

```
R1
conf t
int e0/0
Desc conn to internet
ip add 1.1.1.1 255.255.255.0
no sh
int lo0
Desc LAN
ip add 10.1.1.1 255.255.255.0
exit

ip route 0.0.0.0 0.0.0.0 1.1.1.4
```

```
R3
conf t
int e0/0
Desc conn to internet
ip add 3.3.3.3 255.255.255.0
no shut
int lo0
Desc LAN
ip add 10.3.3.3 255.255.255.0
exit

ip route 0.0.0.0 0.0.0.0 3.3.3.4
```

```
R2:
conf t
int e0/0
Desc conn to internet with dynamic address
ip add 2.2.2.2 255.255.255.0
no sh
int lo0
Desc LAN
ip add 10.2.2.2 255.255.255.0
exit

ip route 0.0.0.0 0.0.0.0 2.2.2.4
```

```
R4:Internet
conf t
int e0/0
Desc conn to R1
ip add 1.1.1.4 255.255.255.0
no shut
int e0/1
Desc conn to R2
ip add 2.2.2.4 255.255.255.0
no sh
int e0/2
Desc conn to R3
ip add 3.3.3.4 255.255.255.0
no sh
exit
```

```
=====
R1:SVTI using Smart default
```

```
crypto ikev2 keyring KR13
peer R3
address 3.3.3.3
pre-shared-key cisco123
exit
```

```
crypto ikev2 profile prof13
match identity remote address 3.3.3.3 255.255.255.255
authentication remote pre-share
authentication local pre-share
keyring local KR13
exit
```

```
crypto ipsec profile IPSEC-PROF13
set ikev2-profile prof13
exit
```

```
interface Tunnel1
ip address 192.168.1.1 255.255.255.0
tunnel source Ethernet0/0
tunnel mode ipsec ipv4
tunnel destination 3.3.3.3
tunnel protection ipsec profile IPSEC-PROF13
end
```

```
! Dynamic routing
Adv tunnel ip /LAN
```

```
Router Eigrp 1
Net 192.168.1.0
net 10.0.0.0
exit
```

```
=====
R3:SVTI
```

```
crypto ikev2 keyring KR13
peer R1
address 1.1.1.1
pre-shared-key cisco123
exit
```

```
crypto ikev2 profile prof13
match identity remote address 1.1.1.1 255.255.255.255
authentication remote pre-share
authentication local pre-share
keyring local KR13
exit
```

```
crypto ipsec profile IPSEC-PROF13
set ikev2-profile prof13
```

exit

```
interface Tunnel1
ip address 192.168.1.3 255.255.255.0
tunnel source Ethernet0/0
tunnel mode ipsec ipv4
tunnel destination 1.1.1.1
tunnel protection ipsec profile IPSEC-PROF13
exit
```

```
Router Eigrp 1
Net 192.168.1.0
net 10.0.0.0
exit
```

=====

R2-R1 --> SVTi-DVTi

R2:

```
crypto ikev2 keyring KR12
peer R1
address 1.1.1.1
pre-shared-key local cisco123
pre-shared-key remote cisco456
exit
```

```
crypto ikev2 profile PROF12
match identity remote address 1.1.1.1 255.255.255.255
authentication remote pre-share
authentication local pre-share
keyring local KR12
exit
```

```
crypto ipsec transform-set tset esp-gcm 256
exit
```

```
crypto ipsec profile IPSEC-PROF12
set transform-set tset
set ikev2-profile PROF12
exit
```

```
Router Eigrp 1
Net 192.168.2.0
net 10.0.0.0
exit
```

```
R1:DVTi
crypto ikev2 keyring KR12
peer R2
address 0.0.0.0 0.0.0.0
pre-shared-key local cisco456
pre-shared-key remote cisco123
exit
```

```
crypto ikev2 profile PROF12
match identity remote address 0.0.0.0
authentication remote pre-share
authentication local pre-share
keyring local KR12
virtual-template 12
exit
```

```
crypto ipsec transform-set tset esp-gcm 256
mode tunnel
exit
```

```
crypto ipsec profile IPSEC-PROF12
set transform-set tset
set ikev2-profile PROF12
exit
```

```
interface Loopback12
ip address 192.168.2.1 255.255.255.0
exit
```

```
interface Virtual-Template12 type tunnel
ip unnumbered Loopback12
tunnel source Ethernet0/0
tunnel mode ipsec ipv4
tunnel protection ipsec profile IPSEC-PROF12
exit
```

```
Router ei 2
net 10.1.1.1 0.0.0.0
net 192.168.2.1 0.0.0.0
exit
```