

ÖDEV: BİLGİSAYAR AĞLARI FİNAL ÖDEVİ

ADI SOYADI: ADNAN GÖKMEN

ÖĞRENCİ NUMARASI: 19360859105

Adım 1:

"3 adet switch" ve "9 adet PC" öğelerini sürükleyerek çalışma alanına yerleştirdim.

Adım 2:

Her bir switch ve PC'ye isim verdim. Bunun için "hostname" komutunu kullandım.

```
Switch>enable
```

```
Switch#configure terminal
```

```
Switch(config)#hostname Switch1
```

Bu adımları tüm cihazlar için tekrarlayıp isimlendirdim.

Adım 3:

Cihazlara erişim için ve güvenlik açısından şifreler ayarladım.

Bunun için aşağıdaki komutları kullandım. Her switch için bunu tekrarladım.

```
Switch1(config)
```

```
#enable secret PASSWORD
```

```
Switch1(config)#line console 0
```

```
Switch1(config-line)#password PASSWORD
```

```
Switch1(config-line)#login
```

```
Switch1(config-line)#exit
```

```
Switch1(config)#line vty 0 15
```

```
Switch1(config-line)#password PASSWORD
```

```
Switch1(config-line)#login
```

```
Switch1(config-line)#exit
```

Adım 4:

VLAN oluşturdum ve cihazları grupladım. Cihazlar arası bağlantı için kablo ve portları kullandım.

Her bir PC için IP adresi ve alt ağ maskelerini girdim.

Adım 5:

IP adreslerini yapılandırdım.

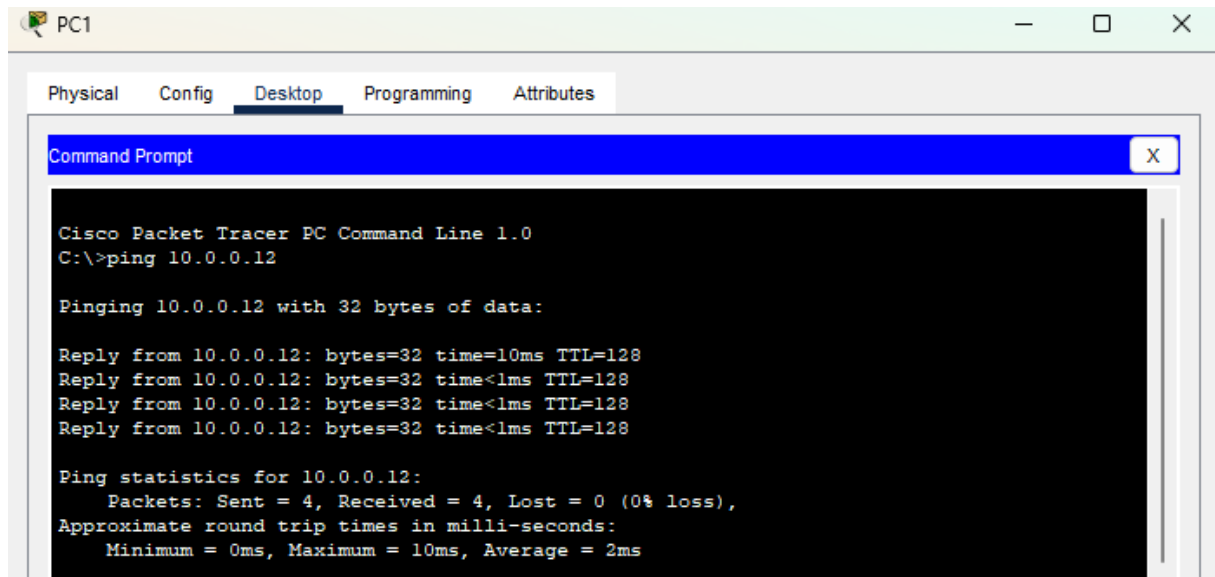
```
S1(config)#interface vlan 1
S1(config-if)#ip address S1(config-if)#S1(config-if)#
S1(config-if)#ip address 10.0.0.11 255.255.255.0
S1(config-if)#ip address 10.0.0.12 255.255.255.0
S1(config-if)#ip address 10.0.0.13 255.255.255.0
S1(config-if)#no shutdown
```

Adım 7:

Her bir PC'den diğer PC'lere ping attım. Ve sonuçları aşağıda raporladım.

PC1'den diğer PC'lere atılan ping sonuçları:

PC2 için atılan ping:



The screenshot shows a Cisco Packet Tracer PC window for PC1. The 'Desktop' tab is active, displaying a 'Command Prompt' window. The command prompt shows the execution of the command 'ping 10.0.0.12'. The output indicates a successful ping with 4 replies, each receiving 32 bytes of data with a time of less than 1ms and a TTL of 128. The ping statistics show 4 packets sent, 4 received, and 0% loss, with an average round trip time of 2ms.

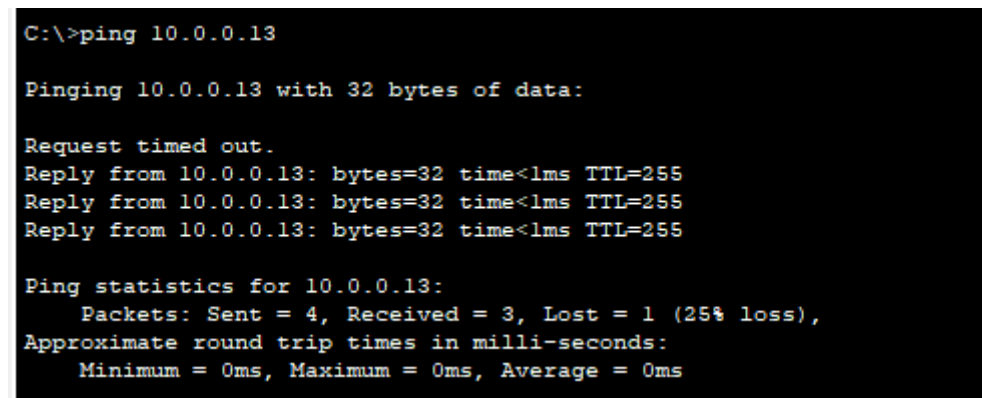
```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 10.0.0.12

Pinging 10.0.0.12 with 32 bytes of data:

Reply from 10.0.0.12: bytes=32 time<1ms TTL=128
Reply from 10.0.0.12: bytes=32 time<1ms TTL=128
Reply from 10.0.0.12: bytes=32 time<1ms TTL=128
Reply from 10.0.0.12: bytes=32 time<1ms TTL=128

Ping statistics for 10.0.0.12:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 10ms, Average = 2ms
```

PC3 için atılan ping:



The screenshot shows a Command Prompt window with the command 'ping 10.0.0.13'. The output indicates a failed ping with 1 request timed out and 3 successful replies. The ping statistics show 4 packets sent, 3 received, and 25% loss, with an average round trip time of 0ms.

```
C:\>ping 10.0.0.13

Pinging 10.0.0.13 with 32 bytes of data:

Request timed out.
Reply from 10.0.0.13: bytes=32 time<1ms TTL=255
Reply from 10.0.0.13: bytes=32 time<1ms TTL=255
Reply from 10.0.0.13: bytes=32 time<1ms TTL=255

Ping statistics for 10.0.0.13:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

PC4 için atılan ping:

```
C:\>ping 10.0.0.14

Pinging 10.0.0.14 with 32 bytes of data:

Reply from 10.0.0.14: bytes=32 time<1ms TTL=128
Reply from 10.0.0.14: bytes=32 time<1ms TTL=128
Reply from 10.0.0.14: bytes=32 time=1ms TTL=128
Reply from 10.0.0.14: bytes=32 time=1ms TTL=128

Ping statistics for 10.0.0.14:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

PC5 için atılan ping:

```
C:\>ping 10.0.0.15

Pinging 10.0.0.15 with 32 bytes of data:

Reply from 10.0.0.15: bytes=32 time=10ms TTL=128
Reply from 10.0.0.15: bytes=32 time=1ms TTL=128
Reply from 10.0.0.15: bytes=32 time=1ms TTL=128
Reply from 10.0.0.15: bytes=32 time<1ms TTL=128

Ping statistics for 10.0.0.15:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 10ms, Average = 3ms
```

PC6 için atılan ping:

```
C:\>ping 10.0.0.16

Pinging 10.0.0.16 with 32 bytes of data:

Request timed out.
Reply from 10.0.0.16: bytes=32 time<1ms TTL=255
Reply from 10.0.0.16: bytes=32 time<1ms TTL=255
Reply from 10.0.0.16: bytes=32 time<1ms TTL=255

Ping statistics for 10.0.0.16:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

PC7 için atılan ping:

```
C:\>ping 10.0.0.17

Pinging 10.0.0.17 with 32 bytes of data:

Reply from 10.0.0.17: bytes=32 time=11ms TTL=128
Reply from 10.0.0.17: bytes=32 time=1ms TTL=128
Reply from 10.0.0.17: bytes=32 time<1ms TTL=128
Reply from 10.0.0.17: bytes=32 time=11ms TTL=128

Ping statistics for 10.0.0.17:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 11ms, Average = 5ms
```

PC8 için atılan ping:

```
C:\>ping 10.0.0.18

Pinging 10.0.0.18 with 32 bytes of data:

Reply from 10.0.0.18: bytes=32 time=10ms TTL=128
Reply from 10.0.0.18: bytes=32 time<1ms TTL=128
Reply from 10.0.0.18: bytes=32 time=1ms TTL=128
Reply from 10.0.0.18: bytes=32 time=1ms TTL=128

Ping statistics for 10.0.0.18:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 10ms, Average = 3ms
```

P9 için atılan ping:

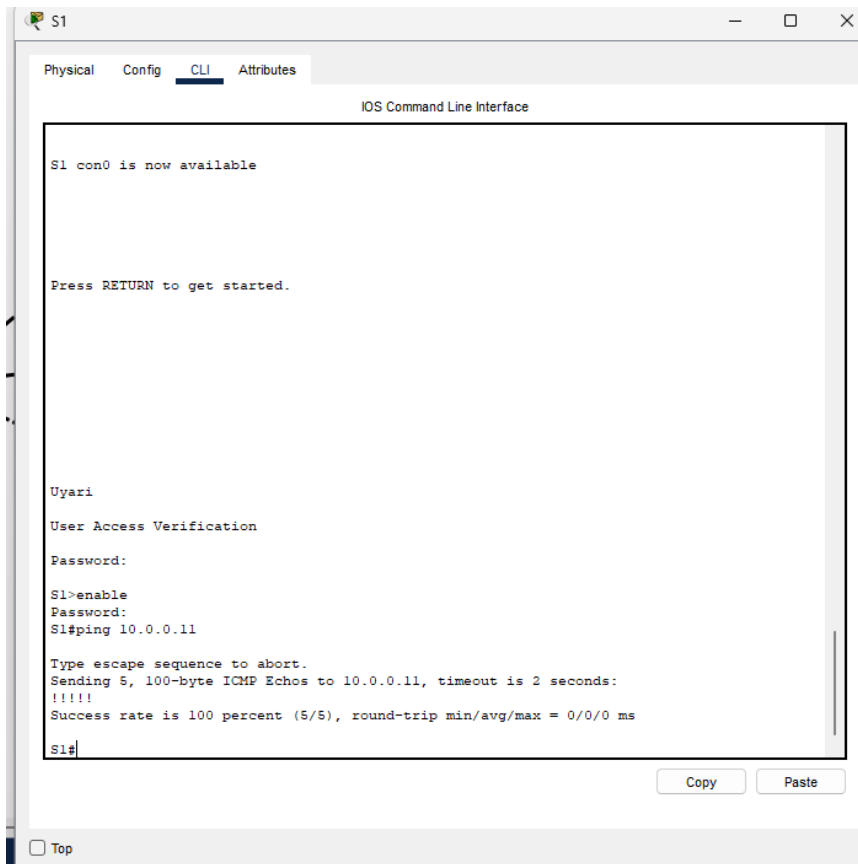
```
C:\>ping 10.0.0.19

Pinging 10.0.0.19 with 32 bytes of data:

Request timed out.
Reply from 10.0.0.19: bytes=32 time<1ms TTL=255
Reply from 10.0.0.19: bytes=32 time<1ms TTL=255
Reply from 10.0.0.19: bytes=32 time=1ms TTL=255

Ping statistics for 10.0.0.19:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Sonuç:



PC2'den diğer PC'lere atılan ping sonuçları:

PC1 için atılan ping:

C:\>ping 10.0.0.11

Pinging 10.0.0.11 with 32 bytes of data:

Reply from 10.0.0.11: bytes=32 time<1ms TTL=128
Reply from 10.0.0.11: bytes=32 time<1ms TTL=128
Reply from 10.0.0.11: bytes=32 time<1ms TTL=128
Reply from 10.0.0.11: bytes=32 time<1ms TTL=128

Ping statistics for 10.0.0.11:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC3 için atılan ping:

C:\>ping 10.0.0.13

Pinging 10.0.0.13 with 32 bytes of data:

Request timed out.

Reply from 10.0.0.13: bytes=32 time<1ms TTL=255

Reply from 10.0.0.13: bytes=32 time<1ms TTL=255

Reply from 10.0.0.13: bytes=32 time<1ms TTL=255

Ping statistics for 10.0.0.13:

Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC4 için atılan ping:

C:\>ping 10.0.0.14

Pinging 10.0.0.14 with 32 bytes of data:

Reply from 10.0.0.14: bytes=32 time<1ms TTL=128

Reply from 10.0.0.14: bytes=32 time<1ms TTL=128

Reply from 10.0.0.14: bytes=32 time<1ms TTL=128

Reply from 10.0.0.14: bytes=32 time<1ms TTL=128

Ping statistics for 10.0.0.14:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC5 için atılan ping:

C:\>ping 10.0.0.15

Pinging 10.0.0.15 with 32 bytes of data:

Reply from 10.0.0.15: bytes=32 time<1ms TTL=128

Reply from 10.0.0.15: bytes=32 time<1ms TTL=128

Reply from 10.0.0.15: bytes=32 time<1ms TTL=128

Reply from 10.0.0.15: bytes=32 time<1ms TTL=128

Ping statistics for 10.0.0.15:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC6 için atılan ping:

C:\>ping 10.0.0.16

Pinging 10.0.0.16 with 32 bytes of data:

Request timed out.

Reply from 10.0.0.16: bytes=32 time<1ms TTL=255

Reply from 10.0.0.16: bytes=32 time<1ms TTL=255

Reply from 10.0.0.16: bytes=32 time<1ms TTL=255

Ping statistics for 10.0.0.16:

Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC7 için atılan ping:

C:\>ping 10.0.0.17

Pinging 10.0.0.17 with 32 bytes of data:

Reply from 10.0.0.17: bytes=32 time<1ms TTL=128

Reply from 10.0.0.17: bytes=32 time=1ms TTL=128

Reply from 10.0.0.17: bytes=32 time<1ms TTL=128

Reply from 10.0.0.17: bytes=32 time<1ms TTL=128

Ping statistics for 10.0.0.17:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 1ms, Average = 0ms

PC8 için atılan ping:

C:\>ping 10.0.0.18

Pinging 10.0.0.18 with 32 bytes of data:

Reply from 10.0.0.18: bytes=32 time<1ms TTL=128

Reply from 10.0.0.18: bytes=32 time<1ms TTL=128

Reply from 10.0.0.18: bytes=32 time<1ms TTL=128

Reply from 10.0.0.18: bytes=32 time<1ms TTL=128

Ping statistics for 10.0.0.18:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC9 için atılan ping:

C:\>ping 10.0.0.19

Pinging 10.0.0.19 with 32 bytes of data:

Request timed out.

Reply from 10.0.0.19: bytes=32 time<1ms TTL=255

Reply from 10.0.0.19: bytes=32 time<1ms TTL=255

Reply from 10.0.0.19: bytes=32 time<1ms TTL=255

Ping statistics for 10.0.0.19:

Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 0ms, Average = 0ms