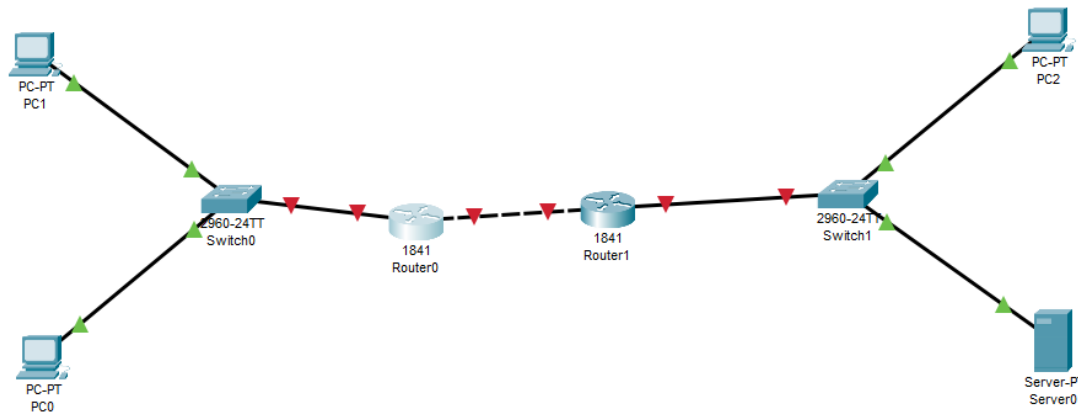


Компьютерные сети 25 – Автоматизированная сеть с использованием DHCP + DNS + Маршрутизация

Строим сеть



У всех ПК ставим DHCP

Настраиваем сервер

Server0

Physical Config Services Desktop Programming Attributes

GLOBAL

- Settings
- Algorithm Settings

INTERFACE

- FastEthernet0

Global Settings

Display Name: Server0

Gateway/DNS IPv4

☐ DHCP

☒ Static

Default Gateway: 192.168.2.100

DNS Server: 192.168.2.101

Server0

Physical Config Services Desktop Programming Attributes

GLOBAL

- Settings
- Algorithm Settings

INTERFACE

- FastEthernet0

FastEthernet0

Port Status: ☒ On

Bandwidth: ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex: ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address: 00D0.FF60.B5DC

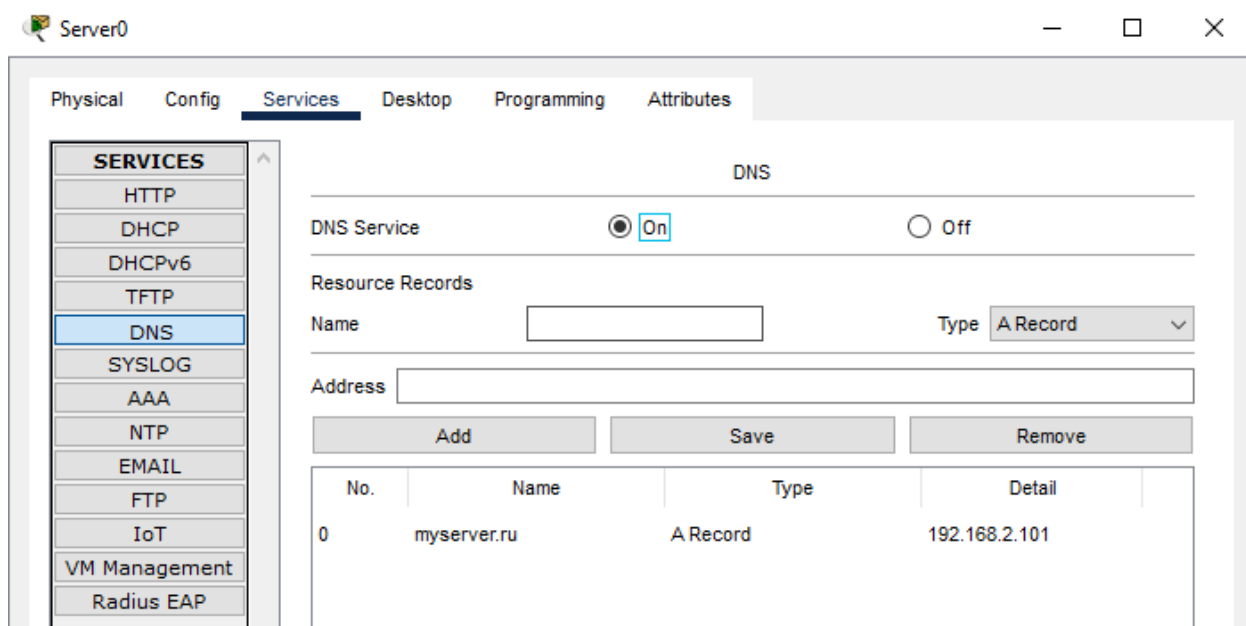
IP Configuration

☐ DHCP

☒ Static

IPv4 Address: 192.168.2.101

Subnet Mask: 255.255.255.0



Конфигурируем Роутер0

```
Router(config)#ip dhcp excluded-address 192.168.1.100
Router(config)#ip dhcp pool net1
Router(dhcp-config)#net 192.168.1.0 255.255.255.0
Router(dhcp-config)#default-router 192.168.1.100
Router(dhcp-config)#dns-server 192.168.2.101
Router(dhcp-config)#int fa0/0
Router(config-if)#ip address 192.168.1.100 255.255.255.0
Router(config-if)#no sh

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Router(config-if)#
Router(config-if)#int fa0/1
Router(config-if)#ip address 192.168.3.1 255.255.255.0
Router(config-if)#no sh

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

Router(config-if)#ro rip
Router(config-router)#net 192.168.1.0
Router(config-router)#net 192.168.3.0
```

Сохраняем

```
Router#wr mem
Building configuration...
[OK]
```

Конфигурируем Роутер1

```

Router(config)#ip dhcp excluded-address 192.168.2.100 192.168.2.101
Router(config)#ip dhcp pool net2
Router(dhcp-config)#net 192.168.2.0 255.255.255.0
Router(dhcp-config)#default-router 192.168.2.100
Router(dhcp-config)#dns-server 192.168.2.101
Router(dhcp-config)#int fa0/0
Router(config-if)#ip ad 192.168.2.100 255.255.255.0
Router(config-if)#no sh

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Router(config-if)#int fa0/1
Router(config-if)#ip ad 192.168.3.2 255.255.255.0
Router(config-if)#no sh

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

Router(config-if)#ro rip
Router(config-router)#net 192.168.2.0
Router(config-router)#net 192.168.3.0

Router#wr mem
Building configuration...
[OK]

```

С PC0 пингуем PC1

```

C:\>ping 192.168.2.1

Pinging 192.168.2.1 with 32 bytes of data:

Request timed out.
Reply from 192.168.2.1: bytes=32 time<1ms TTL=126
Reply from 192.168.2.1: bytes=32 time<1ms TTL=126
Reply from 192.168.2.1: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.2.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

```

Подключаемся к серверу

