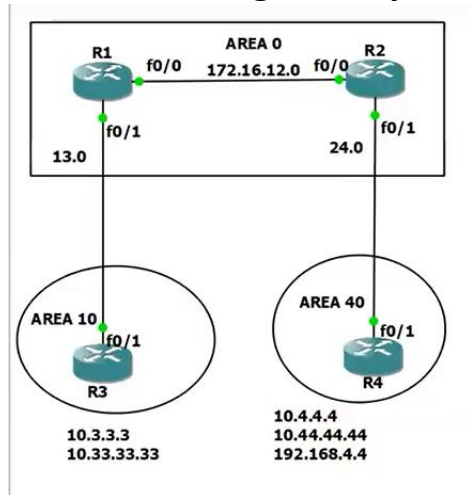


OSPF Completion

Route-Filtering Concepts



```
Summary Net Link States (Area 10)
Link ID      ADV Router    Age      Seq#       Checksum
10.1.1.1     10.1.1.1      343      0x80000001 0x0080A1
10.2.2.2     10.1.1.1      287      0x80000001 0x00C351
10.4.4.4     10.1.1.1      205      0x80000001 0x00E51F
10.44.44.44  10.1.1.1      205      0x80000001 0x00B8D3
172.16.12.0  10.1.1.1      358      0x80000001 0x0074E8
172.16.24.0  10.1.1.1      287      0x80000001 0x0054F2
192.168.4.4  10.1.1.1      205      0x80000001 0x00E6C2
R1(config)#
```

** we don't want this ip add to share with the R3
** area-id filter CMD

#R1

```
R1(config)#ip prefix-list NH seq 10 deny 10.4.4.4/32
R1(config)#ip prefix-list NH seq 20 permit 0.0.0.0/0 le 32
R1(config)#router ospf 10
R1(config-router)#area 10 filterplist prefix NH in
^
% Invalid input detected at '^' marker.
R1(config-router)#area 10 filte-list prefix NH in
^
% Invalid input detected at '^' marker.
R1(config-router)#area 10 filter-list prefix NH in
R1(config-router)#
```

```
Summary Net Link States (Area 10)
Link ID      ADV Router    Age      Seq#       Checksum
10.1.1.1     10.1.1.1      528      0x80000001 0x0080A1
10.2.2.2     10.1.1.1      473      0x80000001 0x00C351
10.44.44.44  10.1.1.1      391      0x80000001 0x00B8D3
172.16.12.0  10.1.1.1      543      0x80000001 0x0074E8
172.16.24.0  10.1.1.1      473      0x80000001 0x0054F2
192.168.4.4  10.1.1.1      391      0x80000001 0x00E6C2
R1#
```

** now its not their in database table

CMD

```
R1#sh run | sec prefix-list
ip prefix-list NH seq 10 deny 10.4.4.4/32
ip prefix-list NH seq 20 permit 0.0.0.0/0 le 32
R1#sh run | sec ospf
router ospf 10
 log-adjacency-changes
 area 10 filter-list prefix NH in
 network 10.1.1.1 0.0.0.0 area 0
 network 172.16.12.0 0.0.0.255 area 0
 network 172.16.13.0 0.0.0.255 area 10
R1#
```

we want R2 to not advertise the 10.44.44.44 nw to R1

```
R2(config)#  
R2(config)#router ospf 10  
R2(config-router)#area 40 range 10.44.44.44 255.255.255.255 not-advertise  
R2(config-router)#
```

Summary Net Link States (Area 0)				
Link ID	ADV Router	Age	Seq#	Checksum
10.3.3.3	10.1.1.1	609	0x80000001	0x00A26F
10.4.4.4	10.2.2.2	645	0x80000001	0x006C9F
10.33.33.33	10.1.1.1	609	0x80000001	0x00C0F6
172.16.13.0	10.1.1.1	794	0x80000001	0x0069F2
172.16.24.0	10.2.2.2	755	0x80000001	0x00DA73
192.168.4.4	10.2.2.2	645	0x80000001	0x006D43

** now its not advertise the network to R1

we want R3 not advertise the 10.33.33.33 network

```
R3#config t  
Enter configuration commands, one per line. End with CNTL/Z.  
R3(config)#  
R3(config)#int loop 2  
R3(config-if)#ip ospf pre  
R3(config-if)#ip ospf prefix-suppression
```

** now we wont receive 10.33.33.33 on R1

On Production environment

#cmd

#R1

Int range f0/0 – 1 , loop 1

Ip ospf area 0

Int range f0/0 – 1

Ip ospf network point-2-point

** bcz we want both the interface of a router should participate in ospf process for desired output

OSPF Completed