

Hello Computers CCIE Security Lab Solution for Lab8

r1config

r1#

hostname r1

!

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

!

!acl for icmp rate-limiting

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

no 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
!
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
!
router ospf 100
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 0
area 0 authentication message-digest
!
router bgp 65511
network 111.111.111.0 mask 255.255.255.0
no auto-summary
no sync
neighbor 150.50.12.2 remote-as 4799
neighbor 150.50.12.2 description r2lo0-ibgp
!
ntp server 150.50.15.111
ntp authenticate
ntp trusted-key 1
ntp authentication-key 1 md5 hello
!
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  
!  
!acl for icmp rate-limiting  
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  
no 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 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
network 150.50.12.0 0.0.0.255 area 0
network 150.50.24.0 0.0.0.255 area 0
network 22.22.22.0 0.0.0.255 area 0
network 150.50.23.0 0.0.0.255 area 2
network 150.50.22.0 0.0.0.255 area 2
area 2 virtual 33.33.33.33 authentication message-digest
area 2 virtual 33.33.33.33 message-digest-key 1 md5 hello
area 0 authentication message-digest
area 2 authentication message-digest
!
router bgp 4799
```

```
network 122.122.122.0 mask 255.255.255.0
no auto-summary
no sync
neighbor 33.33.33.33 remote-as 4799
neighbor 33.33.33.33 description r3lo0-ibgp
neighbor 33.33.33.33 soft-reconfiguration in
neighbor 33.33.33.33 update-source loopback 0
neighbor 44.44.44.44 remote-as 4799
neighbor 44.44.44.44 description r4lo0-ibgp
neighbor 44.44.44.44 soft-reconfiguration in
neighbor 44.44.44.44 update-source loopback 0
!
ntp peer 150.50.12.1
ntp authenticate
ntp trusted-key 1
ntp authentication-key 1 md5 hello
!
line con 0
no login
line vty 0 4
login
password hello
```

r3config

```
r3#
hostname r3
!
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
!
!acl for icmp rate-limiting
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
no 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
ip access-group 131 in
ip inspect rule1 in
!
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
 network 150.50.23.0 0.0.0.255 area 2
 network 33.33.33.0 0.0.0.255 area 3
 network 150.50.33.0 0.0.0.255 area 3
 network 150.50.3.0 0.0.0.255 area 3
 area 2 authentication message-digest
 area 3 authentication message-digest
 area 3 stub no-summary
 default-information originate
!
router bgp 4799
 network 133.133.133.0 mask 255.255.255.0
 no auto-summary
 no sync
 neighbor 150.50.3.113 remote-as 113
 neighbor 150.50.3.113 description bb3atm0-AS113
 neighbor 150.50.3.113 soft-reconfiguration in
 neighbor 22.22.22.22 remote-as 4799
 neighbor 22.22.22.22 description r2lo0-ibgp
 neighbor 22.22.22.22 soft-reconfiguration in
 neighbor 22.22.22.22 update-source loopback 0
 neighbor 44.44.44.44 remote-as 4799
 neighbor 44.44.44.44 description r4lo0-ibgp
 neighbor 44.44.44.44 soft-reconfiguration in
 neighbor 44.44.44.44 update-source loopback 0
 aggregate-address 203.203.0.0 255.255.240.0 summary-only
 aggregate-address 203.203.16.0 255.255.252.0 summary-only
 redistribute ospf 100
!
map-list map1
 ip 150.50.3.113 atm-vc 3 broadcast
!
ip inspect name rule1 tcp
ip inspect name rule1 http
access-list 131 permit ip any any
!
line con 0
 no login
line vty 0 4
 login
 password hello

r4config
-----
r4#
hostname r4
!
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
!
!acl for icmp rate-limiting
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
isdn switch-type basic-ni
username r5 password hello
!
int e0
no 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 172.16.45.4 255.255.255.0
no shut
ip ospf priority 200
ip ospf authentication message-digest
ip ospf message-digest key 1 md5 hello
standby ip 150.50.45.45
standby preempt
standby priority 200
standby track s0 51
standby timer 7 17
ip nat inside
crypto map supermap
!
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
ip nat outside
!
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 rip authenticationmode md5
ip rip authentication key-chain 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
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
crypto map supermap
!
int lo0
ip add 44.44.44.44 255.255.255.0
!
int lo1

```

```

ip add 144.144.144.144 255.255.255.0
!
int lo2
ip add 145.145.145.145 255.255.255.0
!
key chain keyr4
key 1
  key-string hello
!
router ospf 100
network 150.50.24.0 0.0.0.255 area 0
network 150.50.45.0 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
network 145.145.145.0 0.0.0.255 area 1
area 1 authentication message-digest
area 0 authentication message-digest
redistribute rip subnets
!
router rip
no auto-summary
version 2
network 150.50.46.0
redistribute ospf 100
default-metric 2
passive bri0
distribute-list 11 in
!
router bgp 4799
network 144.144.144.0 mask 255.255.255.0
no auto-summary
no sync
neighbor 22.22.22.22 remote-as 4799
neighbor 22.22.22.22 description r1lo0-ibgp
neighbor 22.22.22.22 soft-reconfiguration in
neighbor 22.22.22.22 update-source loopback 0
neighbor 33.33.33.33 remote-as 4799
neighbor 33.33.33.33 description r1lo0-ibgp
neighbor 33.33.33.33 soft-reconfiguration in
neighbor 33.33.33.33 update-source loopback 0
neighbor 150.50.46.6 remote-as 6666
neighbor 150.50.46.6 description r6s0-ebgp
neighbor 150.50.46.6 soft-reconfiguration in
neighbor 150.50.46.6 default-originate
!
dialer-list 1 protocol ip permit
!
access-list 11 deny 10.10.77.0 0.0.0.255
access-list 11 deny 192.168.66.0 0.0.0.255
access-list 11 deny 172.16.45.0 0.0.0.255
!
ip nat inside source list 121 interface s0 overload
!

```

```

access-list 121 deny ip 172.16.45.0 0.0.0.255 10.10.77.0 0.0.0.255
access-list 121 deny ip 172.16.45.0 0.0.0.255 192.168.66.0 0.0.0.255
access-list 121 permit ip 172.16.45.0 0.0.0.255 any
!
int tunnel 46
ip address 10.46.46.4 255.255.255.0
tunnel source 44.44.44.44
tunnel destination 66.66.66.66
crypto map supermap
!
int tunnel 47
ip address 10.47.47.4 255.255.255.0
tunnel source 44.44.44.44
tunnel destination 77.77.77.77
crypto map supermap
!
router eigrp 467
network 10.46.46.0 0.0.0.255
network 10.47.47.0 0.0.0.255
network 172.16.44.0 0.0.0.255
no auto-summary
!
crypto isakmp policy 10
authentication pre-share
hash md5
crypto isakmp policy 20
authentication pre-share
hash sha
!
crypto isakmp key r4r6key address 66.66.66.66
crypto isakmp key r4r7key address 77.77.77.77
crypto isakmp key r4r5key address 55.55.55.55
!
crypto ipsec transform-set tset esp-des esp-md5-hmac
crypto ipsec transform-set tsetr5 esp-des
!
crypto map supermap 10 ipsec-isakmp
set peer 66.66.66.66
set transform-set tset
match address 146
crypto map supermap 20 ipsec-isakmp
set peer 77.77.77.77
set transform-set tset
match address 147
crypto map supermap 30 ipsec-isakmp
set peer 55.55.55.55
set transform-set tsetr5
match address 145
crypto map supermap local-address loopback 0
!
access-list 146 permit ip 172.16.45.0 0.0.0.255 192.168.66.0 0.0.0.255
access-list 147 permit ip 172.16.45.0 0.0.0.255 10.10.77.0 0.0.0.255
access-list 145 permit ip 145.145.145.0 0.0.0.255 156.156.156.0 0.0.0.255

```

```
!  
aaa new-model  
radius-server host 150.50.15.100 key hello  
aaa authentication login no_authentication none  
aaa authentication login lab8-2-4 group radius  
ip radius source-interface loopback0  
!  
line con 0  
  login authentication no_authentication  
line vty 0 4  
  login authentication lab8-2-4
```

r5config

```
-----  
r5#  
hostname r5  
!  
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  
!  
!acl for icmp rate-limiting  
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
isdn switch-type basic-ni
username r4 password hello
!
int e0
no 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 150.50.45.5 255.255.255.0
ip ospf priority 1
no shut
ip ospf authentication message-digest
ip ospf message-digest key 1 md5 hello
standby ip 150.50.45.45
standby preempt
standby priority 150
standby timer 7 17
crypto map supermap
!
int s0
encapsulation hdlc
ip address 150.50.57.5 255.255.255.0
no shut
ip authentication mode eigrp 57 md5
ip authentication key-chain eigrp 57 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
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

```

```

crypto map supermap
!
int lo0
ip add 55.55.55.55 255.255.255.0
!
int lo2
ip add 156.156.156.156 255.255.255.0
!
key chain keyr5
key 1
  key-string hello
!
router ospf 100
network 150.50.45.0 0.0.0.255 area 1
network 55.55.55.0 0.0.0.255 area 1
network 145.45.45.0 0.0.0.15 area 1
network 156.156.156.0 0.0.0.255 area 1
redistribute eigrp 57 subnets
area 1 authentication message-digest
!
router eigrp 57
no auto-summary
network 150.50.57.0 0.0.0.255
passive bri0
redistribute ospf 100 metric 10000 100 255 1 1500
distribute-list 11 in
!
dialer-list 1 protocol ip permit
!
access-list 11 deny 10.10.77.0 0.0.0.255
access-list 11 deny 192.168.66.0 0.0.0.255
access-list 11 deny 172.16.45.0 0.0.0.255
!
aaa new-model
radius-server host 150.50.15.100 key hello
aaa authentication login no_authentication none
aaa authentication login lab8-2-4 group radius
ip radius source-interface loopback0
!
crypto isakmp policy 10
  authentication pre-share
  hash sha
!
crypto isakmp key r4r5key address 44.44.44.44
!
crypto ipsec transform-set tset esp-des
crypto map supermap 10 ipsec-isakmp
  set peer 44.44.44.44
  set transform-set tset
  match address 154
crypto map supermap local-address loopback 0
!
line con 0

```

```
login authentication no_authentication
line vty 0 4
login authentication lab8-2-4
```

```
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
!
!acl for icmp rate-limiting
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
no 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
ip nat inside
!
int s0
encapsulation frame
frame-relay lmi-type ansi
ip address 150.50.46.6 255.255.255.0
no shut
ip rip authentication mode md5
ip rip authentication key-chain keyr6
ip nat outside
crypto map supermap
!
int lo0
ip add 66.66.66.66 255.255.255.0
!
int lo1
ip add 166.166.166.166 255.255.255.0
!
key chain keyr6
key 1
  key-string hello
!
router rip
no auto-summary
version 2
network 150.50.46.0
network 66.66.66.0
network 192.168.66.0
distribute-list 11 in
!
router bgp 6666
network 166.166.166.0 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
!
access-list 11 deny 10.10.77.0 0.0.0.255
access-list 11 deny 192.168.66.0 0.0.0.255
access-list 11 deny 172.16.45.0 0.0.0.255
!
ip nat inside source list 121 interface s0 overload

```



```

access-list 121 deny ip 192.168.66.0 0.0.0.255 10.10.77.0 0.0.0.255
access-list 121 deny ip 192.168.66.0 0.0.0.255 172.16.45.0 0.0.0.255
access-list 121 permit ip 192.168.66.0 0.0.0.255 any
!
int tunnel 64
ip address 10.46.46.6 255.255.255.0
tunnel source 66.66.66.66
tunnel destination 44.44.44.44
crypto map supermap
!
int tunnel 67
ip address 10.67.67.6 255.255.255.0
tunnel source 66.66.66.66
tunnel destination 77.77.77.77
crypto map supermap
!
router eigrp 467
network 10.46.46.0 0.0.0.255
network 10.67.67.0 0.0.0.255
network 192.168.66.0 0.0.0.255
no auto-summary
!
crypto isakmp policy 10
authentication pre-share
hash md5
!
crypto isakmp key r4r6key address 44.44.44.44
crypto isakmp key r6r7key address 77.77.77.77
!
crypto ipsec transform-set tset esp-des esp-md5-hmac
!
crypto map supermap 10 ipsec-isakmp
set peer 44.44.44.44
set transform-set tset
match address 164
crypto map supermap 20 ipsec-isakmp
set peer 77.77.77.77
set transform-set tset
match address 167
crypto map supermap local-address loopback 0
!
access-list 164 permit ip 192.168.66.0 0.0.0.255 172.16.45.0 0.0.0.255
access-list 167 permit ip 192.168.66.0 0.0.0.255 10.10.77.0 0.0.0.255
!
aaa new-model
radius-server host 150.50.15.100 key hello
aaa authentication login no_authentication none
aaa authentication login lab8-2-4 group radius
ip radius source-interface loopback0
!
line con 0
login authentication no_authentication
line vty 0 4

```

login authentication lab8-2-4

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

!

!acl for icmp rate-limiting

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

no 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
ip nat inside
!
int s0
encapsulation hdlc
clock rate 64000
ip address 150.50.57.7 255.255.255.0
no shut
ip authentication mode eigrp 57 md5
ip authentication key-chain eigrp 57 keyr7
ip summary-address eigrp 57 176.0.0.0 248.0.0.0
ip nat outside
crypto map supermap
!
int lo0
ip add 77.77.77.77 255.255.255.0
!
int lo2
ip add 178.178.178.178 255.255.255.0
!
int lo3
ip add 179.179.179.179 255.255.255.0
!
int lo4
ip add 180.180.180.180 255.255.255.0
!
key chain keyr7
key 1
  key-string hello
!
router eigrp 57
no auto-summary
version 2
network 150.50.57.0 0.0.0.255
network 77.77.77.0 0.0.0.255
network 10.10.77.0 0.0.0.255
distribute-list 11 in
!
access-list 11 deny 10.10.77.0 0.0.0.255
access-list 11 deny 192.168.66.0 0.0.0.255
access-list 11 deny 172.16.45.0 0.0.0.255
!
ip nat inside source list 121 interface s0 overload
!
access-list 121 deny ip 10.10.77.0 0.0.0.255 192.168.66.0 0.0.0.255

```

```

access-list 121 deny ip 10.10.77.0 0.0.0.255 172.16.45.0 0.0.0.255
access-list 121 permit ip 10.10.77.0 0.0.0.255 any
!
int tunnel 74
ip address 10.47.47.7 255.255.255.0
tunnel source 77.77.77.77
tunnel destination 44.44.44.44
crypto map supermap
!
int tunnel 76
ip address 10.67.67.7 255.255.255.0
tunnel source 77.77.77.77
tunnel destination 66.66.66.66
crypto map supermap
!
router eigrp 467
network 10.47.47.0 0.0.0.255
network 10.67.67.0 0.0.0.255
network 10.10.77.0 0.0.0.255
no auto-summary
!
crypto isakmp policy 10
authentication pre-share
hash md5
!
crypto isakmp key r4r7key address 44.44.44.44
crypto isakmp key r6r7key address 66.66.66.66
!
crypto ipsec transform-set tset esp-des esp-md5-hmac
!
crypto map supermap 10 ipsec-isakmp
set peer 44.44.44.44
set transform-set tset
match address 174
crypto map supermap 20 ipsec-isakmp
set peer 66.66.66.66
set transform-set tset
match address 176
crypto map supermap local-address loopback 0
!
access-list 174 permit ip 10.10.77.0 0.0.0.255 172.16.45.0 0.0.0.255
access-list 176 permit ip 10.10.77.0 0.0.0.255 192.168.66.0 0.0.0.255
!
aaa new-model
radius-server host 150.50.15.100 key hello
aaa authentication login no_authentication none
aaa authentication login lab8-2-4 group radius
ip radius source-interface loopback0
!
line con 0
login authentication no_authentication
line vty 0 4
login authentication lab8-2-4

```

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 6 3/6
set vlan 7 3/7
set vlan 11 3/13
set vlan 15 3/1,3/11,3/16
set vlan 45 3/4-5
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
!

pix1config
-----
pix1(config)#
!
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 nonat
access-list nonat 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 host 150.50.15.111 eq 123 0 0
conduit permit udp host 150.50.15.111 eq 123 0 0
!
logging on
logging host inside 150.50.111.101
logging trap 0
logging facility 22
logging timestamp
!
conduit permit tcp any eq 135 any
conduit permit tcp any eq 136 any
conduit permit tcp any eq 137 any
conduit permit tcp any eq 138 any
conduit permit tcp any eq 139 any
conduit permit udp any eq 135 any
conduit permit udp any eq 136 any
conduit permit udp any eq 137 any
conduit permit udp any eq 138 any
conduit permit udp any eq 139 any
!
service resetinbound
conduit permit tcp any eq 113 any
!

pix2config
-----
pix2(config)#
!

```

```
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 80 any  
conduit permit tcp host 150.50.22.100 eq 443 any  
alias (inside) 150.50.22.100  
!  
timeout xlate 00:30  
!  
!
```