

For this lab section, refer to Figure 26-3 on page 916 of the book.

Step 2

```
R3#sho run
Building configuration...

Current configuration : 3448 bytes
!
version 12.2
service timestamps debug datetime msec localtime
service timestamps log datetime msec localtime
no service password-encryption
!
hostname R3
!
!
ip subnet-zero
no ip domain-lookup
!
!
!
!
!
interface Loopback3
  description OSPF Loopback
  ip address 3.3.3.3 255.255.255.255
!
interface Loopback10
  ip address 3.3.3.13 255.255.255.255
!
interface Loopback11
  ip address 3.3.3.23 255.255.255.255
!
interface Loopback13
  ip address 130.100.100.1 255.255.255.255
!
interface Loopback33
  description BGP Loopback
  ip address 3.3.3.33 255.255.255.255
!
interface Ethernet0
  ip address 130.100.1.3 255.255.255.0
!
interface Serial0
  no ip address
  encapsulation frame-relay
  no fair-queue
  frame-relay lmi-type ansi
!
interface Serial0.1 point-to-point
  description To R1
```

```

ip address 150.100.31.3 255.255.255.240
ip ospf authentication message-digest
ip ospf message-digest-key 5 md5 cisco
ip ospf hello-interval 65
traffic-shape rate 64000 8000 8000 1000
traffic-shape adaptive 32000
frame-relay interface-dlci 301
!
interface Serial0.2 point-to-point
description To R2
ip address 150.100.32.3 255.255.255.224
ip ospf authentication message-digest
ip ospf message-digest-key 5 md5 cisco
ip ospf hello-interval 65
frame-relay interface-dlci 302
!
interface Serial0.3 point-to-point
description To R4
ip address 150.100.33.3 255.255.255.248
ip ospf authentication message-digest
ip ospf message-digest-key 5 md5 cisco
ip ospf hello-interval 65
ip ospf priority 0
frame-relay interface-dlci 304
!
!
router ospf 123
router-id 3.3.3.3
log-adjacency-changes
area 0 authentication message-digest
redistribute connected subnets route-map redist
network 3.3.3.3 0.0.0.0 area 0
network 150.100.31.0 0.0.0.15 area 0
network 150.100.32.0 0.0.0.31 area 0
network 150.100.33.0 0.0.0.7 area 0
!
router rip
version 1
redistribute ospf 123 metric 1
network 130.100.0.0
!
router bgp 3
no synchronization
bgp router-id 3.3.3.3
bgp log-neighbor-changes
bgp confederation identifier 1234
bgp confederation peers 1 2
network 3.3.3.33 mask 255.255.255.255
neighbor 10.1.1.9 remote-as 9
neighbor 10.1.1.9 description R9 ->PIX
neighbor 10.1.1.9 ebgp-multihop 2
neighbor 10.1.1.9 next-hop-self
neighbor 150.100.31.1 remote-as 1
neighbor 150.100.31.1 description To R1

```

```
neighbor 150.100.31.1 next-hop-self
neighbor 150.100.32.2 remote-as 2
neighbor 150.100.32.2 description To R2
neighbor 150.100.32.2 next-hop-self
neighbor 150.100.33.4 remote-as 456
neighbor 150.100.33.4 description To R4
neighbor 150.100.33.4 next-hop-self
no auto-summary
!
ip classless
ip route 10.1.1.0 255.255.255.0 130.100.1.1
ip http server
!
access-list 1 permit 3.3.3.13
access-list 1 permit 3.3.3.23
!
route-map redist permit 10
  match ip address 1
!
!
line con 0
  exec-timeout 0 0
  privilege level 15
  logging synchronous
line aux 0
line vty 0 4
  logging synchronous
  login
!
end
```

R3#sho ip rip da

```
1.0.0.0/8      auto-summary
1.1.1.1/32     redistributed
  [1] via 1.1.1.1,
2.0.0.0/8      auto-summary
2.2.2.2/32     redistributed
  [1] via 2.2.2.2,
3.0.0.0/8      auto-summary
3.3.3.3/32     redistributed
  [1] via 0.0.0.0,
4.0.0.0/8      auto-summary
4.4.4.4/32     redistributed
  [1] via 4.4.4.4,
5.0.0.0/8      auto-summary
5.5.5.5/32     redistributed
  [1] via 4.4.4.4,
6.0.0.0/8      auto-summary
6.6.6.6/32     redistributed
  [1] via 5.5.5.5,
8.0.0.0/8      auto-summary
8.8.8.8/32     redistributed
  [1] via 6.6.6.6,
```

```
67.0.0.0/8      auto-summary
67.67.67.0/24   redistributed
                 [1] via 4.4.4.4,
130.100.0.0/16   auto-summary
130.100.1.0/24   directly connected, Ethernet0
130.100.55.0/24  redistributed
                 [1] via 5.5.5.5,
130.100.100.1/32 directly connected, Loopback13
140.100.0.0/16   auto-summary
140.100.9.0/27   redistributed
                 [1] via 4.4.4.4,
140.100.45.0/26  redistributed
                 [1] via 4.4.4.4,
140.100.56.0/26  redistributed
                 [1] via 5.5.5.5,
150.100.0.0/16   auto-summary
150.100.31.0/28  redistributed
                 [1] via 0.0.0.0,
150.100.32.0/27  redistributed
                 [1] via 0.0.0.0,
150.100.33.0/29  redistributed
                 [1] via 0.0.0.0,
192.168.2.0/24   auto-summary
192.168.2.0/24   redistributed
                 [1] via 6.6.6.6,
R3#
```

PIX1# **sho config**

```
: Saved
: Written by enable_15 at 19:52:35.459 UTC Sat Mar 1 2003
PIX Version 6.2(2)
ip address outside 130.100.1.1 255.255.255.0
ip address inside 10.1.1.1 255.255.255.0
rip outside passive version 1
rip inside passive version 2 authentication md5 ccie 2
```

PIX1# **sho rip**

```
rip outside passive version 1
rip inside passive version 2 authentication md5 ccie 2
```

PIX1# **sho route**

```
outside 0.0.0.0 0.0.0.0 130.100.1.3 1 OTHER static
outside 1.0.0.0 255.0.0.0 130.100.1.3 1 RIP
outside 2.0.0.0 255.0.0.0 130.100.1.3 1 RIP
outside 3.0.0.0 255.0.0.0 130.100.1.3 1 RIP
outside 4.0.0.0 255.0.0.0 130.100.1.3 1 RIP
outside 5.0.0.0 255.0.0.0 130.100.1.3 1 RIP
outside 6.0.0.0 255.0.0.0 130.100.1.3 1 RIP
outside 8.0.0.0 255.0.0.0 130.100.1.3 1 RIP
inside 9.9.9.9 255.255.255.255 10.1.1.9 1 RIP
```

```

static      inside 10.1.1.0 255.255.255.0 10.1.1.1 1 CONNECT
static      inside 19.19.19.0 255.255.255.0 10.1.1.9 1 RIP
            intf3 127.0.0.1 255.255.255.255 127.0.0.1 1 CONNECT
static      outside 130.100.1.0 255.255.255.0 130.100.1.1 1
CONNECT static
            outside 130.100.55.0 255.255.255.0 130.100.1.3 1 RIP
            outside 130.100.100.1 255.255.255.255 130.100.1.3 1
RIP
            outside 140.100.0.0 255.255.0.0 130.100.1.3 1 RIP
            outside 150.100.0.0 255.255.0.0 130.100.1.3 1 RIP
            DMZ 192.168.1.0 255.255.255.0 192.168.1.223 1
CONNECT static
            outside 192.168.2.0 255.255.255.0 130.100.1.3 1 RIP

```

R6#**sho run**

Building configuration...

Current configuration : 3111 bytes

```

!
! Last configuration change at 05:55:42 UTC Sat Mar 15 2003
!

```

version 12.2

service timestamps debug datetime msec

service timestamps log datetime msec

no service password-encryption

!

hostname R6

!

!

ip subnet-zero

!

!

!

key chain ccie

key 1

key-string ccie

!

!

!

!

!

interface Loopback6

description OSPF Loopback

ip address 6.6.6.6 255.255.255.255

!

interface Loopback666

description BGP Loopback

ip address 6.6.6.66 255.255.255.255

!

interface Tunnel0

```
ip address 192.168.2.2 255.255.255.0
no ip proxy-arp
ip ospf authentication message-digest
ip ospf message-digest-key 5 md5 cisco
ip ospf mtu-ignore
tunnel source 130.100.26.6
tunnel destination 192.168.1.1
!
interface FastEthernet0/0
ip address 130.100.26.6 255.255.255.224
ip rip authentication mode md5
ip rip authentication key-chain ccie
speed 10
half-duplex
!
interface Serial0/0
ip address 140.100.56.6 255.255.255.192
no ip proxy-arp
ip ospf authentication message-digest
ip ospf message-digest-key 5 md5 cisco
ip ospf network point-to-point
!
router ospf 123
router-id 6.6.6.6
log-adjacency-changes detail
area 56 authentication message-digest
area 56 virtual-link 5.5.5.5 authentication message-digest
area 56 virtual-link 5.5.5.5 message-digest-key 5 md5 cisco
area 86 authentication message-digest
network 6.6.6.6 0.0.0.0 area 56
network 140.100.56.0 0.0.0.63 area 56
network 192.168.2.0 0.0.0.255 area 86
!
router rip
version 2
redistribute ospf 123 metric 1
network 130.100.0.0
no auto-summary
!
router bgp 456
no synchronization
bgp router-id 6.6.6.6
bgp log-neighbor-changes
network 6.6.6.6 mask 255.255.255.255
network 130.100.86.0 mask 255.255.255.224
neighbor 140.100.56.5 remote-as 456
neighbor 140.100.56.5 next-hop-self
neighbor 192.168.2.1 remote-as 65000
no auto-summary
!
ip classless
ip route 192.168.1.0 255.255.255.0 130.100.26.2
!
no cdp run
```

```
!  
!  
!  
!  
line con 0  
  exec-timeout 0 0  
line aux 0  
line vty 0 4  
  privilege level 15  
end
```

R6#**sho ip rip da**

```
1.0.0.0/8      auto-summary  
1.1.1.1/32     redistributed  
    [1] via 1.1.1.1,  
2.0.0.0/8      auto-summary  
2.2.2.2/32     redistributed  
    [1] via 2.2.2.2,  
3.0.0.0/8      auto-summary  
3.3.3.3/32     redistributed  
    [1] via 3.3.3.3,  
3.3.3.13/32    redistributed  
    [1] via 3.3.3.3,  
3.3.3.23/32    redistributed  
    [1] via 3.3.3.3,  
4.0.0.0/8      auto-summary  
4.4.4.4/32     redistributed  
    [1] via 4.4.4.4,  
5.0.0.0/8      auto-summary  
5.5.5.5/32     redistributed  
    [1] via 5.5.5.5,  
5.5.5.55/32    redistributed  
    [1] via 5.5.5.5,  
6.0.0.0/8      auto-summary  
6.6.6.6/32     redistributed  
    [1] via 0.0.0.0,  
6.6.6.66/32    redistributed  
    [1] via 0.0.0.0,  
8.0.0.0/8      auto-summary  
8.8.8.8/32     redistributed  
    [1] via 8.8.8.8,  
8.8.8.88/32    redistributed  
    [1] via 192.168.2.1,  
67.0.0.0/8     auto-summary  
67.67.67.0/24  redistributed  
    [1] via 4.4.4.4,  
130.100.0.0/16 auto-summary  
130.100.26.0/27 directly connected, FastEthernet0/0  
130.100.55.0/24 redistributed  
    [1] via 5.5.5.5,  
140.100.0.0/16 auto-summary
```

```
    [1] via 4.4.4.4,  
140.100.45.0/26    redistributed  
    [1] via 5.5.5.5,  
140.100.56.0/26    redistributed  
    [1] via 0.0.0.0,  
150.100.0.0/16     auto-summary  
150.100.31.0/28     redistributed  
    [1] via 3.3.3.3,  
150.100.32.0/27     redistributed  
    [1] via 3.3.3.3,  
150.100.33.0/29     redistributed  
    [1] via 4.4.4.4,  
192.168.2.0/24     auto-summary  
192.168.2.0/24     redistributed  
    [1] via 0.0.0.0,
```

PIX2(config)# **sho config**

```
ip address outside 130.100.26.2 255.255.255.224  
ip address inside 192.168.1.222 255.255.255.0  
rip outside passive version 2 authentication md5 ccie 1  
rip inside passive version 1  
route outside 0.0.0.0 0.0.0.0 130.100.26.6 1  
route inside 8.8.8.0 255.255.255.0 r8 1
```

PIX2(config)# **sho rip**

```
rip outside passive version 2 authentication md5 ccie 1  
rip inside passive version 1
```

PIX2(config)# **sho route**

```
    outside 0.0.0.0 0.0.0.0 130.100.26.6 1 OTHER static  
    outside 1.1.1.1 255.255.255.255 130.100.26.6 1 RIP  
    outside 2.2.2.2 255.255.255.255 130.100.26.6 1 RIP  
    outside 3.3.3.3 255.255.255.255 130.100.26.6 1 RIP  
    outside 3.3.3.13 255.255.255.255 130.100.26.6 1 RIP  
    outside 3.3.3.23 255.255.255.255 130.100.26.6 1 RIP  
    outside 4.4.4.4 255.255.255.255 130.100.26.6 1 RIP  
    outside 5.5.5.5 255.255.255.255 130.100.26.6 1 RIP  
    outside 5.5.5.55 255.255.255.255 130.100.26.6 1 RIP  
    outside 6.6.6.6 255.255.255.255 130.100.26.6 1 RIP  
    outside 6.6.6.66 255.255.255.255 130.100.26.6 1 RIP  
    inside 8.8.8.0 255.255.255.0 r8 1 OTHER static  
    outside 8.8.8.8 255.255.255.255 130.100.26.6 1 RIP  
    outside 8.8.8.88 255.255.255.255 130.100.26.6 1 RIP  
        outside 67.67.67.0 255.255.255.0 130.100.26.6 1  
RIP  
    outside 130.100.26.0 255.255.255.224 130.100.26.2 1  
CONNECT static  
    outside 130.100.55.0 255.255.255.0 130.100.26.6 1 RIP  
    outside 140.100.9.0 255.255.255.224 130.100.26.6 1 RIP  
    outside 140.100.45.0 255.255.255.192 130.100.26.6 1 RIP  
    outside 140.100.56.0 255.255.255.192 130.100.26.6 1 RIP  
    outside 150.100.31.0 255.255.255.240 130.100.26.6 1 RIP
```



```
    outside 150.100.32.0 255.255.255.224 130.100.26.6 1 RIP
    outside 150.100.33.0 255.255.255.248 130.100.26.6 1 RIP
    DMZ3 172.16.22.0 255.255.255.0 172.16.22.1 1 CONNECT
static
    DMZ2 172.16.23.0 255.255.255.0 172.16.23.1 1 CONNECT
static
    inside 192.168.1.0 255.255.255.0 192.168.1.222 1
CONNECT static
    outside 192.168.2.0 255.255.255.0 130.100.26.6 1 RIP
```