

Hello Computers CCIE Security Lab Solution for Lab2

r1config

```
r1#
hostname r1
!
enable secret hello
!
service password-encryption
logging buffered 10000 7
logging 150.50.15.101
logging facility local6
no service tcp-small-server
no service udp-small-server
no service finger
service debug timestamp
no ntp enable
no cdp run
ip http server
ip http access-class 10
access-list 10 permit 150.50.0.0 0.0.255.255
snmp-server community hello ro 71
snmp-server community hellorw rw 72
snmp-server contact Hello Computers
snmp-server location Fremont-Santa Clara
access-list 71 permit 150.50.0.0 0.0.255.255
access-list 72 permit 150.50.111.0 0.0.0.255
scheduler interval 1000
no ip domain-lookup
no ip source-route
!
access-list 141 permit icmp any any
access-list 141 deny ip any any
!
!deny Trinoo
access-list 171 deny tcp any any eq 27665
access-list 171 deny udp any any eq 31335
access-list 171 deny udp any any eq 26444
!deny Stacheldraht
access-list 171 deny tcp any any eq 16660
access-list 171 deny tcp any any eq 65000
!deny subseven
access-list 171 deny tcp any any eq 6711
access-list 171 deny tcp any any eq 6712
access-list 171 deny tcp any any eq 6669
access-list 171 deny tcp any any eq 2222
access-list 171 deny tcp any any eq 7000
access-list 171 permit ip any any
!
int e0
ip directed-broadcast
no ip proxy-arp
```

```

no ip redirects
no ip icmp mask-reply
no ip icmp unreachable
no ip route-cache
rate-limit output access-group 141 1000000 512000 786000 conform-action transmit exceed-action drop
ip access-group 171 out
ip add 150.50.15.1 255.255.255.0
ip ospf priority 1
no shut
ip ospf authentication message-digest
ip ospf message-digest key 1 md5 hello
ip rip authentication mode md5
ip rip authentication key-chain keyr1
!
int s0
encapsulation frame
frame-relay lmi-type ansi
ip address 150.50.12.1 255.255.255.0
ip ospf network point-to-point
frame map ip 150.50.12.2 112 broadcast
no frame inverse
no shut
ip ospf authentication message-digest
ip ospf message-digest key 1 md5 hello
!
int lo0
ip add 11.11.11.11 255.255.255.0
!
int lo1
ip add 111.111.111.111 255.255.255.0
!
key chain keyr1
key 1
  key-string hello
!
router ospf 100
router-id 11.11.11.11
network 150.50.15.0 0.0.0.255 area 0
network 11.11.11.0 0.0.0.255 area 0
network 150.50.12.0 0.0.0.255 area 1
area 1 virtual 22.22.22.22 authentication message-digest
area 1 virtual 22.22.22.22 message-digest-key 1 md5 hello
area 0 authentication message-digest
area 1 authentication message-digest
redistribute rip subnets
!
router rip
version 2
no auto-summary
network 150.50.15.0
redistribute ospf 100
default-metric 2
!

```

```

router bgp 4799
 network 111.111.111.0 mask 255.255.255.0
 no auto-summary
 no sync
 neighbor 22.22.22.22 remote-as 4799
 neighbor 22.22.22.22 description r2lo0-ibgp
 neighbor 22.22.22.22 update-source loopabck 0
 neighbor 22.22.22.22 route-reflector-client
 neighbor 22.22.22.22 soft-reconfiguration in
 neighbor 22.22.22.22 next-hop-self
 neighbor 33.33.33.33 remote-as 4799
 neighbor 33.33.33.33 description r3lo0-ibgp
 neighbor 33.33.33.33 update-source loopabck 0
 neighbor 33.33.33.33 route-reflector-client
 neighbor 33.33.33.33 soft-reconfiguration in
 neighbor 33.33.33.33 next-hop-self
 neighbor 44.44.44.44 remote-as 4799
 neighbor 44.44.44.44 description r4lo0-ibgp
 neighbor 44.44.44.44 update-source loopabck 0
 neighbor 44.44.44.44 route-reflector-client
 neighbor 44.44.44.44 soft-reconfiguration in
 neighbor 44.44.44.44 next-hop-self
 neighbor 55.55.55.55 remote-as 4799
 neighbor 55.55.55.55 description r3lo0-ibgp
 neighbor 55.55.55.55 update-source loopabck 0
 neighbor 55.55.55.55 route-reflector-client
 neighbor 55.55.55.55 soft-reconfiguration in
 neighbor 55.55.55.55 next-hop-self
 neighbor 150.50.15.111 remote-as 111
 neighbor 150.50.15.111 description AS111-bb1
 neighbor 150.50.15.111 update-source loopabck 0
 neighbor 150.50.15.111 soft-reconfiguration in
 neighbor 150.50.15.111 ebgp-multihop 10
 neighbor 150.50.15.111 route-map setnh in
 !
 route-map setnh permit 10
 set ip next-hop 150.50.15.111
 !
 line con 0
 no login
 line vty 0 4
 login
 password hello

r2config
-----
r2#
hostname r2
!
service password-encryption
logging buffered 10000 7
logging 150.50.15.101
logging facility local6

```

```
no service tcp-small-server
no service udp-small-server
no service finger
service debug timestamp
no ntp enable
no cdp run
ip http server
ip http access-class 10
access-list 10 permit 150.50.0.0 0.0.255.255
snmp-server community hello ro 71
snmp-server community hellorw rw 72
snmp-server contact Hello Computers
snmp-server location Fremont-Santa Clara
access-list 71 permit 150.50.0.0 0.0.255.255
access-list 72 permit 150.50.111.0 0.0.0.255
scheduler interval 1000
no ip domain-lookup
no ip source-route
!
access-list 141 permit icmp any any
access-list 141 deny ip any any
!
!deny Trinoo
access-list 171 deny tcp any any eq 27665
access-list 171 deny udp any any eq 31335
access-list 171 deny udp any any eq 26444
!deny Stacheldraht
access-list 171 deny tcp any any eq 16660
access-list 171 deny tcp any any eq 65000
!deny subseven
access-list 171 deny tcp any any eq 6711
access-list 171 deny tcp any any eq 6712
access-list 171 deny tcp any any eq 6669
access-list 171 deny tcp any any eq 2222
access-list 171 deny tcp any any eq 7000
access-list 171 permit ip any any
!
enable secret hello
!
int e0
ip directed-broadcast
no ip proxy-arp
no ip redirects
no ip icmp mask-reply
no ip icmp unreachable
no ip route-cache
rate-limit output access-group 141 1000000 512000 786000 conform-action transmit exceed-action drop
ip access-group 171 out
ip add 150.50.22.2 255.255.255.0
no shut
!
int s0
encapsulation frame
```

```

frame-relay lmi-type ansi
no shut
!
int s0.21 point-to-point
ip add 150.50.12.2 255.255.255.0
frame interface-dlci 121
ip ospf network point-to-point
ip ospf authentication message-digest
ip ospf message-digest key 1 md5 hello
!
int s0.23 point-to-point
ip add 150.50.23.2 255.255.255.0
frame interface-dlci 123
ip ospf network point-to-point
ip ospf authentication message-digest
ip ospf message-digest key 1 md5 hello
!
int s0.24 point-to-point
ip add 150.50.24.2 255.255.255.0
frame interface-dlci 124
ip ospf network point-to-point
ip ospf authentication message-digest
ip ospf message-digest key 1 md5 hello
!
int tunnel 2
ip address 172.16.22.2 255.255.255.0
tunnel source 150.50.22.2
tunnel destination 150.50.22.112
!
int lo0
ip add 22.22.22.22 255.255.255.0
!
int lo1
ip add 122.122.122.122 255.255.255.0
!
router ospf 100
router-id 22.22.22.22
network 150.50.12.0 0.0.0.255 area 1
network 150.50.24.0 0.0.0.255 area 1
network 22.22.22.0 0.0.0.255 area 1
network 150.50.23.0 0.0.0.255 area 2
area 1 virtual 11.11.11.11 authentication message-digest
area 1 virtual 11.11.11.11 message-digest-key 1 md5 hello
redistribute eigrp 112 subnets
area 1 authentication message-digest
area 2 authentication message-digest
redistribute rip subnets
!
router eigrp 112
no auto-summary
network 172.16.22.0 0.0.0.255
network 150.50.22.0 0.0.0.255
redistribute ospf 100 metric 10000 100 255 1 1500

```

```
!  
router rip  
version 1  
no auto-summary  
network 150.50.22.0  
redistribute ospf 100  
default-metric 2  
!  
router bgp 4799  
network 122.122.122.0 mask 255.255.255.0  
no auto-summary  
no sync  
neighbor 11.11.11.11 remote-as 4799  
neighbor 11.11.11.11 description r1lo0-ibgp  
neighbor 11.11.11.11 soft-reconfiguration in  
neighbor 11.11.11.11 update-source loopback 0  
line con 0  
no login  
line vty 0 4  
login  
password hello
```

r3config

```
-----  
r3#  
hostname r3  
!  
enable secret hello  
service password-encryption  
logging buffered 10000 7  
logging 150.50.15.101  
logging facility local6  
no service tcp-small-server  
no service udp-small-server  
no service finger  
service debug timestamp  
no ntp enable  
no cdp run  
ip http server  
ip http access-class 10  
access-list 10 permit 150.50.0.0 0.0.255.255  
snmp-server community hello ro 71  
snmp-server community hellorw rw 72  
snmp-server contact Hello Computers  
snmp-server location Fremont-Santa Clara  
access-list 71 permit 150.50.0.0 0.0.255.255  
access-list 72 permit 150.50.111.0 0.0.0.255  
scheduler interval 1000  
no ip domain-lookup  
no ip source-route  
!  
access-list 141 permit icmp any any  
access-list 141 deny ip any any
```

```

!
!deny Trinoo
access-list 171 deny tcp any any eq 27665
access-list 171 deny udp any any eq 31335
access-list 171 deny udp any any eq 26444
!deny Stacheldraht
access-list 171 deny tcp any any eq 16660
access-list 171 deny tcp any any eq 65000
!deny subseven
access-list 171 deny tcp any any eq 6711
access-list 171 deny tcp any any eq 6712
access-list 171 deny tcp any any eq 6669
access-list 171 deny tcp any any eq 2222
access-list 171 deny tcp any any eq 7000
access-list 171 permit ip any any
!
int e0
ip directed-broadcast
no ip proxy-arp
no ip redirects
no ip icmp mask-reply
no ip icmp unreachable
no ip route-cache
rate-limit output access-group 141 1000000 512000 786000 conform-action transmit exceed-action drop
ip access-group 171 out
ip add 150.50.33.3 255.255.255.0
no shut
!
int s0
encapsulation frame
frame-relay lmi-type ansi
ip address 150.50.23.3 255.255.255.0
ip ospf network point-to-point
frame map ip 150.50.23.2 132 broadcast
no shut
ip ospf authentication message-digest
ip ospf message-digest key 1 md5 hello
!
int atm0
ip address 150.50.113.3
atm pvc 1 0 5 qsaal
atm pvc 2 0 16 ilmi
atm pvc 3 4 40 aal5snap
map-group map1
no shut
!
int lo0
ip add 33.33.33.33 255.255.255.0
!
int lo1
ip add 133.133.133.133 255.255.255.0
!
router ospf 100

```

```

router-id 33.33.33.33
network 150.50.23.0 0.0.0.255 area 2
network 33.33.33.0 0.0.0.255 area 2
network 150.50.33.0 0.0.0.255 area 2
network 150.50.3.0 0.0.0.255 area 2
area 2 authentication message-digest
!
router bgp 4799
network 133.133.133.0 mask 255.255.255.0
no auto-summary
no sync
neighbor 11.11.11.11 remote-as 4799
neighbor 11.11.11.11 description r1lo0-ibgp
neighbor 11.11.11.11 soft-reconfiguration in
neighbor 11.11.11.11 update-source loopback 0
neighbor 150.50.3.113 remote-as 113
neighbor 150.50.3.113 description bb3atm0-AS113
neighbor 150.50.3.113 soft-reconfiguration in
!
map-list map1
ip 150.50.3.113 atm-vc 3 broadcast
!
line con 0
no login
line vty 0 4
login
password hello

r4config
-----
r4#
hostname r4
!
enable secret hello
service password-encryption
logging buffered 10000 7
logging 150.50.15.101
logging facility local6
no service tcp-small-server
no service udp-small-server
no service finger
service debug timestamp
no ntp enable
no cdp run
ip http server
ip http access-class 10
access-list 10 permit 150.50.0.0 0.0.255.255
snmp-server community hello ro 71
snmp-server community hellorw rw 72
snmp-server contact Hello Computers
snmp-server location Fremont-Santa Clara
access-list 71 permit 150.50.0.0 0.0.255.255
access-list 72 permit 150.50.111.0 0.0.0.255

```



```

scheduler interval 1000
no ip domain-lookup
no ip source-route
!
access-list 141 permit icmp any any
access-list 141 deny ip any any
!
!deny Trinoo
access-list 171 deny tcp any any eq 27665
access-list 171 deny udp any any eq 31335
access-list 171 deny udp any any eq 26444
!deny Stacheldraht
access-list 171 deny tcp any any eq 16660
access-list 171 deny tcp any any eq 65000
!deny subseven
access-list 171 deny tcp any any eq 6711
access-list 171 deny tcp any any eq 6712
access-list 171 deny tcp any any eq 6669
access-list 171 deny tcp any any eq 2222
access-list 171 deny tcp any any eq 7000
access-list 171 permit ip any any
!
isdn switch-type basic-ni
username r5 password hello
!
int e0
ip directed-broadcast
no ip proxy-arp
no ip redirects
no ip icmp mask-reply
no ip icmp unreachable
no ip route-cache
rate-limit output access-group 141 1000000 512000 786000 conform-action transmit exceed-action drop
ip access-group 171 out
ip add 172.16.44.4 255.255.255.0
no shut
!
int s0
encapsulation frame
frame-relay lmi-type ansi
ip address 150.50.24.4 255.255.255.0
ip ospf network point-to-point
frame map ip 150.50.24.2 142 broadcast
no shut
ip ospf authentication message-digest
ip ospf message-digest key 1 md5 hello
!
int s1
encapsulation frame
frame-relay lmi-type ansi
ip address 150.50.46.4 255.255.255.0
frame route ip 150.50.46.6 146 broadcast
no shut

```

```

ip authentication mode eigrp 46 md5
ip authentication key-chain eigrp 46 keyr4
!
int bri0
ip add 145.45.45.4 255.255.255.240
isdn switch-type basic-ni
dialer-group 1
encapsulation ppp
ppp authentication chap
dialer idle-timeout 60
dialer load-threshold 128 either
ppp multilink
ppp callback accept
dialer callback-secure
dialer map ip 145.45.45.5 class callbackclass name r5 broadcast 8358662
dialer map ip 145.45.45.5 class callbackclass name r5 broadcast 8358664
ip ospf demand-circuit
ip ospf network point-to-point
no shut
ip ospf authentication message-digest
ip ospf message-digest key 1 md5 hello
!
int lo0
ip add 44.44.44.44 255.255.255.0
!
int lo1
ip add 144.144.144.144 255.255.255.0
!
key chain keyr4
key 1
  key-string hello
!
router ospf 100
router-id 44.44.44.44
network 150.50.24.0 0.0.0.255 area 1
network 150.50.44.0 0.0.0.255 area 1
network 44.44.44.0 0.0.0.255 area 1
network 145.45.45.0 0.0.0.15 area 1
redistribute eigrp 46 subnets
area 1 authentication message-digest
!
router eigrp 46
no auto-summary
network 150.50.46.0 0.0.0.255
redistribute ospf 100 metric 10000 100 255 1 1500
passive bri0
!
router bgp 4799
network 144.144.144.0 mask 255.255.255.0
no auto-summary
no sync
neighbor 11.11.11.11 remote-as 4799
neighbor 11.11.11.11 description r1lo0-ibgp

```

```
neighbor 11.11.11.11 soft-reconfiguration in
neighbor 11.11.11.11 update-source loopback 0
neighbor 150.50.46.6 remote-as 6767
neighbor 150.50.46.6 description r6s0-AS6767
neighbor 150.50.46.6 soft-reconfiguration in
```

```
!
dialer-list 1 protocol ip permit
!
map-class dialer callbackclass
dialer callback-server username
```

```
!
line con 0
no login
line vty 0 4
login
password hello
```

```
r5config
```

```
-----
r5#
hostname r5
!
enable secret hello
service password-encryption
logging buffered 10000 7
logging 150.50.15.101
logging facility local6
no service tcp-small-server
no service udp-small-server
no service finger
service debug timestamp
no ntp enable
no cdp run
ip http server
ip http access-class 10
access-list 10 permit 150.50.0.0 0.0.255.255
snmp-server community hello ro 71
snmp-server community hellorw rw 72
snmp-server contact Hello Computers
snmp-server location Fremont-Santa Clara
access-list 71 permit 150.50.0.0 0.0.255.255
access-list 72 permit 150.50.111.0 0.0.0.255
scheduler interval 1000
no ip domain-lookup
no ip source-route
!
access-list 141 permit icmp any any
access-list 141 deny ip any any
!
!deny Trinoo
access-list 171 deny tcp any any eq 27665
access-list 171 deny udp any any eq 31335
access-list 171 deny udp any any eq 26444
```

```

!deny Stacheldraht
access-list 171 deny tcp any any eq 16660
access-list 171 deny tcp any any eq 65000
!deny subseven
access-list 171 deny tcp any any eq 6711
access-list 171 deny tcp any any eq 6712
access-list 171 deny tcp any any eq 6669
access-list 171 deny tcp any any eq 2222
access-list 171 deny tcp any any eq 7000
access-list 171 permit ip any any
!
isdn switch-type basic-ni
username r4 password hello
!
int e0
ip directed-broadcast
no ip proxy-arp
no ip redirects
no ip icmp mask-reply
no ip icmp unreachable
no ip route-cache
rate-limit output access-group 141 1000000 512000 786000 conform-action transmit exceed-action drop
ip access-group 171 out
ip add 150.50.15.5 255.255.255.0
ip ospf priority 1
no shut
ip ospf authentication message-digest
ip ospf message-digest key 1 md5 hello
!
int s0
encapsulation hdlc
ip address 150.50.57.5 255.255.255.0
no shut
ip rip authentication mode md5
ip rip authentication key-chain keyr5
!
int bri0
ip add 145.45.45.5 255.255.255.240
isdn switch-type basic-ni
dialer-group 1
encapsulation ppp
ppp authentication chap
dialer idle-timeout 60
dialer load-threshold 128 either
ppp multilink
ppp callback request
dialer map ip 145.45.45.4 name r4 broadcast 8358661
dialer map ip 145.45.45.4 name r4 broadcast 8358663
ip ospf demand-circuit
ip ospf network point-to-point
no shut
ip ospf authentication message-digest
ip ospf message-digest key 1 md5 hello

```

```

!
int lo0
 ip add 55.55.55.55 255.255.255.0
!
int lo1
 ip add 155.155.155.155 255.255.255.0
!
key chain keyr5
 key 1
  key-string hello
!
router ospf 100
 router-id 55.55.55.55
 network 150.50.15.0 0.0.0.255 area 0
 network 55.55.55.0 0.0.0.255 area 0
 network 145.45.45.0 0.0.0.15 area 1
 redistribute rip subnets
 area 0 authentication message-digest
 area 1 authentication message-digest
!
router rip
 version 2
 no auto-summary
 network 150.50.57.0
 passive bri0
 redistribute ospf 100
 default-metric 2
!
router bgp 4799
 network 155.155.155.0 mask 255.255.255.0
 no auto-summary
 no sync
 neighbor 11.11.11.11 remote-as 4799
 neighbor 11.11.11.11 description r1lo0-ibgp
 neighbor 11.11.11.11 soft-reconfiguration in
 neighbor 11.11.11.11 update-source loopback 0
 neighbor 150.50.57.7 remote-as 6767
 neighbor 150.50.57.7 description r7s0-AS6767
 neighbor 150.50.57.7 soft-reconfiguration in
!
dialer-list 1 protocol ip permit
!
line con 0
 no login
line vty 0 4
 login
 password hello

r6config
-----
r6#
hostname r6
!

```

```
service password-encryption
logging buffered 10000 7
logging 150.50.15.101
logging facility local6
no service tcp-small-server
no service udp-small-server
no service finger
service debug timestamp
no ntp enable
no cdp run
ip http server
ip http access-class 10
access-list 10 permit 150.50.0.0 0.0.255.255
snmp-server community hello ro 71
snmp-server community hellorw rw 72
snmp-server contact Hello Computers
snmp-server location Fremont-Santa Clara
access-list 71 permit 150.50.0.0 0.0.255.255
access-list 72 permit 150.50.111.0 0.0.0.255
scheduler interval 1000
no ip domain-lookup
no ip source-route
!
access-list 141 permit icmp any any
access-list 141 deny ip any any
!
!deny Trinoo
access-list 171 deny tcp any any eq 27665
access-list 171 deny udp any any eq 31335
access-list 171 deny udp any any eq 26444
!deny Stacheldraht
access-list 171 deny tcp any any eq 16660
access-list 171 deny tcp any any eq 65000
!deny subseven
access-list 171 deny tcp any any eq 6711
access-list 171 deny tcp any any eq 6712
access-list 171 deny tcp any any eq 6669
access-list 171 deny tcp any any eq 2222
access-list 171 deny tcp any any eq 7000
access-list 171 permit ip any any
!
enable secret hello
!
int e0
ip directed-broadcast
no ip proxy-arp
no ip redirects
no ip icmp mask-reply
no ip icmp unreachable
no ip route-cache
rate-limit output access-group 141 1000000 512000 786000 conform-action transmit exceed-action drop
ip access-group 171 out
ip add 192.168.66.6 255.255.255.0
```

```

no shut
!
int s0
encapsulation frame
frame-relay lmi-type ansi
ip address 150.50.46.6 255.255.255.0
no shut
ip authentication mode eigrp 46 md5
ip authentication key-chain eigrp 46 keyr6
!
int lo0
ip add 66.66.66.66 255.255.255.0
!
int lo1
ip add 167.167.167.166 255.255.255.0
!
key chain keyr6
key 1
  key-string hello
!
router eigrp 46
no auto-summary
network 150.50.46.0 0.0.0.255
network 66.66.66.0 0.0.0.255
network 192.168.66.0 0.0.0.255
!
router bgp 6767
network 167.167.167.0 mask 255.255.255.0
no auto-summary
neighbor 150.50.46.4 remote-as 4799
neighbor 150.50.46.4 description r4s1-AS4799
neighbor 150.50.46.4 soft-reconfiguration in
!
line con 0
no login
line vty 0 4
login
password hello

r7config
-----
r7#
hostname r7
!
service password-encryption
logging buffered 10000 7
logging 150.50.15.101
logging facility local6
no service tcp-small-server
no service udp-small-server
no service finger
service debug timestamp
no ntp enable

```

```

no cdp run
ip http server
ip http access-class 10
access-list 10 permit 150.50.0.0 0.0.255.255
snmp-server community hello ro 71
snmp-server community hellorw rw 72
snmp-server contact Hello Computers
snmp-server location Fremont-Santa Clara
access-list 71 permit 150.50.0.0 0.0.255.255
access-list 72 permit 150.50.111.0 0.0.0.255
scheduler interval 1000
no ip domain-lookup
no ip source-route
!
access-list 141 permit icmp any any
access-list 141 deny ip any any
!
!deny Trinoo
access-list 171 deny tcp any any eq 27665
access-list 171 deny udp any any eq 31335
access-list 171 deny udp any any eq 26444
!deny Stacheldraht
access-list 171 deny tcp any any eq 16660
access-list 171 deny tcp any any eq 65000
!deny subseven
access-list 171 deny tcp any any eq 6711
access-list 171 deny tcp any any eq 6712
access-list 171 deny tcp any any eq 6669
access-list 171 deny tcp any any eq 2222
access-list 171 deny tcp any any eq 7000
access-list 171 permit ip any any
!
enable secret hello
!
int e0
ip directed-broadcast
no ip proxy-arp
no ip redirects
no ip icmp mask-reply
no ip icmp unreachable
no ip route-cache
rate-limit output access-group 141 1000000 512000 786000 conform-action transmit exceed-action drop
ip access-group 171 out
ip add 10.10.77.7 255.255.255.0
no shut
!
int s0
encapsulation hdlc
clock rate 64000
ip address 150.50.57.7 255.255.255.0
no shut
ip rip authentication mode md5
ip rip authentication key-chain keyr7

```



```
!  
int lo0  
ip add 77.77.77.77 255.255.255.0  
!  
int lo1  
ip add 167.167.167.167 255.255.255.0  
!  
key chain keyr7  
key 1  
key-string hello  
!  
router rip  
version 2  
network 150.50.57.0  
network 77.77.77.0  
network 10.10.77.0  
no auto-summary  
!  
router bgp 6767  
network 167.167.167.0 mask 255.255.255.0  
no auto-summary  
neighbor 150.50.57.5 remote-as 4799  
neighbor 150.50.57.5 description r5s0-AS4799  
neighbor 150.50.57.5 soft-reconfiguration in  
!  
line con 0  
no login  
!  
line vty 0 4  
login  
password hello  
  
catconfig  
-----  
cat(enable)  
  
set vtp domain hello  
set vtp mode transparent  
!  
set port name 3/1 r1e0  
set port name 3/2 r2e0  
set port name 3/3 r3e0  
set port name 3/4 r4e0  
set port name 3/5 r5e0  
set port name 3/6 r6e0  
set port name 3/7 r7e0  
set port name 3/8 bb1e0  
set port name 3/9 bb2e0  
set port name 3/10 bb3e0  
set port name 3/11 pix1e0  
set port name 3/12 pix1e1  
set port name 3/13 pix1e2  
set port name 3/14 pix2e0
```

```
set port name 3/15 pix2e1
set port name 3/16 solaris1
set port name 3/17 solaris2
set port name 3/18 tacacs-ca
set port name 3/19 tftp
!
set vlan 2 3/2,3/14,3/17
set vlan 3 3/3
set vlan 4 3/4
set vlan 6 3/6
set vlan 7 3/7
set vlan 11 3/13
set vlan 15 3/1,3/5,3/11,3/16
set vlan 111 3/8,3/12,3/18-19
set vlan 112 3/9,3/15
set vlan 113 3/10
!
set port speed 3/1 auto
set port duplex 3/1 auto
set port speed 3/2 auto
set port duplex 3/2 auto
set port speed 3/3 auto
set port duplex 3/4 auto
set port speed 3/5 auto
set port duplex 3/6 auto
set port speed 3/7 auto
set port duplex 3/7 auto
set port speed 3/8 auto
set port duplex 3/8 auto
set port speed 3/9 auto
set port duplex 3/9 auto
set port speed 3/10 auto
set port duplex 3/10 auto
set port speed 3/11 auto
set port duplex 3/11 auto
set port speed 3/12 auto
set port duplex 3/12 auto
set port speed 3/13 auto
set port duplex 3/13 auto
set port speed 3/14 auto
set port duplex 3/14 auto
set port speed 3/15 auto
set port duplex 3/15 auto
set port speed 3/16 auto
set port duplex 3/16 auto
set port speed 3/17 auto
set port duplex 3/17 auto
set port speed 3/18 auto
set port duplex 3/18 auto
!
set vlan 111 name backbone1
set vlan 112 name backbone2
set vlan 113 name backbone3
```

```

set vlan 15 name pix1outsidevlan
set vlan 7 name r7e0vlan
set vlan 6 name r6e0vlan
set vlan 4 name r4e0vlan
set vlan 22 name pix2outsidevlan
set vlan 11 name pix1dmzvlan
!
set interface sc0 150.50.111.90 255.255.255.0
set interface sc0 111
set ip route default 150.50.111.11 primary
!
set ip permit enable
set ip permit 150.50.0.0 255.255.0.0
!

pix1#
!hostname pix1
interface e0 auto
interface e1 auto
interface e2 auto
!
nameif e0 outside sec0
nameif e1 inside sec100
nameif e2 dmz sec50
!
ip address outside 150.50.15.11 255.255.255.0
ip address inside 150.50.111.11 255.255.255.0
ip address dmz 10.10.11.11 255.255.255.0
!
nat (inside) 0 access-list insidetodmz
access-list no nat permit ip 150.50.111.0 255.255.255.0 10.10.11.0 255.255.255.0
!
nat (inside) 1 0 0
global (outside) 1 150.50.15.150-150.50.15.160 255.255.255.0
global (outside) 1 150.50.111.50
!
rip outside passive version 2
rip outside default version 2
!
route outside 0 0 150.50.15.1
!
!static and conduit for router bb1 to allow BGP connection from r1
static (inside,outside) 150.50.15.111 150.50.111.111
conduit permit tcp host 150.50.15.111 gt 11000 host 150.50.15.1
!
!static and conduit for aaa/ca server
static (inside,outside) 150.50.15.100 150.50.111.100
conduit permit ip host 150.50.15.100 0 0
!
!static and conduit for tftp server
static (inside,outside) 150.50.15.101 150.50.111.101
conduit permit tcp host 150.50.15.101 eq tftp 0 0
!

```

```

conduit permit tcp 150.50.15.111 255.255.255.255 eq telnet 0 0
conduit permit tcp 150.50.15.101 255.255.255.255 eq tftp 0 0
static (dmz,outside) 150.50.15.200 10.10.11.200
conduit permit tcp host 150.50.15.200 eq 80 any
conduit permit tcp host 150.50.15.200 eq 443 any
!
conduit permit gre 0 0 0 0
conduit permit esp 0 0 0 0
conduit permit ah 0 0 0 0
conduit permit udp 0 0 eq 500 0 0
conduit permit icmp 0 0 eq echo-reply 0 0
!
static (inside,outside) 150.50.15.210 150.50.111.210
nat (inside) 0 access-list nat0list
access-list nat0list permit ip host 150.50.111.200 0 0
access-list nat0list permit ip host 150.50.111.210 host 150.50.22.210
!
static (inside,outside) 150.50.15.220 10.10.11.220
alias (inside) 10.10.11.220
!
conduit permit tcp 0 0 113 0 0
service resetinbound
!
filter activex 80 0 0 0 0
!
sysopt connection permit-ipsec
!
isakmp enable outside
isakmp identity address
isakmp policy 10 authentication pre-share
isakmp policy 10 hash md5
isakmp policy 10 encryption des
isakmp policy 10 group 1
isakmp key pix1pix2key address 150.50.22.12 netmask 255.255.255.255
!
crypto ipsec transform-set tset esp-des esp-md5-hmac
crypto map supermap 10 ipsec-isakmp
crypto map supermap 10 set peer 150.50.22.12
crypto map supermap 10 set transform-set tset
crypto map supermap 10 match address bb1tobb2
crypto map supermap interface outside
!
access-list bb1tobb2 permit ip 150.50.111.111 255.255.255.255 150.50.22.112 255.255.255.255
!
filter url http 0 0 0 0 allow
url-server (inside) host 150.50.111.101 timeout 10
!
fixup protocol smtp 25
static (dmz,outside) 150.50.15.25 10.10.11.25
conduit permit tcp host 150.50.15.25 eq 25 0 0
!
aaa-server TACACS+ protocol tacacs+
aaa-server AuthOutbound protocol tacacs+

```

```
aaa-server AuthOutbound (inside) host 150.50.111.100 hello timeout 5
aaa authentication include ftp outbound 0 0 0 0 AuthOutbound
aaa accounting include ftp outbound 0 0 0 0 AuthOutbound
aaa authentication include telnet outbound host 150.50.111.230 0 0 AuthOutbound
aaa accounting include telnet outbound host 150.50.111.230 0 0 AuthOutbound
```

pix2config

```
-----
pix2#
!
hostname pix2
!
interface e0 auto
interface e1 auto
!
nameif e0 outside sec0
nameif e1 inside sec100
!
ip address outside 150.50.22.12 255.255.255.0
ip address inside 10.10.112.12 255.255.255.0
!
nat (inside) 1 10.10.112.0 255.255.255.0
global (outside) 1 150.50.22.150-150.50.22.160 255.255.255.0
global (outside) 1 150.50.22.50
!
rip outside passive version 2
rip outside default version 2
!
route outside 0 0 150.50.22.2
route inside 112.112.112.0 255.255.255.0 10.10.112.112
!
!static and conduit to allow ping to bb2 loopback0 from r2
static (inside,outside) 150.50.22.113 112.112.112.112
conduit permit icmp host 150.50.22.113 host 150.50.22.2
!
!static and conduit to allow gre traffic to bb2 from r2
static (inside,outside) 150.50.22.112 10.10.112.112
conduit permit gre host 150.50.22.112 host 150.50.22.2
!
static (inside,outside) 150.50.22.100 10.10.112.100
conduit permit tcp host 150.50.22.100 eq ftp host 150.50.22.150
conduit permit tcp host 150.50.22.100 eq ftp host 150.50.15.150
!
conduit permit gre 0 0 0 0
conduit permit esp 0 0 0 0
conduit permit ah 0 0 0 0
conduit permit udp 0 0 eq 500 0 0
conduit permit icmp 0 0 eq echo-reply 0 0
!
static (inside,outside) 150.50.22.210 10.10.112.210
nat (inside) 0 access-list nat0list
access-list nat0list permit ip host 10.10.112.210 host 150.50.15.210
```

```
!  
static (inside,outside) 150.50.22.220 10.10.112.220  
alias (inside) 150.50.22.220  
!  
filter java 80 0 0 0 0  
!  
outbound 1 deny 10.10.112.91 255.255.255.255  
outbound 1 deny 10.10.112.92 255.255.255.255  
outbound 1 deny 10.10.112.93 255.255.255.255  
outbound 1 deny 10.10.112.94 255.255.255.255  
outbound 1 deny 10.10.112.95 255.255.255.255  
outbound 1 except 10.10.112.96 255.255.255.255  
apply (inside) 1 outgoing_src  
!  
sysopt connection permit-ipsec  
!  
isakmp enable outside  
isakmp identity address  
isakmp policy 10 authentication pre-share  
isakmp policy 10 hash md5  
isakmp policy 10 encryption des  
isakmp policy 10 group 1  
isakmp key pix1pix2key address 150.50.15.11 netmask 255.255.255.255  
!  
crypto ipsec transform-set tset esp-des esp-md5-hmac  
crypto map supermap 10 ipsec-isakmp  
crypto map supermap 10 set peer 150.50.15.11  
crypto map supermap 10 set transform-set tset  
crypto map supermap 10 match address bb2tobb1  
crypto map supermap interface outside  
!  
access-list bb2tobb1 permit ip host 10.10.112.112 host 150.50.15.111
```