Cisco №23

1841
ISP

1841
Router4
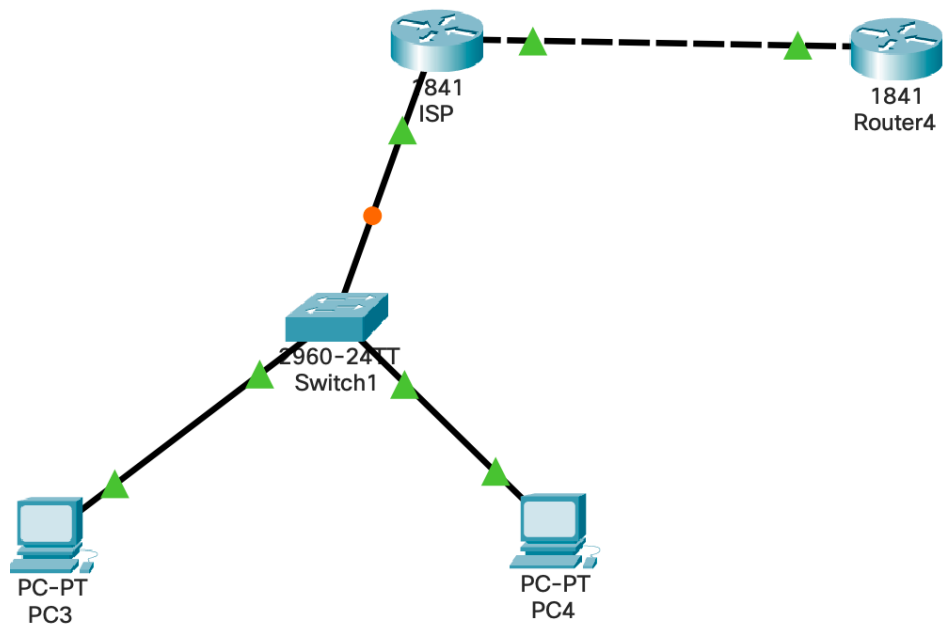
2960-24TT
Switch1

PC-PT
PC3

PC-PT
PC4

PC3

Physical | Config | Desktop | Programming | Attributes

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth

FastEthernet0

Port Status ☑ On

Bandwidth ○ 100 Mbps ○ 10 Mbps ☑ Auto

Duplex ○ Half Duplex ● Full Duplex ☑ Auto

MAC Address 0001.C728.9834

IP Configuration
○ DHCP
● Static
IPv4 Address 192.168.0.1
Subnet Mask 255.255.255.0

PC3

Physical | Config | Desktop | Programming | Attributes

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth

Global Settings

Display Name PC3

Interfaces FastEthernet0 ⇅

Gateway/DNS IPv4
○ DHCP
● Static
Default Gateway 192.168.0.100
DNS Server

ISP

Physical | **Config** | **CLI** | **Attributes**

FastEthernet0/0

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE

Port Status ☑ On

Bandwidth ⦿ 100 Mbps ◯ 10 Mbps ☑ Auto

Duplex ◯ Half Duplex ⦿ Full Duplex ☑ Auto

MAC Address 00D0.5888.5A01

IP Configuration
IPv4 Address 192.168.0.100
Subnet Mask 255.255.255.0

ISP

Physical | **Config** | **CLI** | **Attributes**

FastEthernet0/1

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
FastEthernet0/0
FastEthernet0/1

Port Status ☑ On

Bandwidth ⦿ 100 Mbps ◯ 10 Mbps ☑ Auto

Duplex ◯ Half Duplex ⦿ Full Duplex ☑ Auto

MAC Address 00D0.5888.5A02

IP Configuration
IPv4 Address 100.10.10.1
Subnet Mask 255.0.0.0

Tx Ring Limit 10

```
Router(config)#access-line 1 permit 192.168.0.0 0.0.0.255
                      ^
% Invalid input detected at '^' marker.

Router(config)#access-list 1 permit 192.168.0.0 0.0.0.255
Router(config)#ip nat pool white-address 100.10.10.77 100.10.11.99 netmask
255.255.255.0
%Pool white-address mask 255.255.255.0 too small; should be at least
255.255.254.0
%Start and end addresses on different subnets
Router(config)#ip nat pool white-address 100.10.11.77 100.10.11.99 netmask
255.255.255.0
Router(config)#ip nat inside source list 1 pool white-address
Router(config)#int fa0/0
Router(config-if)#ip nat inside
Router(config-if)#int fa0/1
Router(config-if)#ip nat outside
Router(config-if)#exit
```
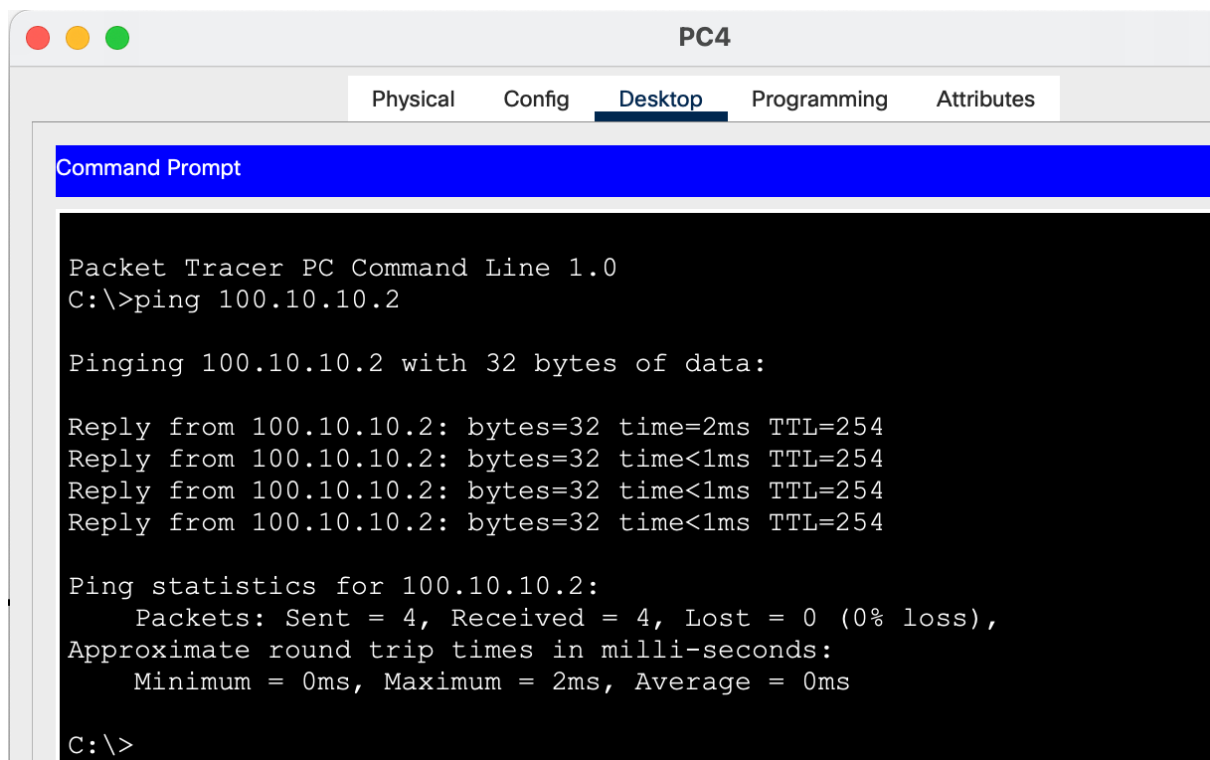
```
C:\>ping 100.10.10.2

Pinging 100.10.10.2 with 32 bytes of data:

Reply from 100.10.10.2: bytes=32 time<1ms TTL=254
Reply from 100.10.10.2: bytes=32 time<1ms TTL=254
Reply from 100.10.10.2: bytes=32 time<1ms TTL=254
Reply from 100.10.10.2: bytes=32 time<1ms TTL=254

Ping statistics for 100.10.10.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

PC4

| Physical | Config | Desktop | Programming | Attributes |

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 100.10.10.2

Pinging 100.10.10.2 with 32 bytes of data:

Reply from 100.10.10.2: bytes=32 time=2ms TTL=254
Reply from 100.10.10.2: bytes=32 time<1ms TTL=254
Reply from 100.10.10.2: bytes=32 time<1ms TTL=254
Reply from 100.10.10.2: bytes=32 time<1ms TTL=254

Ping statistics for 100.10.10.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 2ms, Average = 0ms

C:\>
```

Видим, что компы имеют адрес x.x.x.77

```
Router#show ip nat translations
Pro  Inside global      Inside local       Outside local      Outside global
icmp 100.10.11.77:1     192.168.0.2:1      100.10.10.2:1      100.10.10.2:1
icmp 100.10.11.77:2     192.168.0.2:2      100.10.10.2:2      100.10.10.2:2
icmp 100.10.11.77:3     192.168.0.2:3      100.10.10.2:3      100.10.10.2:3
icmp 100.10.11.77:4     192.168.0.2:4      100.10.10.2:4      100.10.10.2:4
```