vrf 8  
redistribute connected  
no auto-summary  
no synchronization  
exit-address-family  
!  
address-family ipv4 vrf 9  
redistribute connected  
no auto-summary  
no synchronization  
exit-address-family  
!  
address-family ipv4 vrf 10  
redistribute connected  
no auto-summary  
no synchronization  
exit-address-family
```

## **Configurazione VRF LITE ed AS-OVERRIDE**

### **6K5-CED-sw1 & 6K5-CED-sw2**

```
vlan 310  
name 1-vrf_Lite  
vlan 311  
name 2-vrf_Lite  
vlan 312  
name 3-vrf_Lite  
vlan 313  
name 4-vrf_Lite  
vlan 314  
name 5-vrf_Lite  
vlan 315  
name 6-vrf_Lite  
vlan 316  
name 7-vrf_Lite  
vlan 317  
name 8-vrf_Lite  
vlan 318
```

```
name 9-vrf_Lite
vlan 319
name 10-vrf_Lite
!
!
!
```

segue ./.

```
ip vrf 1
rd 65001:10
route-target export 65001:10
route-target import 65001:10
route-target import 65001:110
!
ip vrf 2
rd 65001:70
route-target export 65001:70
route-target import 65001:70
route-target import 65001:110
!
ip vrf 3
rd 65001:50
route-target export 65001:50
route-target import 65001:50
route-target import 65001:110
!
ip vrf 4
rd 65001:60
route-target export 65001:60
route-target import 65001:60
route-target import 65001:110
!
ip vrf 5
rd 65001:100
route-target export 65001:100
route-target import 65001:100
route-target import 65001:110
!
ip vrf 6
rd 65001:20
route-target export 65001:20
route-target import 65001:20
route-target import 65001:110
!
ip vrf 7
rd 65001:30
route-target export 65001:30
route-target import 65001:30
route-target import 65001:110
!
```

```
ip vrf TO-INTERNET
rd 65001:110
route-target export 65001:110
route-target import 65001:110
route-target import 65001:10
route-target import 65001:20
route-target import 65001:30
route-target import 65001:40
route-target import 65001:50
route-target import 65001:60
route-target import 65001:70
route-target import 65001:80
route-target import 65001:90
route-target import 65001:100
!
ip vrf 8
rd 65001:40
route-target export 65001:40
route-target import 65001:40
route-target import 65001:110
!
ip vrf 9
rd 65001:80
route-target export 65001:80
route-target import 65001:80
route-target import 65001:110
!
ip vrf 10
rd 65001:90
route-target export 65001:90
route-target import 65001:90
route-target import 65001:110
!
!
interface Vlan310
ip vrf forwarding 1
ip address a.b.z.2 255.255.255.252
!
interface Vlan311
ip vrf forwarding 2
ip address a.b.z.6 255.255.255.252
!
interface Vlan312
ip vrf forwarding 3
ip address a.b.z.10 255.255.255.252
!
interface Vlan313
ip vrf forwarding 4
ip address a.b.z.14 255.255.255.252
!
```

```
interface Vlan314
ip vrf forwarding 5
ip address a.b.z.18 255.255.255.252
!
interface Vlan315
ip vrf forwarding 6
ip address a.b.z.22 255.255.255.252
!
interface Vlan316
ip vrf forwarding 7
ip address a.b.z.26 255.255.255.252
!
interface Vlan317
ip vrf forwarding 8
ip address a.b.z.30 255.255.255.252
!
interface Vlan318
ip vrf forwarding 9
ip address a.b.z.34 255.255.255.252
!
interface Vlan319
ip vrf forwarding 10
ip address a.b.z.74 255.255.255.252
!
!
router bgp 65001
address-family ipv4 vrf 1
neighbor a.b.z.1 remote-as 65002
neighbor a.b.z.1 activate
neighbor a.b.z.1 as-override
no auto-summary
no synchronization
exit-address-family
!
address-family ipv4 vrf 2
neighbor a.b.z.5 remote-as 65002
neighbor a.b.z.5 activate
neighbor a.b.z.5 as-override
!
address-family ipv4 vrf 3
neighbor a.b.z.9 remote-as 65002
neighbor a.b.z.9 activate
neighbor a.b.z.9 as-override
!
address-family ipv4 vrf 4
neighbor a.b.z.13 remote-as 65002
neighbor a.b.z.13 activate
neighbor a.b.z.13 as-override
!
```



```
address-family ipv4 vrf 5
neighbor a.b.z.17 remote-as 65002
neighbor a.b.z.17 activate
neighbor a.b.z.17 as-override
!
address-family ipv4 vrf 6
neighbor a.b.z.21 remote-as 65002
neighbor a.b.z.21 activate
neighbor a.b.z.21 as-override
!
address-family ipv4 vrf 7
neighbor a.b.z.25 remote-as 65002
neighbor a.b.z.25 activate
neighbor a.b.z.25 as-override
!
address-family ipv4 vrf 8
neighbor a.b.z.29 remote-as 65002
neighbor a.b.z.29 activate
neighbor a.b.z.29 as-override
!
address-family ipv4 vrf 9
neighbor a.b.z.33 remote-as 65002
neighbor a.b.z.33 activate
neighbor a.b.z.33 as-override
!
address-family ipv4 vrf 10
redistribute connected
neighbor a.b.z.73 remote-as 65002
neighbor a.b.z.73 activate
neighbor a.b.z.73 as-override
!
```

### **P10-3750-sw1 (NO MPLS)**

```
vlan 310
name 1-vrf_Lite
vlan 311
name 2-vrf_Lite
vlan 312
name 3-vrf_Lite
vlan 313
name 4-vrf_Lite
vlan 314
name 5-vrf_Lite
vlan 315
name 6-vrf_Lite
vlan 316
name 7-vrf_Lite
```

```
vlan 317
 name 8-vrf_Lite
vlan 318
 name 9-vrf_Lite
vlan 319
 name 10-vrf_Lite
!
!

ip vrf 1
 rd 65001:10
 route-target export 65001:10
 route-target import 65001:10
!
ip vrf 2
 rd 65001:70
 route-target export 65001:70
 route-target import 65001:70
!
ip vrf 3
 rd 65001:50
 route-target export 65001:50
 route-target import 65001:50
!
ip vrf 4
 rd 65001:60
 route-target export 65001:60
 route-target import 65001:60
!
ip vrf 5
 rd 65001:100
 route-target export 65001:100
 route-target import 65001:100
!
ip vrf 6
 rd 65001:20
 route-target export 65001:20
 route-target import 65001:20
!
ip vrf 7
 rd 65001:30
 route-target export 65001:30
 route-target import 65001:30
!
ip vrf 8
 rd 65001:40
 route-target export 65001:40
 route-target import 65001:40
!
```

```
ip vrf 9
rd 65001:80
route-target export 65001:80
route-target import 65001:80
!
ip vrf 10
rd 65001:90
route-target export 65001:90
route-target import 65001:90
!
interface Vlan310
ip vrf forwarding 1
ip address a.b.z.1 255.255.255.252
!
interface Vlan311
ip vrf forwarding 2
ip address a.b.z.5 255.255.255.252
!
interface Vlan312
ip vrf forwarding 3
ip address a.b.z.9 255.255.255.252
!
interface Vlan313
ip vrf forwarding 4
ip address a.b.z.13 255.255.255.252
!
interface Vlan314
ip vrf forwarding 5
ip address a.b.z.17 255.255.255.252
!
interface Vlan315
ip vrf forwarding 6
ip address a.b.z.21 255.255.255.252
!
interface Vlan316
ip vrf forwarding 7
ip address a.b.z.25 255.255.255.252
!
interface Vlan317
ip vrf forwarding 8
ip address a.b.z.29 255.255.255.252
!
interface Vlan318
ip vrf forwarding 9
ip address a.b.z.33 255.255.255.252
!
interface Vlan319
ip vrf forwarding 10
ip address a.b.z.73 255.255.255.252
!
```

```
router bgp 65002
no synchronization
bgp log-neighbor-changes
no auto-summary
!
address-family ipv4 vrf 10
redistribute connected
neighbor 192.168.8.34 remote-as 65001
neighbor 192.168.8.34 activate
no auto-summary
no synchronization
exit-address-family
!
address-family ipv4 vrf 5
redistribute connected
neighbor 192.168.8.30 remote-as 65001
neighbor 192.168.8.30 activate
!
address-family ipv4 vrf 1
redistribute connected
neighbor a.b.z.14 remote-as 65001
neighbor a.b.z.14 activate
!
address-family ipv4 vrf 2
redistribute connected
neighbor a.b.z.10 remote-as 65001
neighbor a.b.z.10 activate
!
address-family ipv4 vrf 3
redistribute connected
neighbor a.b.z.6 remote-as 65001
neighbor a.b.z.6 activate
!
address-family ipv4 vrf 4
redistribute connected
neighbor a.b.z.74 remote-as 65001
neighbor a.b.z.74 activate
!
address-family ipv4 vrf 9
redistribute connected
neighbor a.b.z.22 remote-as 65001
neighbor a.b.z.22 activate
!
address-family ipv4 vrf 6
redistribute connected
neighbor a.b.z.18 remote-as 65001
neighbor a.b.z.18 activate
!
```

```
address-family ipv4 vrf 7  
redistribute connected  
neighbor a.b.z.26 remote-as 65001  
neighbor a.b.z.26 activate
```

!

```
address-family ipv4 vrf 8  
redistribute connected  
neighbor a.b.z.2 remote-as 65001  
neighbor a.b.z.2 activate
```

!