Ağ Yöneticileri Derneği
CCNA2 LAB 8 - PROJE ÇÖZÜMÜ
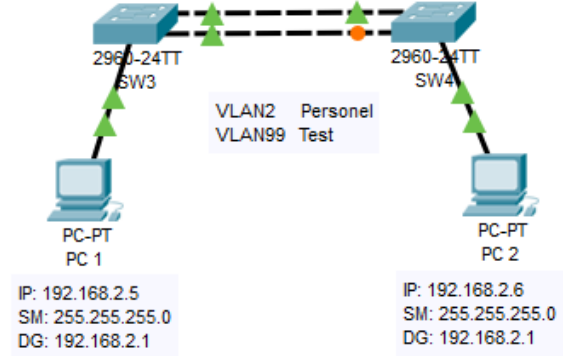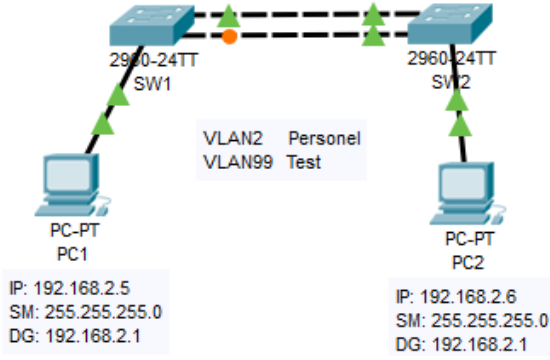## EtherChannel Uygulaması

```
ETHERCHANNEL
PaGP (Cisco)

desirable  -  desirable
desirable  -  auto
on         -  on   (protokole gerek yok)
```

```
ETHERCHANNEL
LACP (IEEE Standard)

active  -  active
active  -  passive
on      -  on   (protokole gerek yok)
```


2960-24TT
SW1

2960-24TT
SW2

VLAN2   Personel
VLAN99   Test

2960-24TT
SW3

VLAN2   Personel
VLAN99   Test

2960-24TT
SW4

PC-PT
PC1

IP: 192.168.2.5
SM: 255.255.255.0
DG: 192.168.2.1

PC-PT
PC2

IP: 192.168.2.6
SM: 255.255.255.0
DG: 192.168.2.1

PC-PT
PC 1

IP: 192.168.2.5
SM: 255.255.255.0
DG: 192.168.2.1

PC-PT
PC 2

IP: 192.168.2.6
SM: 255.255.255.0
DG: 192.168.2.1

// ADIM1:   VLAN'lerin Oluşturulması ve Portların VLAN'lere atanması

//SW1
Switch(config)# **hostname SW1**
SW1(config)# **vlan 2**
SW1(config-vlan)# **name personel**
SW1(config-vlan)# **vlan 99**
SW1(config-vlan)# **name test**
SW1(config-vlan)# **exit**

SW1(config)# **interface FastEthernet 0/3**
SW1(config-if)# **switchport mode access**
SW1(config-if)# **switchport access vlan 2**

//SW2
Switch(config)# **hostname SW3**
SW2 (config)# **vlan 2**
SW2(config-vlan)# **name personel**
SW2(config-vlan)# **vlan 99**
SW2(config-vlan)# **name test**
SW2(config-vlan)# **exit**

SW2(config)# **interface FastEthernet 0/3**
SW2(config-if)# **switchport mode access**
SW2(config-if)# **switchport access vlan 2**

VLAN kontrol komutu: **show vlan brief**
TRUNK Interface kontrol komutu: **show interface trunk**

//SW3
Switch(config)# **hostname SW3**
SW1(config)# **vlan 2**
SW1(config-vlan)# **name personel**
SW1(config-vlan)# **vlan 99**
SW1(config-vlan)# **name test**
SW1(config-vlan)# **exit**

SW1(config)# **interface FastEthernet 0/3**
SW1(config-if)# **switchport mode access**
SW1(config-if)# **switchport access vlan 2**

//SW4
Switch(config)# **hostname SW4**
SW4(config)# **vlan 2**
SW4(config-vlan)# **name personel**
SW4(config-vlan)# **vlan 99**
SW4(config-vlan)# **name test**
SW4(config-vlan)# **exit**

SW4(config)# **interface FastEthernet 0/3**
SW4(config-if)# **switchport mode access**
SW4(config-if)# **switchport access vlan 2**

VLAN kontrol komutu: **show vlan brief**
TRUNK Interface kontrol komutu: **show interface trunk**

// ADIM2: EtherChannel (PaGP) Yapılandırması:	// ADIM2: EtherChannel (LACP) Yapılandırması:
//SW1 ve SW2	//SW3 ve SW4
interface range Fa 0/1 – 2	interface range Fa 0/1 - 2
speed auto ---- default "auto" İki uçta da aynı olmalı	speed auto
duplex auto ---- default "auto" İki uçta da aynı olmalı	duplex auto
channel-group 1 mode desirable	channel-group 1 mode active
shutdown	shutdown
exit	exit
interface port-channel 1	interface port-channel 1
switchport mode trunk	switchport mode trunk
switchport trunk allowed vlan 2,99	switchport trunk allowed vlan 2,99
exit	end
interface range Fa 0/1 – 2	interface range Fa 0/1 – 2
no shut	no shut
wr	wr
EtherChannel kontrol komutu: **show etherchannel summary**	EtherChannel kontrol komutu: **show etherchannel summary**
PortChannel interface incelemesi: **show interface Portchannel 1**	PortChannel interface incelemesi: **show interface Portchannel 1**
TRUNK Interface kontrol komutu: **show interface trunk**	TRUNK Interface kontrol komutu: **show interface trunk**

```
SW1#show etherchannel summary
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)
```

Şekil 1 "show etherchannel summary"   PAgP

```
SW3#sh etherchannel summary
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)         LACP       Fa0/1(P)  Fa0/2(P)
```

Şekil 2 "show etherchannel summary"   LACP

Not: Packet Tracer'da "show interface PortChannel 1" komutu çalışmamaktadır.

Özet konfigürasyon çıktısı	
SW1#sh running-config (komutun ilgili kısmı listelenmiştir.)	SW3#sh running-config (komutun ilgili kısmı listelenmiştir.)
interface Port-channel1 switchport trunk allowed vlan 2,99 switchport mode trunk ! interface FastEthernet0/1 switchport trunk allowed vlan 2,99 switchport mode trunk channel-group 1 mode desirable ! interface FastEthernet0/2 switchport trunk allowed vlan 2,99 switchport mode trunk channel-group 1 mode desirable !	interface Port-channel1 switchport trunk allowed vlan 2,99 switchport mode trunk ! interface FastEthernet0/1 switchport trunk allowed vlan 2,99 switchport mode trunk channel-group 1 mode active ! interface FastEthernet0/2 switchport trunk allowed vlan 2,99 switchport mode trunk channel-group 1 mode active !