

```
=====
Flex VPN clients with Dynamic HUB Destination.
```

Internet

```
R5:
conf t
int e0/0
ip add 1.1.1.5 255.255.255.0
no sh
exit
int e0/1
ip add 2.2.2.5 255.255.255.0
no sh
exit
int e0/2
ip add 3.3.3.5 255.255.255.0
no sh
exit
int e0/3
ip add 4.4.4.5 255.255.255.0
no sh
exit
```

```
=====
R1:
```

```
conf t
Int loopback 0
Ip add 10.1.1.1 255.255.255.0
!
Int F 0/0
Ip add 1.1.1.1 255.255.255.0
No shut
!
Ip route 0.0.0.0 0.0.0.0 1.1.1.5
```

R2:

```
conf t
Int loopback 0
Ip add 10.2.2.2 255.255.255.0
!
Int F 0/0
Ip add 2.2.2.2 255.255.255.0
No shut
!
Ip route 0.0.0.0 0.0.0.0 2.2.2.5
```

R3:

```
conf t
Int loopback 0
Ip add 10.3.3.3 255.255.255.0
!
Int F 0/0
Ip add 3.3.3.3 255.255.255.0
No shut
```

```
!  
Ip route 0.0.0.0 0.0.0.0 3.3.3.5
```

```
R4:  
conf t  
Int loopback 0  
Ip add 10.4.4.4 255.255.255.0  
!  
Int F 0/0  
Ip add 4.4.4.4 255.255.255.0  
No shut  
!  
Ip route 0.0.0.0 0.0.0.0 4.4.4.5
```

```
=====  
R1:HUB
```

```
conf t  
ip local pool FLEX 192.168.2.2 192.168.2.254  
!
```

!note:- Loopback is assigned an ip address for tunnel.

```
Interface loopback 2  
Ip address 192.168.2.1 255.255.255.0
```

```
int virtual-template 3 type tunnel  
ip unnumbered Lo2  
tunnel source e0/0  
tunnel mode ipsec ipv4  
!  
access-list 1 permit 10.1.1.0 0.0.0.255
```

```
crypto ikev2 keyring KR_CLIENTS  
peer Clients  
address 0.0.0.0  
pre-shared cisco123  
exit  
exit
```

```
crypto ikev2 authorization policy default  
pool FLEX  
route set interface  
route set access-list 1
```

!route set interface: A static route will be generated on hub for the ip assigned to the client
!route set access-list 1: A static route will be generated on hub for the clients LAN

```
crypto ikev2 profile PROF_CLIENTS  
match identity remote address 0.0.0.0 0.0.0.0  
authentication remote pre-share  
authentication local pre-share  
keyring local KR_CLIENTS
```

```
aaa authorization group over psk list default default
virtual-template 3
!
Crypto ipsec profile CLIENTS
set ikev2-profile PROF_CLIENTS
!
int virtual-template 3 type tunnel
tunnel protection ipsec profile CLIENTS
```

=====

R2:HUB2

```
ip local pool FLEX 172.168.2.3 172.168.2.254
!
```

```
Interface loopback 2
Ip address 172.168.2.2 255.255.255.0
```

```
int virtual-template 3 type tunnel
ip unnumbered Lo2
tunnel source e0/0
tunnel mode ipsec ipv4
!
access-list 1 permit 10.1.1.0 0.0.0.255
```

```
!
crypto ikev2 keyring KR_CLIENTS
peer Clients
address 0.0.0.0
pre-shared cisco123
!
```

```
crypto ikev2 authorization policy default
pool FLEX
route set interface
route set access-list 1
!
```

```
crypto ikev2 profile PROF_CLIENTS
match identity remote address 0.0.0.0 0.0.0.0
authentication remote pre-share
authentication local pre-share
keyring local KR_CLIENTS
aaa authorization group over psk list default default
virtual-template 3
!
```

```
Crypto ipsec profile CLIENTS
set ikev2-profile PROF_CLIENTS
!
```

```
int virtual-template 3 type tunnel
tunnel protection ipsec profile CLIENTS
```

=====

R2

```
aaa new-model
aaa authorization network default local
!
```

```
access-list 1 permit 10.2.2.0 0.0.0.255
```

```
!
```

```
crypto ikev2 keyring KR_R1
```

```
peer hub
```

```
address 0.0.0.0
```

```
pre-shared cisco123
```

```
!
```

```
crypto ikev2 authorization policy default
```

```
route set access-list 1
```

```
route set interface
```

```
!
```

```
crypto ikev2 profile PROF_1
```

```
match identity remote address 0.0.0.0 0.0.0.0
```

```
authentication remote pre-share
```

```
authentication local pre-share
```

```
keyring local KR_R1
```

```
aaa authorization group override psk list default default
```

```
!
```

```
!
```

```
crypto ipsec profile ABC
```

```
set ikev2-profile PROF_1
```

```
!
```

```
int tunnel 1
```

```
ip add negotiated
```

```
tunnel source e0/0
```

```
tunnel destination dynamic
```

```
tunnel mode ipsec ipv4
```

```
tunnel protection ipsec profile ABC
```

```
!
```

```
crypto ikev2 client flexvpn flex
```

```
peer 1 1.1.1.1
```

```
connect auto
```

```
client connect Tunnel1
```

```
!
```

```
=====
```

```
R3:
```

```
aaa new-model
```

```
aaa authorization network default local
```

```
!
```

```
access-list 1 permit 10.3.3.0 0.0.0.255
```

```
crypto ikev2 keyring KR_R1
```

```
peer hub
```

```
address 0.0.0.0
```

```
pre-shared cisco123
```

```
!
```

```
crypto ikev2 authorization policy default
```

```
route set access-list 1
```

```
route set interface
```

```
!
```

```
crypto ikev2 profile PROF_1
```

```
match identity remote address 0.0.0.0 0.0.0.0
```

```
authentication remote pre-share
authentication local pre-share
keyring local KR_R1
aaa authorization group override psk list default default
!
crypto ipsec transform-set ABC esp-gcm
!
crypto ipsec profile ABC
set ikev2-profile PROF_1
!
int tunnel 1
ip add negotiated
tunnel source e0/0
tunnel destination dynamic
tunnel mode ipsec ipv4
tunnel protection ipsec profile ABC
!
crypto ikev2 client flexvpn flex
peer 1 1.1.1.1
connect auto
client connect Tunnel1
!
=====
```