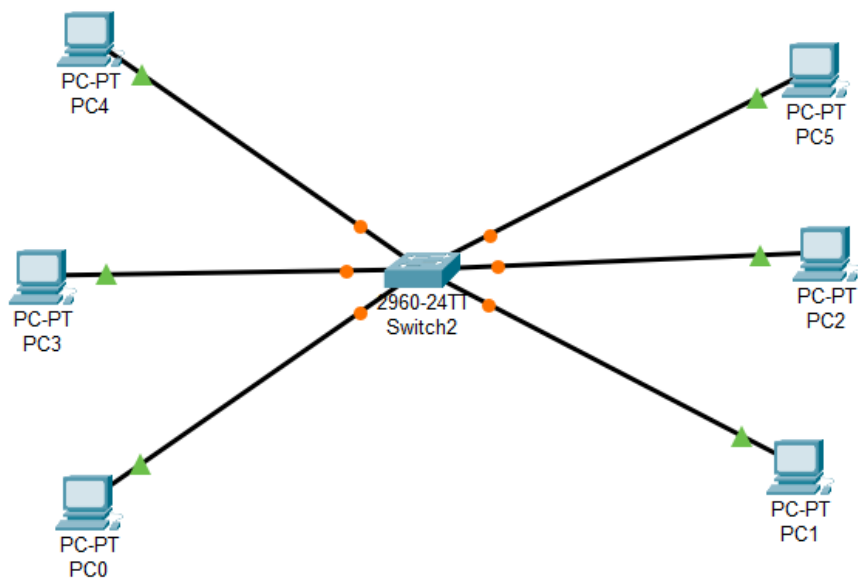


Создал сеть



Настроил устройства слева

IP Configuration	
<input type="radio"/> DHCP	
<input checked="" type="radio"/> Static	
IPv4 Address	192.168.0.1
Subnet Mask	255.255.255.0

И справа

IP Configuration	
<input type="radio"/> DHCP	
<input checked="" type="radio"/> Static	
IPv4 Address	192.168.1.1
Subnet Mask	255.255.255.0
IPv6 Configuration	

Пингуем

```
C:\>ping 192.168.0.1

Pinging 192.168.0.1 with 32 bytes of data:

Reply from 192.168.0.1: bytes=32 time=8ms TTL=128
Reply from 192.168.0.1: bytes=32 time=4ms TTL=128
Reply from 192.168.0.1: bytes=32 time=3ms TTL=128
Reply from 192.168.0.1: bytes=32 time=2ms TTL=128

Ping statistics for 192.168.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 8ms, Average = 4ms

C:\>ping 192.168.1.2

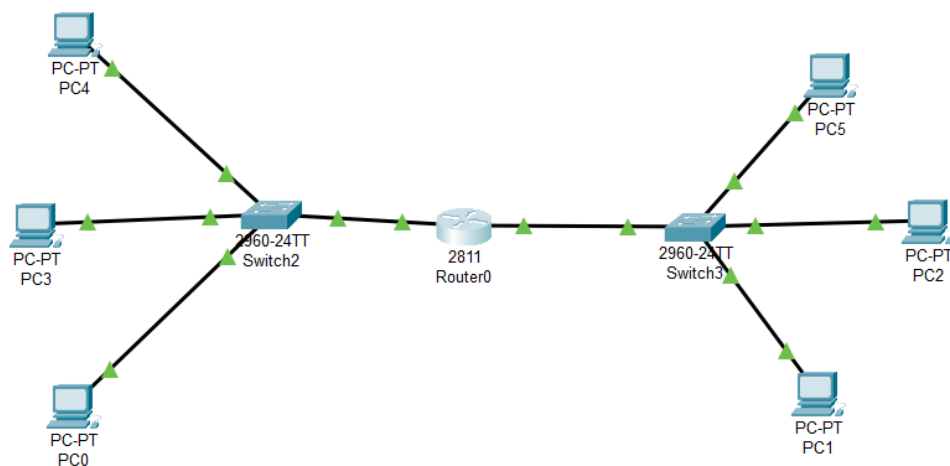
Pinging 192.168.1.2 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Для связи двух подсетей нужен маршрутизатор

Подключаем роутер



Настраиваем порты

FastEthernet0/0	
Port Status	<input checked="" type="checkbox"/> On
Bandwidth	<input checked="" type="radio"/> 100 Mbps <input type="radio"/> 10 Mbps <input checked="" type="checkbox"/> Auto
Duplex	<input type="radio"/> Half Duplex <input checked="" type="radio"/> Full Duplex <input checked="" type="checkbox"/> Auto
MAC Address	00D0.5828.B001
<div>IP Configuration</div> <div> <div>IPv4 Address</div> <div>192.168.0.254</div> </div> <div> <div>Subnet Mask</div> <div>255.255.255.0</div> </div>	
Tx Ring Limit	10

FastEthernet0/1	
Port Status	<input checked="" type="checkbox"/> On
Bandwidth	<input checked="" type="radio"/> 100 Mbps <input type="radio"/> 10 Mbps <input checked="" type="checkbox"/> Auto
Duplex	<input type="radio"/> Half Duplex <input checked="" type="radio"/> Full Duplex <input checked="" type="checkbox"/> Auto
MAC Address	00D0.5828.B002
<div>IP Configuration</div> <div> <div>IPv4 Address</div> <div>192.168.1.254</div> </div> <div> <div>Subnet Mask</div> <div>255.255.255.0</div> </div>	
Tx Ring Limit	10

show ip route

Данная команда используется для отображения текущего состояния таблицы маршрутизации.

```
Router#show ip route
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

    192.168.0.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.0.0/24 is directly connected, FastEthernet0/0
L       192.168.0.254/32 is directly connected, FastEthernet0/0
    192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.1.0/24 is directly connected, FastEthernet0/1
L       192.168.1.254/32 is directly connected, FastEthernet0/1
```

Настроил шлюзы

Gateway/DNS IPv4

☐ DHCP

☒ Static

Default Gateway

DNS Server

Display Name

Interfaces ▼

Gateway/DNS IPv4

☐ DHCP

☒ Static

Default Gateway

DNS Server

Пингуем через роутер

```
Router#ping 192.168.0.0
```

```
Type escape sequence to abort.
```

```
Sending 5, 100-byte ICMP Echos to 192.168.0.0, timeout is 2 seconds:
```

```
Reply to request 0 from 192.168.0.1, 0 ms
Reply to request 0 from 192.168.0.2, 0 ms
Reply to request 0 from 192.168.0.3, 0 ms
Reply to request 1 from 192.168.0.1, 0 ms
Reply to request 1 from 192.168.0.2, 0 ms
Reply to request 1 from 192.168.0.3, 0 ms
Reply to request 2 from 192.168.0.2, 0 ms
Reply to request 2 from 192.168.0.3, 0 ms
Reply to request 2 from 192.168.0.1, 0 ms
Reply to request 3 from 192.168.0.1, 0 ms
Reply to request 3 from 192.168.0.2, 0 ms
Reply to request 3 from 192.168.0.3, 0 ms
Reply to request 4 from 192.168.0.1, 0 ms
Reply to request 4 from 192.168.0.2, 0 ms
Reply to request 4 from 192.168.0.3, 0 ms
```

```
Router#ping 192.168.1.0
```

```
Type escape sequence to abort.
```

```
Sending 5, 100-byte ICMP Echos to 192.168.1.0, timeout is 2 seconds:
```

```
Reply to request 0 from 192.168.1.1, 0 ms
Reply to request 0 from 192.168.1.2, 0 ms
Reply to request 0 from 192.168.1.3, 0 ms
Reply to request 1 from 192.168.1.1, 0 ms
Reply to request 1 from 192.168.1.2, 1 ms
Reply to request 1 from 192.168.1.3, 0 ms
Reply to request 2 from 192.168.1.1, 0 ms
Reply to request 2 from 192.168.1.2, 0 ms
Reply to request 2 from 192.168.1.3, 0 ms
Reply to request 3 from 192.168.1.1, 0 ms
Reply to request 3 from 192.168.1.2, 0 ms
Reply to request 3 from 192.168.1.3, 0 ms
Reply to request 4 from 192.168.1.1, 0 ms
Reply to request 4 from 192.168.1.2, 0 ms
Reply to request 4 from 192.168.1.3, 0 ms
```

Пингуем из одной сети в другую

```
C:\>ping 192.168.1.2
```

```
Pinging 192.168.1.2 with 32 bytes of data:
```

```
Reply from 192.168.1.2: bytes=32 time<1ms TTL=127
Reply from 192.168.1.2: bytes=32 time<1ms TTL=127
Reply from 192.168.1.2: bytes=32 time<1ms TTL=127
Reply from 192.168.1.2: bytes=32 time<1ms TTL=127
```

```
Ping statistics for 192.168.1.2:
```

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

```
C:\>|
```