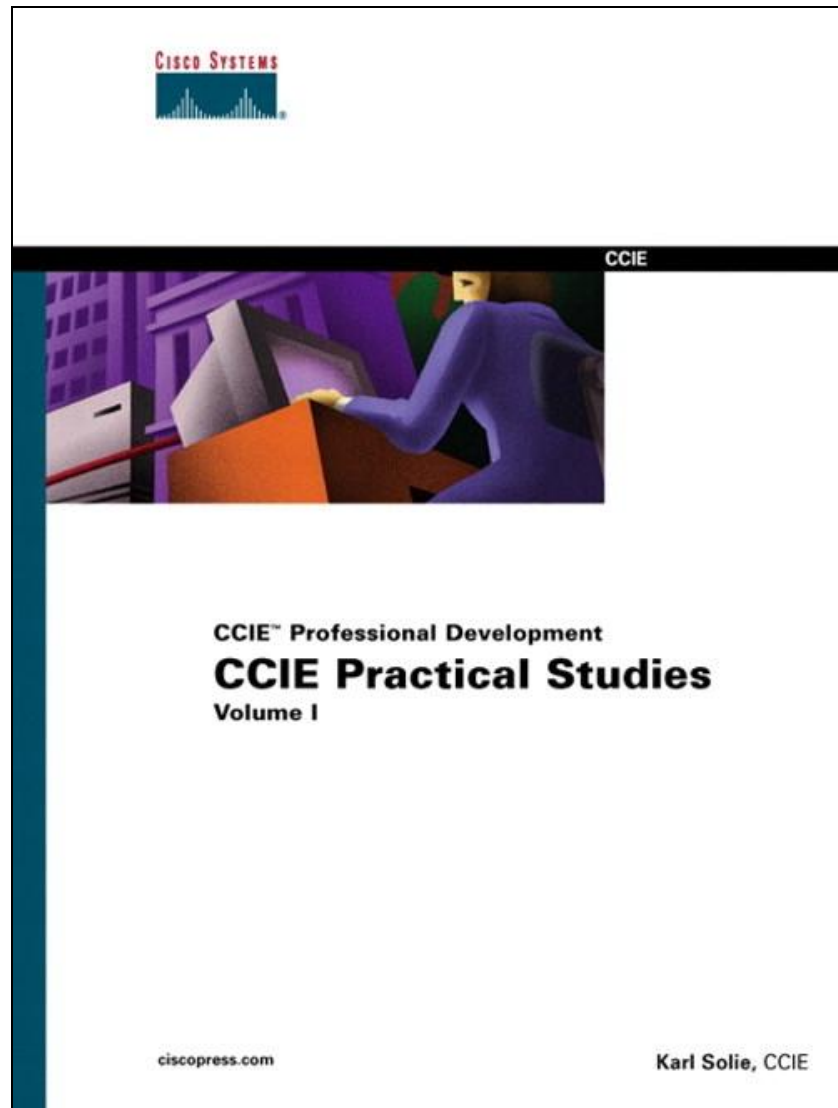


# Cisco Press CCIE Practical Studies

## CCIE Practice Lab:

### “Enchilada Solutions”



**Cisco Press CCIE Practical Studies**  
**CCIE Practice Lab:**  
**“Enchilada”**

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## Overview

The Cisco Press CCIE Practical Studies Volume 1 book contains 5 simulated CCIE lab exams in chapter 18, and the solutions are not in the book. As promised in the book, the solutions are posted are [www.ciscopress.com](http://www.ciscopress.com). This file contains the solutions to one of those labs.

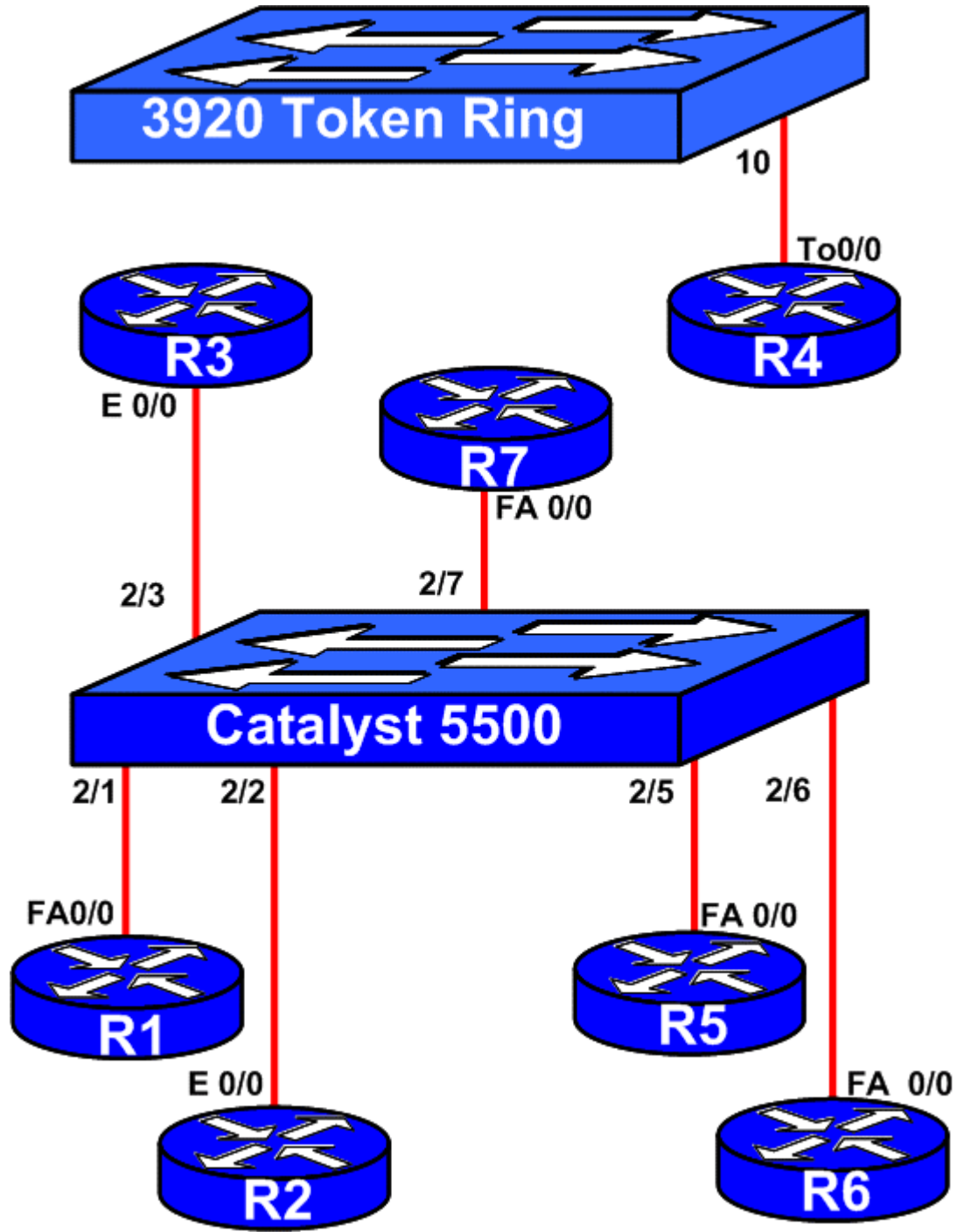
## Technical Details

The following table lists the interfaces on the routers used for the solution.

**Table 54-1: Names and Interfaces used**

CCIE PS Device Name	Interfaces Used	Frame-Relay Port	LAN Switch Port	VLAN or Ring Number
R1	Serial 0/0 FastEthernet 0/0 Bri 0/0	Serial 0/3	FA 2/1	VLAN 1
R2	Serial 0/0 Ethernet 0/0 Voice 1/0/0	Serial 0/1	FA 2/2	VLAN 20
R3	Serial 0/0 Ethernet 0/0	Serial 0/0	FA 2/3	VLAN 30
R4	Serial 0/0 TokenRing 0/0 Bri 0/0	Serial 0/2	Port 10 (T/R)	Ring 2
R5	FastEthernet 0/0 ATM 1/0		FA 2/5	VLAN 1
R6	FastEthernet 0/0 ATM 1/0		FA 2/6	VLAN 2
R7	Serial 0/0 Ethernet 0/0	Serial 1/0	2/7	VLAN 70,80,90

In the following figure, the LAN cabling is detailed, with port numbers shown as well.



## Lab Instruction Changes and Interpretations

With any complex lab, there might be various interpretations of the meaning of the requirement. Interpreting the problem statement is part of the difficulty of the lab. However, with the solution, it is sometimes helpful to more directly state how a requirement was interpreted. Also, there may be items in the lab exercises that may be changed at the next printing in order to correct typographic errors, unintended ambiguities, and the like. For this lab, the following lists the interpretations used when compiling these answers:

Section VII, Number 2: Change the text stating “Do not use the ospf **network** command” to read “Do not change the OSPF Network type on R1.”

## Initial Configurations

The following configurations are for the Frame Relay Switch and Access Server.

### Initial Configuration: FR Switch

```
! ! Cisco Press CCIE Practical Studies Volume I
!  
! Initial Configuration
!  
! Frame-Relay Switch
!  
!  
!version 12.2
no service single-slot-reload-enable
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!  
hostname FRS
!  
logging buffered 4096 debugging
logging rate-limit console 10 except errors
!  
ip subnet-zero
!  
!  
no ip finger
!  
no ip dhcp-client network-discovery
frame-relay switching
call rsvp-sync
!  
!  
!  
!  
!  
!  
!  
!  
interface FastEthernet0/0
no ip address
duplex auto
speed auto
!  
interface Serial0/0
no ip address
encapsulation frame-relay
clockrate 148000
frame-relay lmi-type ansi
frame-relay intf-type dce
```

```
frame-relay route 121 interface Serial0/3 120
!
interface Serial0/1
no ip address
encapsulation frame-relay
clockrate 64000
frame-relay lmi-type ansi
frame-relay intf-type dce
frame-relay route 111 interface Serial0/3 110
!
interface Serial0/2
no ip address
encapsulation frame-relay
clockrate 148000
frame-relay lmi-type ansi
frame-relay intf-type dce
frame-relay route 141 interface Serial0/3 140
!
interface Serial0/3
no ip address
encapsulation frame-relay
clockrate 64000
cdp enable
frame-relay lmi-type ansi
frame-relay intf-type dce
frame-relay route 110 interface Serial0/1 111
frame-relay route 120 interface Serial0/0 121
frame-relay route 130 interface Serial1/0 131
frame-relay route 140 interface Serial0/2 141
!
interface Serial1/0
no ip address
encapsulation frame-relay
clockrate 128000
frame-relay lmi-type ansi
frame-relay intf-type dce
frame-relay route 131 interface Serial0/3 130
!
interface Serial1/1
no ip address
!
interface Serial1/2
no ip address
!
interface Serial1/3
no ip address
!
ip kerberos source-interface any
ip classless
ip http server
```

```
!  
!  
!  
dial-peer cor custom  
!  
!  
!  
!  
line con 0  
transport input none  
line aux 0  
line vty 0 4  
login  
line vty 5 15  
login  
!  
no scheduler allocate  
end
```



**Initial Configuration: Access Server**

```
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname AS
!
logging rate-limit console 10 except errors
!
ip subnet-zero
!
!
no ip finger
no ip domain-lookup
ip host R1 2033 10.1.1.1
ip host FRS 2041 10.1.1.1
ip host R7 2039 10.1.1.1
ip host BB 2040 10.1.1.1
ip host R6 2038 10.1.1.1
ip host R5 2037 10.1.1.1
ip host R4 2036 10.1.1.1
ip host R3 2035 10.1.1.1
ip host R2 2034 10.1.1.1
ip host ETHSW 2043 10.1.1.1
ip host adtran1 2044 10.1.1.1
!
no ip dhcp-client network-discovery
call rsvp-sync
!
!
!
!
!
!
!
!
!
interface Loopback0
ip address 10.1.1.1 255.255.255.0
!
interface FastEthernet0/0
no ip address
shutdown
duplex auto
speed auto
!
ip kerberos source-interface any
ip classless
ip http server
!
```

```
!  
!  
dial-peer cor custom  
!  
!  
!  
!  
line con 0  
transport input none  
line 33 48  
no exec  
transport input all  
line aux 0  
line vty 0 4  
login  
line vty 5 15  
login  
!  
no scheduler allocate  
end
```

**Solutions:**

The following configurations list a suggested solution to all parts of this lab.

**Solution: Router1**

```
! Cisco Press CCIE Practical Studies Volume I
!
! Solved Configuration
!
! Router 1 - R1
!
!
!
version 12.2
no service single-slot-reload-enable
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname R1
!
logging rate-limit console 10 except errors
enable password cisco
!
username R4 password 0 cisco
clock timezone cst -6
ip subnet-zero
!
!
no ip finger
!
ip multicast-routing
ip dhcp-server 155.100.116.130
no ip dhcp-client network-discovery
ipx routing 1.1.1
isdn switch-type basic-ni
call rsvp-sync
!
!
!
!
!
!
dlsw local-peer peer-id 155.100.121.1
dlsw remote-peer 0 tcp 155.100.124.1 lf 1500 keepalive 0 timeout
180
dlsw remote-peer 0 tcp 155.100.122.1 dmac-output-list 700
dlsw bridge-group 1
!
```

```
!  
interface Loopback0  
ip address 155.100.121.1 255.255.255.0  
!  
interface FastEthernet0/0  
ip address 155.100.16.129 255.255.255.128  
ip pim sparse-dense-mode  
ip igmp join-group 224.0.7.7  
ip cgmp  
duplex auto  
speed auto  
ntp broadcast  
ipx network 16128  
ipx sap-incremental eigrp 2001  
bridge-group 1  
!  
interface Serial0/0  
no ip address  
encapsulation frame-relay  
no fair-queue  
cdp enable  
!  
interface Serial0/0.1 multipoint  
ip address 155.100.34.1 255.255.255.0  
ip pim sparse-dense-mode  
ip ospf message-digest-key 1 md5 cisco  
ipx network 340  
no ipx split-horizon eigrp 2001  
frame-relay map bridge 120 broadcast  
frame-relay map ip 155.100.34.2 110 broadcast  
frame-relay map ip 155.100.34.3 120 broadcast  
bridge-group 1  
!  
interface Serial0/0.2 point-to-point  
ip address 155.100.35.1 255.255.255.0  
frame-relay interface-dlci 130  
!  
interface Serial0/0.3 point-to-point  
ip address 155.100.2.1 255.255.255.0  
ipx network 20  
frame-relay interface-dlci 140  
!  
interface BRI0/0  
ip address 155.100.1.1 255.255.255.0  
encapsulation ppp  
dialer idle-timeout 305  
dialer map snapshot 1 name r4 broadcast 4085553040  
dialer map ip 155.100.1.4 name r4 broadcast 4085553040  
dialer map ip 155.100.1.4 name r4 broadcast 4085553041  
dialer load-threshold 5 either
```

```
dialer-group 10
isdn switch-type basic-ni
isdn spid1 40855530100101 5553010
isdn spid2 40855530110101 5553011
cdapi buffers regular 0
cdapi buffers raw 0
cdapi buffers large 0
snapshot server 5 dialer
ppp authentication chap
ppp multilink
!
interface Serial0/1
no ip address
!
router eigrp 2001
redistribute ospf 2001
redistribute igrp 2000
network 155.100.16.128 0.0.0.127
default-metric 10000 1000 254 1 1500
passive-interface Bri 0/0
no auto-summary
no eigrp log-neighbor-changes
!
router ospf 2001
log-adjacency-changes
area 0 authentication message-digest
area 10 virtual-link 155.100.127.1
redistribute connected subnets tag 2
redistribute eigrp 2001 subnets tag 1
redistribute igrp 2000 subnets tag 3
network 155.100.34.1 0.0.0.0 area 0
network 155.100.35.1 0.0.0.0 area 10
network 155.100.121.0 0.0.0.0 area 10
neighbor 155.100.34.2
neighbor 155.100.34.3
default-metric 10
!
router igrp 2000
redistribute eigrp 2001
redistribute ospf 2001
network 155.100.0.0
default-metric 10000 1000 254 1 1500
distance 150
!
ip kerberos source-interface any
ip classless
ip http server
ip pim rp-address 155.100.16.129
!
access-list 700 permit 2200.900e.0001 0000.0000.0000
```

```
dialer-list 10 protocol ip permit
!
!
!
ipx router eigrp 2001
network 340
network 16128
!
!
ipx router rip
no network 16128
no network 340
!
!
!
bridge 1 protocol ieee
!
dial-peer cor custom
!
!
!
!
line con 0
transport input none
line aux 0
line vty 0 4
login
line vty 5 15
login
!
ntp master 7
end
```

**Solution: Router2**

```
! ! Cisco Press CCIE Practical Studies Volume I
!
! Solved Configuration
!
! Router 2 - R2
!
!
version 12.2
no service single-slot-reload-enable
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
service udp-small-servers
!
hostname R2
!
logging rate-limit console 10 except errors
!
ip subnet-zero
!
!
no ip finger
!
ip multicast-routing
no ip dhcp-client network-discovery
ipx routing 2.2.2
call rsvp-sync
!
!
!
!
!
!
dlsw local-peer peer-id 155.100.122.1
dlsw remote-peer 0 tcp 155.100.121.1
dlsw bridge-group 1
!
!
interface Loopback0
ip address 155.100.122.1 255.255.255.0
!
interface Ethernet0/0
ip address 155.100.32.33 255.255.255.224
ip helper-address 155.100.16.130
ip pim sparse-dense-mode
half-duplex
ipx network 3232
bridge-group 1
```

```
!  
interface Serial0/0  
ip address 155.100.34.2 255.255.255.0  
ip pim sparse-dense-mode  
encapsulation frame-relay  
ip ospf message-digest-key 1 md5 cisco  
ip ospf priority 0  
ipx input-sap-filter 1000  
ipx network 340  
cdp enable  
frame-relay map ipx 340.3.3.3 111 broadcast  
frame-relay map ip 155.100.34.1 111 broadcast  
frame-relay map ip 155.100.34.3 111 broadcast  
frame-relay map ipx 340.1.1.1 111 broadcast  
frame-relay lmi-type ansi  
!  
interface BRI0/0  
no ip address  
shutdown  
cdapi buffers regular 0  
cdapi buffers raw 0  
cdapi buffers large 0  
!  
interface Serial0/1  
no ip address  
!  
router ospf 2001  
log-adjacency-changes  
area 0 authentication message-digest  
area 20 range 155.100.32.0 255.255.255.0  
area 20 range 155.100.122.0 255.255.255.0  
network 155.100.32.33 0.0.0.0 area 20  
network 155.100.34.2 0.0.0.0 area 0  
network 155.100.122.1 0.0.0.0 area 20  
!  
router bgp 2001  
no synchronization  
bgp log-neighbor-changes  
neighbor 155.100.125.1 remote-as 5  
neighbor 155.100.125.1 ebgp-multihop 5  
neighbor 155.100.125.1 update-source Loopback0  
neighbor 155.100.127.1 remote-as 2001  
neighbor 155.100.127.1 update-source Loopback0  
!  
ip kerberos source-interface any  
ip classless  
ip http server  
ip pim rp-address 155.100.16.129  
!  
access-list 1000 deny FFFFFFFF 0 fake*
```



```
access-list 1000 permit FFFFFFFF
!
!
!
ipx router eigrp 2001
network 3232
network 340
!
!
no ipx router rip
!
!
bridge 1 protocol ieee
!
voice-port 1/0/0
connection plar 1001
!
voice-port 1/0/1
!
dial-peer cor custom
!
!
!
dial-peer voice 100 voip
destination-pattern 1001
session target ipv4:155.100.123.1
!
dial-peer voice 200 pots
destination-pattern 2001
port 1/0/0
!
!
line con 0
transport input none
line aux 0
line vty 0 4
login
line vty 5 15
login
!
ntp clock-period 17207395
ntp peer 10.11.10.1
end
```

**Solution: Router3**

```
! ! Cisco Press CCIE Practical Studies Volume I
!
! Solved Configuration
!
! Router 3 - R3
!
!
!
version 12.2
no service single-slot-reload-enable
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname R3
!
logging rate-limit console 10 except errors
!
ip subnet-zero
!
!
no ip finger
!
no ip dhcp-client network-discovery
ipx routing 3.3.3
call rsvp-sync
!
!
!
!
!
bridge irb
!
!
!
interface Loopback0
ip address 155.100.123.1 255.255.255.0
!
interface Ethernet0/0
ip address 155.100.33.1 255.255.255.0
ip irdp
half-duplex
bridge-group 1
!
interface Serial0/0
ip address 155.100.34.3 255.255.255.0
encapsulation frame-relay
ip ospf message-digest-key 1 md5 cisco
```

```
ip ospf priority 0
ipx network 340
no fair-queue
frame-relay map bridge 121 broadcast
frame-relay map ipx 2.2.2 121 broadcast
frame-relay map ip 155.100.34.1 121 broadcast
frame-relay map ip 155.100.34.2 121 broadcast
frame-relay map ipx 340.1.1.1 121 broadcast
bridge-group 1
!
interface TokenRing0/0
no ip address
ring-speed 16
!
interface Serial0/1
no ip address
!
interface BVI1
no ip address
ipx network 330
ipx sap-incremental eigrp 2001
!
router ospf 2001
log-adjacency-changes
area 0 authentication message-digest
area 30 nssa
area 30 range 155.100.123.0 255.255.255.0
network 155.100.33.1 0.0.0.0 area 30
network 155.100.34.3 0.0.0.0 area 0
network 155.100.123.1 0.0.0.0 area 30
!
ip kerberos source-interface any
ip classless
ip http server
!
!
!
!
ipx router eigrp 2001
network 330
network 340
!
!
!
bridge 1 protocol ieee
bridge 1 route ip
bridge 1 route ipx
no bridge 1 bridge ip
!
voice-port 1/0/0
```

```
connection plar 2001
!
voice-port 1/0/1
!
dial-peer cor custom
!
!
!
dial-peer voice 101 voip
destination-pattern 2001
session target ipv4:155.100.122.1
!
dial-peer voice 2001 pots
destination-pattern 1001
port 1/0/0
!
!
line con 0
transport input none
line aux 0
line vty 0 4
login
line vty 5 15
login
!
ntp clock-period 17207961
ntp peer 10.11.10.1
end
```

**Solution: Router4**

```
! Cisco Press CCIE Practical Studies Volume I
!
! Solved Configuration
!
! Router 4 - R4
!
!
!
version 12.2
no service single-slot-reload-enable
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname R4
!
logging rate-limit console 10 except errors
enable password cisco
!
username r1 password 0 cisco
ip subnet-zero
!
!
no ip finger
!
no ip dhcp-client network-discovery
ipx routing 4.4.4
isdn switch-type basic-ni
call rsvp-sync
!
!
!
!
!
!
source-bridge ring-group 100
dlsw local-peer peer-id 155.100.124.1 lf 1500
dlsw remote-peer 0 tcp 155.100.121.1 lf 1500 keepalive 0 timeout
180
!
!
interface Loopback0
ip address 155.100.124.1 255.255.255.0
!
interface Loopback20
ip address 220.128.1.1 255.255.255.0
!
interface Ethernet0/0
```

```
no ip address
half-duplex
!
interface Serial0/0
ip address 155.100.2.4 255.255.255.0
encapsulation frame-relay
ipx network 20
no fair-queue
frame-relay interface-dlci 141
!
interface TokenRing0/0
ip address 10.11.10.1 255.255.255.0
ntp broadcast
ipx network 100
ring-speed 16
source-bridge 2 1 100
source-bridge spanning
!
interface BRI0/0
ip address 155.100.1.4 255.255.255.0
encapsulation ppp
dialer idle-timeout 305
dialer map ip 155.100.1.1 name r1 broadcast 4085553010
dialer map ip 155.100.1.1 name r1 broadcast 4085553011
dialer map snapshot 1 name r1 broadcast 4085553010
dialer load-threshold 5 either
dialer-group 10
isdn switch-type basic-ni
isdn spid1 40855530400101 5553040
isdn spid2 40855530410101 5553041
cdapi buffers regular 0
cdapi buffers raw 0
cdapi buffers large 0
snapshot client 5 8 dialer
ppp authentication chap
ppp multilink
!
interface Serial0/1
no ip address
shutdown
!
router igrp 2000
network 10.0.0.0
network 155.100.0.0
network 220.128.0.0
!
router bgp 4
no synchronization
bgp log-neighbor-changes
network 220.128.1.0
```

```
neighbor 155.100.127.1 remote-as 2001
neighbor 155.100.127.1 ebgp-multihop 5
neighbor 155.100.127.1 update-source Loopback0
neighbor 155.100.127.1 route-map setweight in
!
ip kerberos source-interface any
ip classless
ip http server
ip as-path access-list 101 permit _2001_
!
dialer-list 10 protocol ip permit
route-map setweight permit 10
match as-path 101
set weight 350
!
!
!
!
!
!
dial-peer cor custom
!
!
!
!
line con 0
transport input none
line aux 0
line vty 0 4
login
line vty 5 15
login
!
ntp server 155.100.16.129
end
```

**Solution: Router5**

```
! ! Cisco Press CCIE Practical Studies Volume I
!
! Solved Configuration
!
! Router 5 - R5
!
!
!
version 12.2
no service single-slot-reload-enable
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname R5
!
logging rate-limit console 10 except errors
!
ip subnet-zero
!
!
no ip finger
!
ip multicast-routing
no ip dhcp-client network-discovery
ipx routing 5.5.5
call rsvp-sync
!
!
!
!
!
!
!
!
interface Loopback0
ip address 155.100.125.1 255.255.255.0
ipx network DEAD
!
interface Loopback20
ip address 24.128.1.1 255.255.255.0
!
interface Loopback21
ip address 24.128.2.1 255.255.255.0
!
interface FastEthernet0/0
ip address 155.100.16.130 255.255.255.128
ip pim sparse-dense-mode
```



```
ip summary-address eigrp 2001 155.100.16.0 255.255.255.0 5
duplex auto
speed auto
ipx network 16128
ipx sap-incremental eigrp 2001
!
interface Serial0/0
no ip address
shutdown
clockrate 2000000
!
interface Serial0/1
no ip address
shutdown
clockrate 2000000
!
interface Serial0/2
no ip address
shutdown
clockrate 2000000
!
interface Serial0/3
no ip address
shutdown
clockrate 2000000
!
interface ATM1/0
atm pvc 56 0 115 aal5snap inarp 1
ip address 155.100.18.5 255.255.255.0
no atm ilmi-keepalive
!
router eigrp 2001
network 155.100.16.128 0.0.0.127
network 155.100.0.0
no auto-summary
no eigrp log-neighbor-changes
!
router bgp 5
no synchronization
bgp log-neighbor-changes
network 24.128.1.0 mask 255.255.255.0
network 24.128.2.0 mask 255.255.255.0
neighbor 155.100.122.1 remote-as 2001
neighbor 155.100.122.1 ebgp-multihop 5
neighbor 155.100.122.1 update-source Loopback0
neighbor 155.100.122.1 default-originate route-map checkroute
default-information originate
!
ip kerberos source-interface any
ip classless
```

```
ip http server
ip pim rp-address 155.100.16.129
!
access-list 20 permit 220.128.1.0 0.0.0.255
route-map checkroute permit 10
match ip address 20
!
!
!
!
ipx router eigrp 2001
network 16128
network DEAD
!
!
ipx router rip
no network 16128
!
!
ipx sap 5 fakefserver DEAD.0011.0011.0011 452 1
!
!
dial-peer cor custom
!
!
!
!
line con 0
transport input none
line aux 0
line vty 0 4
login
!
end
```

**Solution: Router6**

```
! ! Cisco Press CCIE Practical Studies Volume I
!
! Solved Configuration
!
! Router 6 - R6
!
!
!
version 12.2
no service single-slot-reload-enable
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname R6
!
logging rate-limit console 10 except errors
!
ip subnet-zero
!
!
no ip finger
!
no ip dhcp-client network-discovery
call rsvp-sync
!
!
!
!
!
!
!
!
!
!
interface Loopback0
ip address 155.100.128.1 255.255.255.0
!
interface FastEthernet0/0
ip address 155.100.17.1 255.255.255.0
duplex auto
speed auto
!
interface ATM1/0
atm pvc 65 0 116 aal5snap inarp 1
ip address 155.100.18.6 255.255.255.0
no atm ilmi-keepalive
!
router eigrp 2001
network 155.100.0.0
```

```
no auto-summary
no eigrp log-neighbor-changes
!
ip kerberos source-interface any
ip classless
ip http server
!
!
!
dial-peer cor custom
!
!
!
!
line con 0
transport input none
line aux 0
line vty 0 4
login
!
end
```

**Solution: Router7**

```
! ! Cisco Press CCIE Practical Studies Volume I
!
! Solved Configuration
!
! Router 7 - R7
!
!
!
version 12.2
no service single-slot-reload-enable
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname R7
!
logging rate-limit console 10 except errors
!
ip subnet-zero
!
!
no ip finger
!
no ip dhcp-client network-discovery
call rsvp-sync
!
!
!
!
!
!
!
!
!
!
interface Loopback0
ip address 155.100.127.1 255.255.255.0
!
interface FastEthernet0/0
no ip address
duplex auto
speed auto
!
interface FastEthernet0/0.7
encapsulation dot1Q 70
ip address 155.100.37.1 255.255.255.0
!
interface FastEthernet0/0.8
encapsulation dot1Q 80
ip address 155.100.38.1 255.255.255.0
```

```
!  
interface FastEthernet0/0.9  
encapsulation dot1Q 90  
ip address 155.100.39.1 255.255.255.0  
!  
interface Serial0/0  
ip address 155.100.35.2 255.255.255.0  
encapsulation frame-relay  
ip ospf network point-to-point  
ip ospf message-digest-key 1 md5 cisco  
no fair-queue  
frame-relay interface-dlci 131  
!  
interface Serial0/1  
no ip address  
!  
interface Serial0/2  
no ip address  
!  
interface Serial0/3  
no ip address  
!  
router ospf 2001  
log-adjacency-changes  
area 0 authentication message-digest  
area 10 range 155.100.127.0 255.255.255.0  
area 10 virtual-link 155.100.121.1 authentication-key cisco  
network 155.100.35.2 0.0.0.0 area 10  
network 155.100.37.1 0.0.0.0 area 70  
network 155.100.38.1 0.0.0.0 area 70  
network 155.100.39.1 0.0.0.0 area 70  
network 155.100.127.1 0.0.0.0 area 10  
distribute-list 80 in Serial0/0  
!  
router bgp 2001  
no synchronization  
bgp log-neighbor-changes  
neighbor 155.100.122.1 remote-as 2001  
neighbor 155.100.122.1 update-source Loopback0  
neighbor 155.100.124.1 remote-as 4  
neighbor 155.100.124.1 ebgp-multihop 4  
neighbor 155.100.124.1 update-source Loopback0  
!  
ip kerberos source-interface any  
ip classless  
ip http server  
!  
access-list 80 deny 10.0.0.0 0.255.255.255  
access-list 80 permit any  
!
```

```
!  
dial-peer cor custom  
!  
!  
!  
!  
line con 0  
transport input none  
line aux 0  
line vty 0 4  
login  
line vty 5 15  
login  
!  
end
```

**Solution: Cat 5500**

```
! ! Cisco Press CCIE Practical Studies Volume I
!
! Solved Configuration
!
! Ethernet Switch
!
!
!begin
!
# ***** NON-DEFAULT CONFIGURATION *****
!
!
#time: Thu Jan 17 2002, 11:35:29
!
#version 5.5(8)
!
set prompt cat5k
!
#system
set system name cat5k
!
#frame distribution method
set port channel all distribution mac both
!
#vtp
set vtp domain enchilada
set vlan 1 name default type ethernet mtu 1500 said 100001 state
active
set vlan 2 name VLAN0002 type ethernet mtu 1500 said 100002
state active
set vlan 20 name VLAN0020 type ethernet mtu 1500 said 100020
state active
set vlan 30 name VLAN0030 type ethernet mtu 1500 said 100030
state active
set vlan 70 name VLAN0070 type ethernet mtu 1500 said 100070
state active
set vlan 80 name VLAN0080 type ethernet mtu 1500 said 100080
state active
set vlan 90 name VLAN0090 type ethernet mtu 1500 said 100090
state active
set vlan 1002 name fddi-default type fddi mtu 1500 said 101002
state active
set vlan 1004 name fddinet-default type fddinet mtu 1500 said
101004 state activ
e stp ieee
set vlan 1005 name trnet-default type trbrf mtu 1500 said 101005
state active st
p ibm
```



```
set vlan 1003 name token-ring-default type trcrf mtu 1500 said
101003 state acti
ve mode srb aremaxhop 7 stemaxhop 7 backupcrf off
!
#ip
set interface sc0 70 155.100.37.2/255.255.255.0 155.100.37.255
set ip route 0.0.0.0/0.0.0.0          155.100.37.1
!
#set boot command
set boot auto-config non-recurring
!
#igmp
set igmp enable
!
#mls
set mls nde disable
!
# default port status is enable
!
!
#module 1 : 0-port Supervisor IIG
!
#module 2 : 24-port 10/100BaseTX Ethernet
set vlan 2      2/6
set vlan 20     2/2
set vlan 30     2/3
set port name   2/1  vlan1
set port name   2/2  vlan20
set port name   2/3  vlan30
set port name   2/5  vlan1
set port name   2/6  vlan2
set port name   2/7  trunkr7
set port name   2/9  dummytrunk
set multicast router 2/1,2/5
set trunk 2/7  on dot1q 1-1005
clear trunk 2/9  70,80,90
set trunk 2/9  on dot1q 1-69,71-79,81-89,91-1005
!
#module 3 empty
!
#module 4 empty
!
#module 5 empty
!
#module 15 empty
!
#module 16 empty
end
```