**Switch ALS1:**

ALS1#show running-config

Building configuration...

Current configuration : 2224 bytes

! Last configuration change at 22:47:26 UTC Sat Sep 14 2024

version 15.2

service timestamps debug datetime msec

service timestamps log datetime msec

no service password-encryption

service compress-config

!

hostname ALS1

!

boot-start-marker

boot-end-marker

!

logging discriminator EXCESS severity drops 6 msg-body drops EXCESSCOLL

logging buffered 50000

logging console discriminator EXCESS

!

no aaa new-model

!

!

--More--

\*Sep 14 22:47:35.793: %LINEPROTO-5-UPDOWN: Line protocol on Interface Port-channel2, changed state to up

\*Sep 14 22:47:35.885: %LINEPROTO-5-UPDOWN: Line protocol on Interface Port-channel5, changed state to up

!

!

no ip icmp rate-limit unreachable

!

!

no ip domain-lookup

no ip cef

no ipv6 cef

!

!

spanning-tree mode pvst

spanning-tree extend system-id

!

vlan internal allocation policy ascending

!

ip tcp synwait-time 5

!

!

!

!

interface Port-channel5

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

!

interface Port-channel2

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

!

interface Ethernet0/0

!

interface Ethernet0/1

!

interface Ethernet0/2

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 2 mode active

!

interface Ethernet0/3

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 2 mode active

!

interface Ethernet1/0

!

interface Ethernet1/1

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 5 mode active

!

interface Ethernet1/2

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 5 mode active

!

interface Ethernet1/3

!

interface Ethernet2/0

switchport access vlan 10

switchport mode access

!

interface Ethernet2/1

switchport access vlan 20

switchport mode access

!

interface Ethernet2/2

!

interface Ethernet2/3

!

interface Ethernet3/0

!

interface Ethernet3/1

!

interface Ethernet3/2

!

interface Ethernet3/3

!

interface Vlan1

no ip address

shutdown

!

ip forward-protocol nd

!

no ip http server

no ip http secure-server

!

!

control-plane

!

!

line con 0

exec-timeout 0 0

privilege level 15

logging synchronous

line aux 0

exec-timeout 0 0

privilege level 15

logging synchronous

line vty 0 4

login

!

!

end

**Switch ALS2:**

ALS2#show running-config

Building configuration...

Current configuration : 2224 bytes

!

! Last configuration change at 22:47:26 UTC Sat Sep 14 2024

!

version 15.2

service timestamps debug datetime msec

service timestamps log datetime msec

no service password-encryption

service compress-config

!

hostname ALS2

!

boot-start-marker

boot-end-marker

!

!

logging discriminator EXCESS severity drops 6 msg-body drops EXCESSCOLL

logging buffered 50000

logging console discriminator EXCESS

!

no aaa new-model

!

!

no ip icmp rate-limit unreachable

!

!

no ip domain-lookup

no ip cef

no ipv6 cef

!

!

spanning-tree mode pvst

spanning-tree extend system-id

!

vlan internal allocation policy ascending

!

ip tcp synwait-time 5

!

!

!

interface Port-channel4

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

!

interface Port-channel3

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

!

interface Ethernet0/0

!

interface Ethernet0/1

!

interface Ethernet0/2

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 3 mode active

!

interface Ethernet0/3

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 3 mode active

!

interface Ethernet1/0

!

interface Ethernet1/1

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 4 mode active

!

interface Ethernet1/2

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 4 mode active

!

interface Ethernet1/3

!

interface Ethernet2/0

switchport access vlan 10

switchport mode access

!

interface Ethernet2/1

switchport access vlan 20

switchport mode access

!

interface Ethernet2/2

!

interface Ethernet2/3

!

interface Ethernet3/0

!

interface Ethernet3/1

!

interface Ethernet3/2

!

interface Ethernet3/3

!

interface Vlan1

no ip address

shutdown

!

ip forward-protocol nd

!

no ip http server

no ip http secure-server

!

!

!

control-plane

!

!

line con 0

exec-timeout 0 0

privilege level 15

logging synchronous

line aux 0

exec-timeout 0 0

privilege level 15

logging synchronous

line vty 0 4

login

!

!

end

**Switch DLS1:**

DLS1#show running-config

Building configuration...

Current configuration : 2960 bytes

!

! Last configuration change at 22:53:13 UTC Sat Sep 14 2024

!

version 15.2

service timestamps debug datetime msec

service timestamps log datetime msec

no service password-encryption

service compress-config

!

hostname DLS1

!

boot-start-marker

boot-end-marker

!

!

logging discriminator EXCESS severity drops 6 msg-body drops EXCESSCOLL

logging buffered 50000

logging console discriminator EXCESS

!

no aaa new-model

!

!

no ip icmp rate-limit unreachable

!

!

ip dhcp pool V10

network 192.168.10.0 255.255.255.0

default-router 192.168.10.254

dns-server 8.8.8.8

!

!

no ip domain-lookup

no ip cef

no ipv6 cef

!

!

spanning-tree mode pvst

spanning-tree extend system-id

spanning-tree vlan 10 priority 24576

spanning-tree vlan 20 priority 28672

!

vlan internal allocation policy ascending

!

ip tcp synwait-time 5

!

!

!

interface Port-channel4

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

!

interface Port-channel2

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

!

interface Port-channel1

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

!

interface Ethernet0/0

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 1 mode active

!

interface Ethernet0/1

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 1 mode active

!

interface Ethernet0/2

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 2 mode active

!

interface Ethernet0/3

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 2 mode active

!

interface Ethernet1/0

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 4 mode active

!

interface Ethernet1/1

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 4 mode active

!

interface Ethernet1/2

no switchport

ip address 11.0.0.1 255.0.0.0

!

interface Ethernet1/3

!

interface Ethernet2/0

!

interface Ethernet2/1

!

interface Ethernet2/2

!

interface Ethernet2/3

!

interface Ethernet3/0

!

interface Ethernet3/1

!

interface Ethernet3/2

!

interface Ethernet3/3

!

interface Vlan1

no ip address

shutdown

!

interface Vlan10

ip address 192.168.10.254 255.255.255.0

!

interface Vlan20

ip address 192.168.20.253 255.255.255.0

!

!

router eigrp 100

network 11.0.0.0

network 192.168.1.0

network 192.168.10.0

network 192.168.20.0

!

ip forward-protocol nd

!

no ip http server

no ip http secure-server

!

!

!

control-plane

!

!

line con 0

exec-timeout 0 0

privilege level 15

logging synchronous

line aux 0

exec-timeout 0 0

privilege level 15

logging synchronous

line vty 0 4

login

!

!

end

**Switch DLS2:**

DLS2#show running-config

Building configuration...

Current configuration : 2972 bytes

!

! Last configuration change at 22:56:32 UTC Sat Sep 14 2024

!

version 15.2

service timestamps debug datetime msec

service timestamps log datetime msec

no service password-encryption

service compress-config

!

hostname DLS2

!

boot-start-marker

boot-end-marker

!

!

logging discriminator EXCESS severity drops 6 msg-body drops EXCESSCOLL

logging buffered 50000

logging console discriminator EXCESS

!

no aaa new-model

!

!

no ip icmp rate-limit unreachable

!

!

ip dhcp pool V20

network 192.168.20.0 255.255.255.0

default-router 192.168.20.254

dns-server 8.8.8.8

!

!

no ip domain-lookup

no ip cef

no ipv6 cef

!

spanning-tree mode pvst

spanning-tree extend system-id

spanning-tree vlan 10 priority 28672

spanning-tree vlan 20 priority 24576

!

vlan internal allocation policy ascending

!

ip tcp synwait-time 5

!

!

!

interface Port-channel5

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

!

interface Port-channel3

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

!

interface Port-channel1

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

!

interface Ethernet0/0

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 1 mode active

!

interface Ethernet0/1

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 1 mode active

!

interface Ethernet0/2

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 3 mode active

!

interface Ethernet0/3

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 3 mode active

!

interface Ethernet1/0

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 5 mode active

!

interface Ethernet1/1

switchport trunk allowed vlan 1,10,20

switchport trunk encapsulation dot1q

switchport mode trunk

channel-group 5 mode active

!

interface Ethernet1/2

no switchport

ip address 12.0.0.1 255.0.0.0

!

interface Ethernet1/3

!

interface Ethernet2/0

!

interface Ethernet2/1

!

interface Ethernet2/2

!

interface Ethernet2/3

!

interface Ethernet3/0

!

interface Ethernet3/1

!

interface Ethernet3/2

!

interface Ethernet3/3

!

interface Vlan1

no ip address

shutdown

!

interface Vlan10

ip address 192.168.10.253 255.255.255.0

!

interface Vlan20

ip address 192.168.20.254 255.255.255.0

!

!

router eigrp 100

network 12.0.0.0

network 192.0.0.0 0.255.255.255

network 192.168.10.0

network 192.168.20.0

!

ip forward-protocol nd

!

no ip http server

no ip http secure-server

!

!

control-plane

!

!

line con 0

exec-timeout 0 0

privilege level 15

logging synchronous

line aux 0

exec-timeout 0 0

privilege level 15

logging synchronous

line vty 0 4

login

!

!

end

**ISP:**

ISP#show running-config

Building configuration...

Current configuration : 1441 bytes

!

version 12.4

service timestamps debug datetime msec

service timestamps log datetime msec

no service password-encryption

!

hostname ISP

!

boot-start-marker

boot-end-marker

!

!

no aaa new-model

no ip icmp rate-limit unreachable

!

!

ip cef

no ip domain lookup

!

!

!

ip tcp synwait-time 5

!

!

!

interface FastEthernet0/0

ip address 13.0.0.1 255.0.0.0

duplex half

!

interface GigabitEthernet1/0

no ip address

shutdown

negotiation auto

!

interface GigabitEthernet2/0

no ip address

shutdown

negotiation auto

!

interface Serial3/0

no ip address

shutdown

serial restart-delay 0

!

interface Serial3/1

no ip address

shutdown

serial restart-delay 0

!

interface Serial3/2

no ip address

shutdown

serial restart-delay 0

!

interface Serial3/3

no ip address

shutdown

serial restart-delay 0

!

interface FastEthernet4/0

ip address 11.0.0.2 255.0.0.0

duplex full

speed auto

!

interface FastEthernet4/1

ip address 12.0.0.2 255.0.0.0

duplex full

speed auto

!

!

router eigrp 100

network 11.0.0.0

network 12.0.0.0

network 13.0.0.0

no auto-summary

!

ip forward-protocol nd

!

no ip http server

no ip http secure-server

!

!

no cdp log mismatch duplex

!

!

!

control-plane

!

!

!

gatekeeper

shutdown

!

!

line con 0

exec-timeout 0 0

privilege level 15

logging synchronous

stopbits 1

line aux 0

exec-timeout 0 0

privilege level 15

logging synchronous

stopbits 1

line vty 0 4

login

!

!

end