Projekt Munka tesztfázis

Topológia
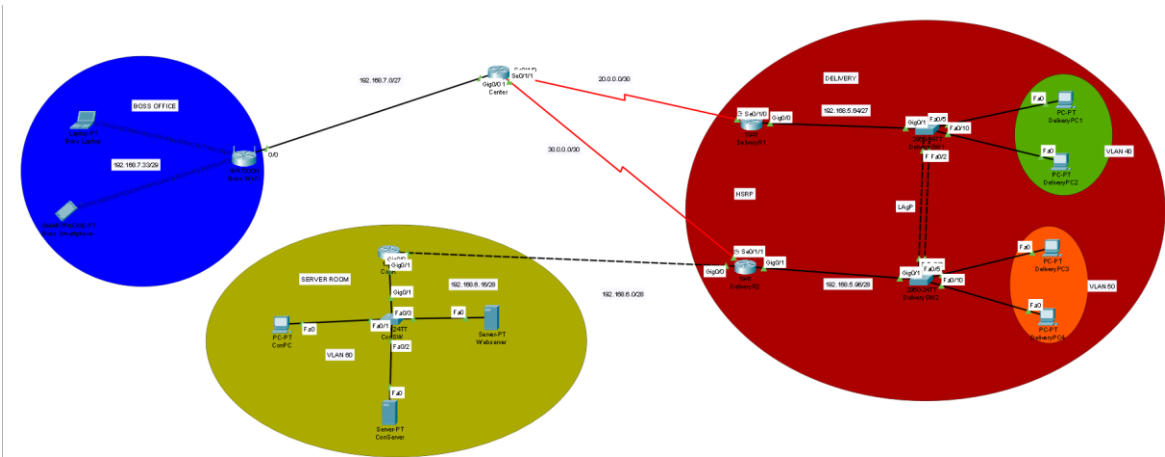
IP tábla

Eszköz	Interface	IP	IPv6	Subnet	Gateway
Center	Gig/0/0 Se0/1/0 Se0/1/1	192.168.7.1 20.0.0.1 30.0.0.1	--------------------------------- --------------------------------- ---------------------------------	/27 /30 /30	-------------------- -------------------- -------------------- -------------------- --------
Delivery R1	Gig0/0.40 Se0/1/0	192.168.5.65 20.0.0.2	2001:ACAD:DB8:5::2/64 --------------------------------	/27 /30	-------------------- -------------------- -------------------- ------
Delivery R2	Gig0/0.50 Se0/1/0	192.168.5.97 30.0.0.2	2001:ACAD:DB8:5::1/64 --------------------------------	/28 /30	-------------------- -------------------- -------------------- ------
ConR	Gig0/0 Gig0/1.60	192.168.6.2 192.168.6.17	-------------------------------- --------------------------------	/28 /28	-------------------- --------------------

					---------------------------------
Boss Wi-Fi	Internet LAN	192.168.7.2 192.168.7.33	--------------------------- --------------------------- ------------------------	/29 /29	192.168.7.1
DeliverySW1	VLAN 40	----------------------- -----	-------------	---------	--------------------- --------------------- ----
DeliverySW2	VLAN 50	----------------------- -----	-------------	---------	--------------------- --
DeliveryPC1	NIC	DHCP	SLAAC	/27	192.168.5.65
DeliveryPC2	NIC	DHCP	SLAAC	/27	192.168.5.65
DeliveryPC3	NIC	DCHP	SLAAC	/28	192.168.5.97
DeliveryPC4	NIC	DHCP	SLAAC	/28	192.168.5.97
DeliveryServer	NIC	DHCP	SLAAC	/27	192.168.5.85
Laptop	Wireless	DHCP	--------------	/29	192.168.7.1
Smartphone	Wireless	DHCP	--------------	/29	192.168.7.1
ConPC	NIC	192.168.6.20	Stateful	/28	192.168.6.17
ConServer	NIC	192.168.6.25	2001:ACAD:DB8:6::1/64	/28	192.168.6.17

Vlan tábla

Eszköz neve	Azonosító	Név	Portok	Hálózat
DeliverySW1	40 99	Delivery1 Trash	Fa0/5,Fa0/10,Fa0/3 Fa0/6-9,fa0/11- 24,Gig0/2	192.168.5.64/27
DeliverySW2	50 99	Delivery2 Trash	Fa0/5,Fa0/10	192.168.5.96/28

			Fa0/3-4,Fa0/6-9,Fa0/11-24,Gig0/2	
ConSW	60 99	ConVLAN Trash	Fa0/1, Fa0/2 Fa0/3-24,Gig0/2	192.168.6.16/28

EtherChannel

Protokoll	Port
LACP	Fa0/1, Fa0/2
LACP	Fa0/1, Fa0/2

Alapbeállítások:

Center:

- Password: cisco
- Minden jelszó titkosítva
- Konzol: console
- Telnet: class

DeliveryR1:

- Password: cisco
- Minden jelszó titkosítva
- Konzol: console
- Telnet: class

DeliveryR2:

- Password: cisco
- Minden jelszó titkosítva
- Konzol: console
- Telnet: class

DeliverySW1:

- Password: cisco
- Minden jelszó titkosítva
- Konzol: console
- Telnet: class

DliverySW2:

- Password: cisco
- Minden jelszó titkosítva
- Konzol: console
- Telnet: class

ConR:

- Password: cisco
- Minden jelszó titkosítva
- Konzol: console
- Telnet: class

ConSW:

- Password: cisco
- Minden jelszó titkosítva
- Konzol: console
- Telnet: class

Linux szerver:

Your name: taco_manager

Servers name: tacos_kft

Username: taco_loco

Password:tastytaco

Groups: taco_managers

Users:

- taco_lajka
- taco_varadi
- taco_enyedi

OSPF:

Center:

➢ Router ID: 10.10.10.10
➢ Folyamatazonosító: 10

> Hálózatok megadva:
> - 20.0.0.0/30
> - 30.0.0.0/30
> - 192.168.7.0/28

DeliveryR1:

> Router ID: 1.1.1.1
> Folyamatazonosító: 1
> Hálózatok megadva:
> - 20.0.0.0/30
> - 192.168.5.0/26
> - 192.168.5.64/27

DeliveryR2:

> Routerd ID: 2.2.2.2
> Folyamatazonosító: 2
> Hálózatok megadva:
> - 30.0.0.0/30
> - 192.168.5.0/26
> - 192.168.5.96/27
> - 192.168.6.0/28

ConR:

> Router ID: 3.3.3.3
> Folyamatazonosító: 3
> Hálózatok megadva:
> - 192.168.6.0/28
> - 192.168.6.16/28

```
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

     20.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C       20.0.0.0/30 is directly connected, Serial0/1/0
L       20.0.0.1/32 is directly connected, Serial0/1/0
     30.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C       30.0.0.0/30 is directly connected, Serial0/1/1
L       30.0.0.1/32 is directly connected, Serial0/1/1
     192.168.5.0/24 is variably subnetted, 3 subnets, 3 masks
O       192.168.5.0/26 [110/65] via 20.0.0.2, 00:03:27, Serial0/1/0
                       [110/65] via 30.0.0.2, 00:03:27, Serial0/1/1
O       192.168.5.64/27 [110/65] via 20.0.0.2, 00:04:07, Serial0/1/0
O       192.168.5.96/28 [110/65] via 30.0.0.2, 00:04:07, Serial0/1/1
     192.168.6.0/28 is subnetted, 3 subnets
O       192.168.6.0/28 [110/65] via 30.0.0.2, 00:03:27, Serial0/1/1
O       192.168.6.16/28 [110/66] via 30.0.0.2, 00:03:27, Serial0/1/1
O       192.168.6.32/28 [110/66] via 30.0.0.2, 00:03:27, Serial0/1/1
     192.168.7.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.7.0/27 is directly connected, GigabitEthernet0/0
L       192.168.7.1/32 is directly connected, GigabitEthernet0/0
```

SSH:

DeliveryR1:

domain-name: taco.hu

hostname: DeliveryR1

user admin secret admin

crypto key: 1024

version 2

line vty 0 15:

login local

transport input ssh

DeliveryR2:

domain-name: taco.hu

hostname: DeliveryR2

user admin secret admin

crypto key: 1024

version 2

    line vty 0 15:

    login local

    transport input ssh

ConR:

domain-name: taco.hu

hostname: ConR

user admin secret admin

crypto key: 1024

version 2

    line vty 0 15:

    login local

    transport input ssh

Center:

domain-name: taco.hu

hostname: Center

user admin secret admin

crypto key: 1024

version 2

line vty 0 15:

login local

transport input ssh

NAT:

```
Router#sh ip nat translations
Pro  Inside global    Inside local     Outside local    Outside global
---   209.165.201.5    192.168.6.19     ---              ---
tcp 209.165.201.5:80   192.168.6.19:80  192.168.5.104:1026 192.168.5.104:1026
```

HSRP:

DeliveryR1

```
GigabitEthernet0/0 - Group 0 (version 2)
  State is Active
    33 state changes, last state change 00:36:15
  Virtual IP address is 192.168.5.94
  Active virtual MAC address is 0000.0C07.AC00
    Local virtual MAC address is 0000.0C07.AC00 (v2 default)
  Hello time 3 sec, hold time 10 sec
    Next hello sent in 0.994 secs
  Preemption enabled
  Active router is local
  Standby router is 192.168.5.3, priority 100 (expires in 8 sec)
  Priority 101 (configured 101)
  Group name is hsrp-Gig0/0-0 (default)
```

DeliveryR2

```
GigabitEthernet0/1 - Group 0 (version 2)
  State is Standby
    13 state changes, last state change 00:37:30
  Virtual IP address is 192.168.5.94
  Active virtual MAC address is 0000.0C07.AC00
    Local virtual MAC address is 0000.0C07.AC00 (v2 default)
  Hello time 3 sec, hold time 10 sec
    Next hello sent in 1.188 secs
  Preemption enabled
  Active router is 192.168.5.2, priority 101 (expires in 6 sec)
    MAC address is 0000.0C07.AC00
  Standby router is local
  Priority 100 (default 100)
  Group name is hsrp-Gig0/1-0 (default)
```

Port biztonság:

DeliverySW1 1/2

```
interface FastEthernet0/5
 switchport access vlan 40
 switchport mode access
 switchport port-security
 switchport port-security mac-address sticky
 switchport port-security violation restrict
 switchport port-security mac-address sticky 00D0.BC5B.D8A9
 spanning-tree portfast
 spanning-tree bpduguard enable
```

DeliverySW1 2/2

```
interface FastEthernet0/10
 switchport access vlan 40
 switchport mode access
 switchport port-security
 switchport port-security mac-address sticky
 switchport port-security violation restrict
 switchport port-security mac-address sticky 0001.646A.BB84
 spanning-tree portfast
 spanning-tree bpduguard enable
```

DeliverySW2 1/2

```
interface FastEthernet0/5
 switchport access vlan 50
 switchport mode access
 switchport port-security
 switchport port-security mac-address sticky
 switchport port-security violation restrict
 switchport port-security mac-address sticky 0060.7097.8110
 spanning-tree portfast
 spanning-tree bpduguard enable
```

DeliverySW2 2/2

```
interface FastEthernet0/10
 switchport access vlan 50
 switchport mode access
 switchport port-security
 switchport port-security mac-address sticky
 switchport port-security violation restrict
 switchport port-security mac-address sticky 00D0.58D2.83A7
 spanning-tree portfast
 spanning-tree bpduguard enable
```

ConsSW

```
interface FastEthernet0/1
 switchport access vlan 60
 switchport mode access
 switchport port-security
 switchport port-security mac-address sticky
 switchport port-security violation restrict
 switchport port-security mac-address sticky 0002.1682.947A
 spanning-tree portfast
 spanning-tree bpduguard enable
!
interface FastEthernet0/2
 switchport access vlan 60
 switchport mode access
 switchport port-security
 switchport port-security mac-address sticky
 switchport port-security violation restrict
 switchport port-security mac-address sticky 0002.4A95.CB1A
 spanning-tree portfast
 spanning-tree bpduguard enable
```

Wi-Fi beállítások:

Wireless	Setup	Wireless	Security	Access Restrictions	Applications & Gaming	Administration	Status

Basic Wireless Settings

Help...

Network Mode: Mixed ⌄

Network Name (SSID):   BossWI-FI

Radio Band: Auto ⌄

Wide Channel: Auto ⌄

Standard Channel: 6 - 2.437GHz ⌄

SSID Broadcast: ◯ Enabled   🔵 Disabled

			Wireless-N Broadband Router	WRT300N
Wireless	Setup	Wireless	Security	Access Restrictions	Applications & Gaming	Administration	Status

Basic Wireless Settings Wireless Security Guest Network Wireless MAC Filter Advanced Wireless Settings

Wireless Security

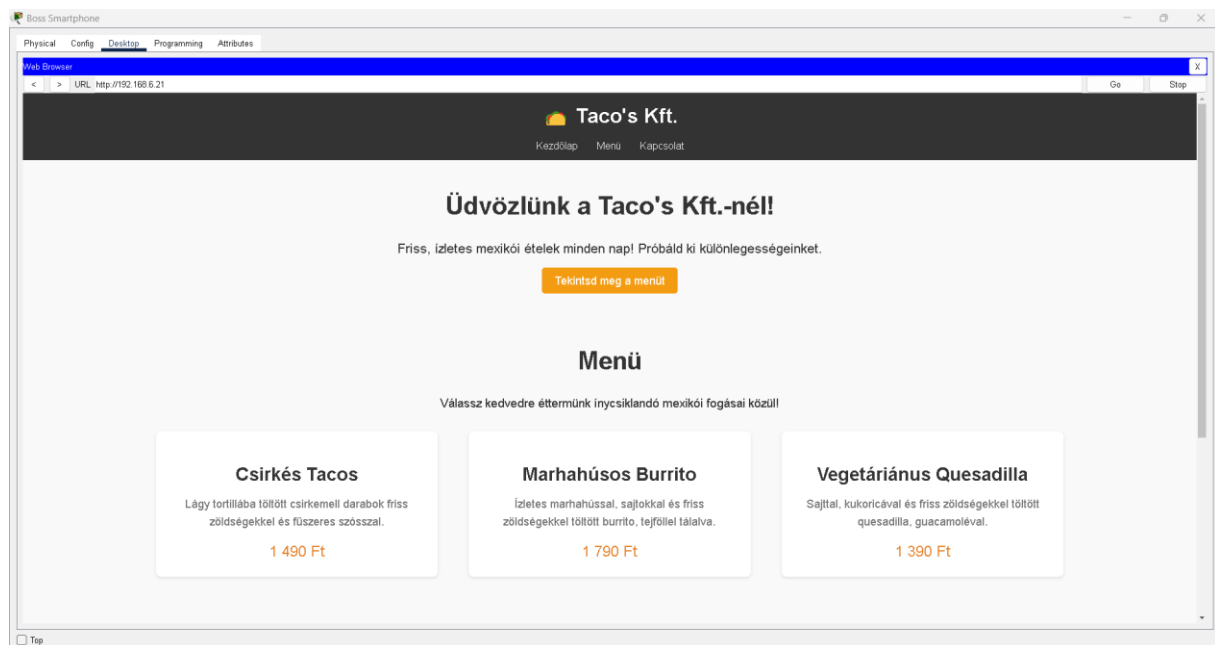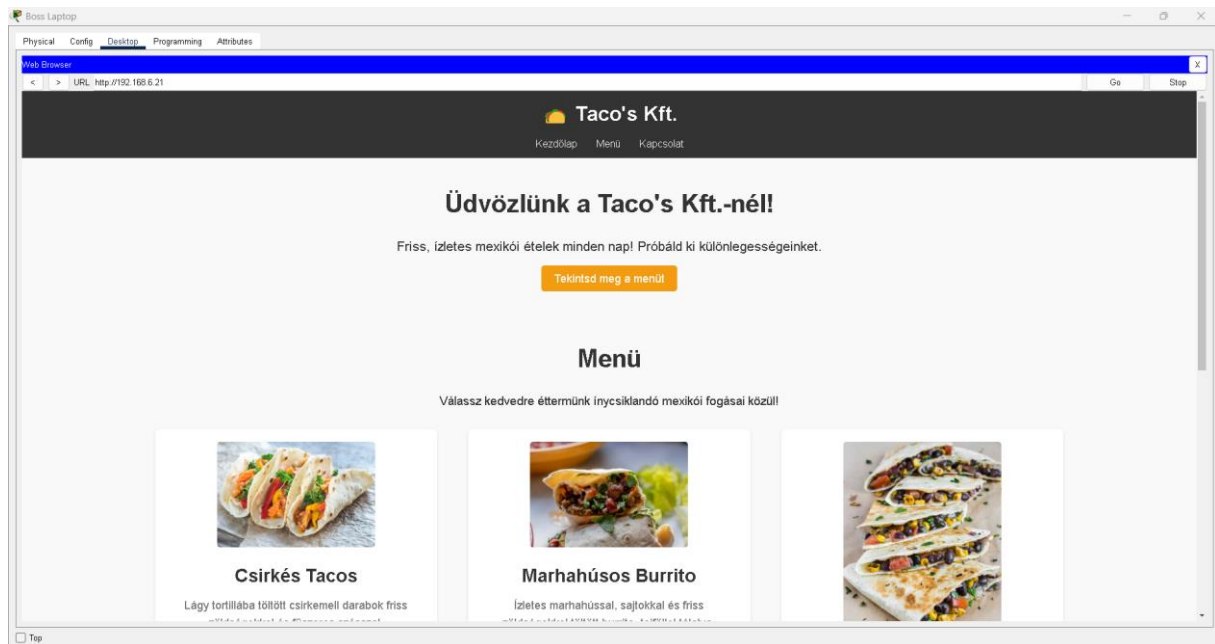Security Mode: WPA2 Personal

Encryption: AES

Passphrase: BossOffice12345

Key Renewal: 3600 seconds

Help...

ACL:

A 192.168.7.0-s hálózat csak weboldalon érje el a 192.168.6.21-es Webserver-t

Etherchannel:

DeliverySW1:

```
Flags:  D - down         P - in port-channel
        I - stand-alone s - suspended
        H - Hot-standby (LACP only)
        R - Layer3       S - Layer2
        U - in use       f - failed to allocate aggregator
        u - unsuitable for bundling
        w - waiting to be aggregated
        d - default port


Number of channel-groups in use: 1
Number of aggregators:           1

Group  Port-channel  Protocol    Ports
------+-------------+-----------+--------------------------

1      Po1(SU)          PAgP    Fa0/1(P) Fa0/2(P)
```

DeliverySW2:

```
Flags:  D - down         P - in port-channel
        I - stand-alone s - suspended
        H - Hot-standby (LACP only)
        R - Layer3       S - Layer2
        U - in use       f - failed to allocate aggregator
        u - unsuitable for bundling
        w - waiting to be aggregated
        d - default port


Number of channel-groups in use: 1
Number of aggregators:           1

Group  Port-channel  Protocol    Ports
------+-------------+-----------+---------------------------

1      Po1(SU)          PAgP    Fa0/1(P) Fa0/2(P)
```

Configok

Center

!

version 15.1

no service timestamps log datetime msec

no service timestamps debug datetime msec

service password-encryption

```
!
hostname Center
!
!
!
enable password 7 0822455D0A16
!
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
username DeliveryR1 password 7 082048430017
username DeliveryR2 password 7 082048430017
!
!
license udi pid CISCO1941/K9 sn FTX1524U846-
```

```
!
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
!
!
interface GigabitEthernet0/0
 ip address 192.168.7.1 255.255.255.224
 duplex auto
 speed auto
```

```
!
interface GigabitEthernet0/1
 no ip address
 duplex auto
 speed auto
!
interface Serial0/1/0
 ip address 20.0.0.1 255.255.255.252
 encapsulation ppp
 ppp authentication chap
 no keepalive
 ip access-group 101 in
!
interface Serial0/1/1
 ip address 30.0.0.1 255.255.255.252
 encapsulation ppp
 ppp authentication chap
 ip access-group 101 in
!
interface Vlan1
 no ip address
 shutdown
```

```
!
router ospf 10
 router-id 10.10.10.10
 log-adjacency-changes
 passive-interface GigabitEthernet0/0
 network 20.0.0.0 0.0.0.3 area 0
 network 30.0.0.0 0.0.0.3 area 0
 network 192.168.7.0 0.0.0.31 area 0
!
ip classless
ip route 0.0.0.0 0.0.0.0 GigabitEthernet0/1
!
ip flow-export version 9
!
!
access-list 101 deny ip any 0.0.0.0 255.255.255.240
!
banner motd !WARNING. You need authorization for this device!
!
!
!
```

```
!
line con 0
 password 7 082243401A160912
 login
!
line aux 0
!
line vty 0 4
 password 7 0822404F1A0A
 login
line vty 5 15
 password 7 0822404F1A0A
 login
!
!
!
end
```

DeliveryR1:

```
!
version 15.1
no service timestamps log datetime msec
```

```
no service timestamps debug datetime msec
service password-encryption
!
hostname DeliveryR1
!
!
!
enable password 7 0822455D0A16
!
!
ip dhcp excluded-address 192.168.5.65 192.168.5.70
!
ip dhcp pool LAN1
 network 192.168.5.64 255.255.255.224
 default-router 192.168.5.94
 dns-server 8.8.8.8
!
!
!
no ip cef
ipv6 unicast-routing
!
```

```
no ipv6 cef
!
!
!
!
license udi pid CISCO1941/K9 sn FTX15249UMV-
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
```

```
!
!
interface GigabitEthernet0/0
 ip address 192.168.5.2 255.255.255.192
 duplex auto
 speed auto
 ipv6 enable
 ipv6 dhcp server Stateful
 standby version 2
 standby 1 preempt
 standby 0 ip 192.168.5.94
 standby priority 101
 standby preempt
!
interface GigabitEthernet0/0.40
 encapsulation dot1Q 40
 ip address 192.168.5.65 255.255.255.224
 ipv6 address 2001:ACAD:DB8:5::2/64
 ipv6 enable
 ipv6 ospf 1 area 0
 standby version 2
!
```

```
interface GigabitEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/1/0
 ip address 20.0.0.2 255.255.255.252
 clock rate 2000000
!
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 1
 router-id 1.1.1.1
 log-adjacency-changes
```

```
 network 20.0.0.0 0.0.0.3 area 0
 network 192.168.5.0 0.0.0.63 area 0
 network 192.168.5.64 0.0.0.31 area 0
!
ipv6 router ospf 1
 router-id 1.1.1.1
 log-adjacency-changes
!
ip classless
!
ip flow-export version 9
!
!
!
 banner motd !WARNING. You need authorization for this
device!
 !
 !
 !
 !
line con 0
 password 7 082243401A160912
```

```
 login
!
line aux 0
!
line vty 0 4
 password 7 0822404F1A0A
 login
line vty 5 15
 password 7 0822404F1A0A
 login
!
!
!
end
```

DeliveryR2:

```
!
version 15.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
```

```
hostname DeliveryR2
!
!
!
enable password 7 0822455D0A16
!
!
ip dhcp excluded-address 192.168.5.97 192.168.5.102
!
ip dhcp pool LAN2
 network 192.168.5.96 255.255.255.240
 default-router 192.168.5.94
 dns-server 8.8.8.8
!
!
!
no ip cef
ipv6 unicast-routing
!
no ipv6 cef
!
!
```

!

!

license udi pid CISCO1941/K9 sn FTX1524O9WR-

!

!

!

!

!

!

!

!

!

!

spanning-tree mode pvst

!

!

!

!

!

interface GigabitEthernet0/0

```
 ip address 192.168.6.1 255.255.255.240
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 ip address 192.168.5.3 255.255.255.192
 duplex auto
 speed auto
 standby version 2
 standby 0 ip 192.168.5.94
 standby preempt
!
interface GigabitEthernet0/1.50
 encapsulation dot1Q 50
 ip address 192.168.5.97 255.255.255.240
 ipv6 address 2001:ACAD:DB8:5::1/64
 ipv6 ospf 1 area 0
 standby version 2
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
```

```
 shutdown
!
interface Serial0/1/1
 ip address 30.0.0.2 255.255.255.252
 clock rate 2000000
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 2
 router-id 2.2.2.2
 log-adjacency-changes
 network 30.0.0.0 0.0.0.3 area 0
 network 192.168.5.0 0.0.0.63 area 0
 network 192.168.5.96 0.0.0.15 area 0
 network 192.168.6.0 0.0.0.15 area 0
!
ipv6 router ospf 1
 router-id 2.2.2.2
 log-adjacency-changes
!
```

```
ip classless

ip route 209.165.201.0 255.255.255.0 192.168.6.2

!

ip flow-export version 9

!

!

!

banner motd !WARNING. You need authorization for this device!

!

!

!

!

line con 0

 password 7 082243401A160912

 login

!

line aux 0

!

line vty 0 4

 password 7 0822404F1A0A

 login
```

```
line vty 5 15
 password 7 0822404F1A0A
 login
!
!
!
end

DeliverySW1:
!
version 15.0
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname DeliverySW1
!
enable password 7 0822455D0A16
!
!
!
ip ssh version 2
```

```
ip domain-name taco.com
!
username admin secret 5
$1$mERr$oixFHbQeZPA/RsivKDJhf.
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface Port-channel1
 switchport mode trunk
!
interface FastEthernet0/1
 switchport mode trunk
 channel-group 1 mode auto
!
interface FastEthernet0/2
 switchport mode trunk
 channel-group 1 mode auto
!
interface FastEthernet0/3
```

```
 switchport access vlan 40

 ip dhcp snooping trust

 switchport mode access

!

interface FastEthernet0/4

!

interface FastEthernet0/5

 switchport access vlan 40

 switchport mode access

 switchport port-security

 switchport port-security mac-address sticky

 switchport port-security violation restrict

 switchport port-security mac-address sticky
00D0.BC5B.D8A9

 spanning-tree portfast

 spanning-tree bpduguard enable

!

interface FastEthernet0/6

 switchport access vlan 99

 shutdown

!

interface FastEthernet0/7
```

```
  switchport access vlan 99
  shutdown
!
interface FastEthernet0/8
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/9
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/10
 switchport access vlan 40
 switchport mode access
 switchport port-security
 switchport port-security mac-address sticky
 switchport port-security violation restrict
 switchport port-security mac-address sticky
0001.646A.BB84
 spanning-tree portfast
 spanning-tree bpduguard enable
!
```

```
interface FastEthernet0/11
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/12
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/13
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/14
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/15
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/16
 switchport access vlan 99
```

```
 shutdown
!
interface FastEthernet0/17
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/18
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/19
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/20
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/21
 switchport access vlan 99
 shutdown
!
```

```
interface FastEthernet0/22
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/23
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/24
 switchport access vlan 99
 shutdown
!
interface GigabitEthernet0/1
 ip dhcp snooping trust
 switchport mode trunk
!
interface GigabitEthernet0/2
 switchport access vlan 99
 shutdown
!
interface Vlan1
 no ip address
```

```
 shutdown
!
interface Vlan40
 ip address 192.168.5.73 255.255.255.224
!
banner motd !WARNING. You need authorization for this device!
 !
 !
 !
line con 0
 password 7 082243401A160912
 login
!
line vty 0 4
 password 7 0822404F1A0A
 login local
 transport input ssh
line vty 5 15
 password 7 0822404F1A0A
 login local
 transport input ssh
```

```
!
!
!
!
end

DeliverySW2:
!
version 15.0
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname DeliverySW2
!
enable password 7 0822455D0A16
!
!
!
ip ssh version 2
ip domain-name taco.com
!
```

```
username admin secret 5
$1$mERr$vTbHul1N28cEp8lkLqr0f/
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface Port-channel1
 switchport mode trunk
!
interface FastEthernet0/1
 switchport mode trunk
 channel-group 1 mode desirable
!
interface FastEthernet0/2
 switchport mode trunk
 channel-group 1 mode desirable
!
interface FastEthernet0/3
 switchport access vlan 99
 shutdown
```

```
!
interface FastEthernet0/4
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/5
 switchport access vlan 50
 switchport mode access
 switchport port-security
 switchport port-security mac-address sticky
 switchport port-security violation restrict
 switchport port-security mac-address sticky
0060.7097.8110
 spanning-tree portfast
 spanning-tree bpduguard enable
!
interface FastEthernet0/6
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/7
 switchport access vlan 99
```

```
 shutdown
!
interface FastEthernet0/8
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/9
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/10
 switchport access vlan 50
 switchport mode access
 switchport port-security
 switchport port-security mac-address sticky
 switchport port-security violation restrict
 switchport port-security mac-address sticky 00D0.58D2.83A7
 spanning-tree portfast
 spanning-tree bpduguard enable
!
interface FastEthernet0/11
```

```
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/12
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/13
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/14
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/15
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/16
 switchport access vlan 99
 shutdown
```

```
!
interface FastEthernet0/17
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/18
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/19
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/20
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/21
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/22
```

```
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/23
 switchport access vlan 99
 shutdown
!
interface FastEthernet0/24
 switchport access vlan 99
 shutdown
!
interface GigabitEthernet0/1
 ip dhcp snooping trust
 switchport mode trunk
!
interface GigabitEthernet0/2
 switchport access vlan 99
 shutdown
!
interface Vlan1
 no ip address
 shutdown
```

```
!
interface Vlan50
 ip address 192.168.5.109 255.255.255.240
!
banner motd !WARNING. You need authorization for this device!
!
!
!
line con 0
 password 7 082243401A160912
 login
!
line vty 0 4
 password 7 0822404F1A0A
 login local
 transport input ssh
line vty 5 15
 password 7 0822404F1A0A
 login local
 transport input ssh
!
```

!

!

!

end

ConR:

!

version 15.1

no service timestamps log datetime msec

no service timestamps debug datetime msec

service password-encryption

!

hostname ConR

!

!

!

enable password 7 0822455D0A16

!

!

!

!

!

```
!
ip cef
ipv6 unicast-routing
!
no ipv6 cef
!
!
!
!
license udi pid CISCO1941/K9 sn FTX1524P5FJ-
!
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
```

```
!
!
!
!
!
!
interface GigabitEthernet0/0
 ip address 192.168.6.2 255.255.255.240
 ip nat outside
 duplex auto
 speed auto
!
interface GigabitEthernet0/0.60
 no ip address
!
interface GigabitEthernet0/1
 ip address 192.168.6.33 255.255.255.240
 ip nat inside
 duplex auto
 speed auto
!
interface GigabitEthernet0/1.60
```

```
  encapsulation dot1Q 60
  ip address 192.168.6.17 255.255.255.240
  ipv6 enable
  ipv6 ospf 1 area 0
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 3
 router-id 3.3.3.3
 log-adjacency-changes
 network 192.168.6.32 0.0.0.15 area 0
 network 192.168.6.16 0.0.0.15 area 0
 network 192.168.6.0 0.0.0.15 area 0
!
ipv6 router ospf 1
 router-id 3.3.3.3
 log-adjacency-changes
!
ip nat inside source static 192.168.6.19 209.165.201.5
ip classless
```

```
ip route 192.168.5.96 255.255.255.240 192.168.6.1
!
ip flow-export version 9
!
!
!
banner motd !WARNING. You need authorization for this
device!
!
!
!
!
line con 0
 password 7 082243401A160912
 login
!
line aux 0
!
line vty 0 4
 password 7 0822404F1A0A
 login
line vty 5 15
```

```
 password 7 0822404F1A0A
 login
!
!
!
end

ConSW:
!
version 15.0
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname ConSW
!
enable password 7 0822455D0A16
!
!
!
ip ssh version 2
ip domain-name taco.com
```

```
!
username admin secret 5
$1$mERr$vTbHul1N28cEp8lkLqr0f/
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1
 switchport access vlan 60
 switchport mode access
 switchport port-security
 switchport port-security mac-address sticky
 switchport port-security violation restrict
 switchport port-security mac-address sticky
0002.1682.947A
 spanning-tree portfast
 spanning-tree bpduguard enable
!
interface FastEthernet0/2
 switchport access vlan 60
```

```
 switchport mode access

 switchport port-security

 switchport port-security mac-address sticky

 switchport port-security violation restrict

 switchport port-security mac-address sticky
0002.4A95.CB1A

 spanning-tree portfast

 spanning-tree bpduguard enable

 !

 interface FastEthernet0/3

 !

 interface FastEthernet0/4

 !

 interface FastEthernet0/5

 !

 interface FastEthernet0/6

 !

 interface FastEthernet0/7

 !

 interface FastEthernet0/8

 !

 interface FastEthernet0/9
```

!

interface FastEthernet0/10

!

interface FastEthernet0/11

!

interface FastEthernet0/12

!

interface FastEthernet0/13

!

interface FastEthernet0/14

!

interface FastEthernet0/15

!

interface FastEthernet0/16

!

interface FastEthernet0/17

!

interface FastEthernet0/18

!

interface FastEthernet0/19

!

interface FastEthernet0/20

```
!
interface FastEthernet0/21
!
interface FastEthernet0/22
!
interface FastEthernet0/23
!
interface FastEthernet0/24
!
interface GigabitEthernet0/1
 switchport mode trunk
!
interface GigabitEthernet0/2
!
interface Vlan1
 no ip address
 shutdown
!
interface Vlan60
 ip address 192.168.6.18 255.255.255.240
!
```

```
banner motd !WARNING. You need authorization for this device!
!
!
!
line con 0
 password 7 082243401A160912
 login
!
line vty 0 4
 password 7 0822404F1A0A
 login local
 transport input ssh
line vty 5 15
 password 7 0822404F1A0A
 login local
 transport input ssh
!
!
!
!
end
```