Защита по лабораторной работе №2

pf

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15 марта 2025

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Информация

Цель

Получить основные навыки по начальному конфигурированию оборудования Cisco.

Строим схему с маршрутизатором .

Рис. 1: такими командами

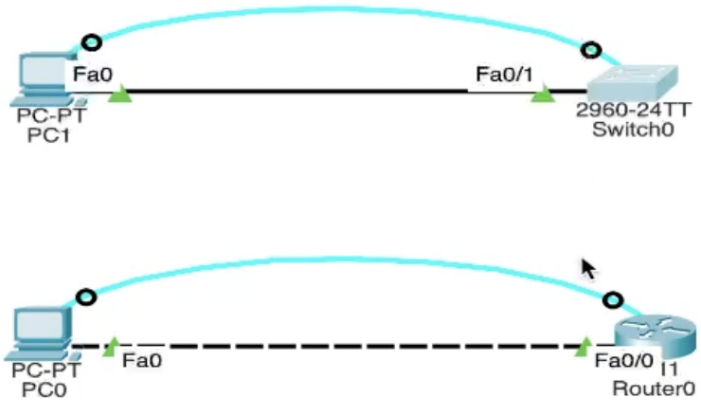
Конфигурируем маршрутизатор .

```
Router>en
Router>enable
Router#en
Router#en
Router#enable
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname mskdonskaya-gw-1
mskdonskaya-gw-1(config)#interface f0/0
mskdonskaya-gw-1(config-if)#no shut
mskdonskaya-gw-1(config-if)#no shutdown

mskdonskaya-gw-1(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, chan
up

mskdonskaya-gw-1(config-if)#ip address 192.168.1.254 255.255.255.0
mskdonskaya-gw-1(config-if)#line vty 0 4
mskdonskaya-gw-1(config-line)#password cisco
mskdonskaya-gw-1(config-line)#login
mskdonskaya-gw-1(config-line)#line console 0
mskdonskaya-gw-1(config-line)##password cisco
                              ^
% Invalid input detected at '^' marker.

mskdonskaya-gw-1(config-line)#password cisco
mskdonskaya-gw-1(config-line)#login
mskdonskaya-gw-1(config-line)#enable secret cisco
mskdonskaya-gw-1(config)#service password encryption
                                         ^
% Invalid input detected at '^' marker.

mskdonskaya-gw-1(config)#service password
```

Продолжение .

```
mskdonskaya-gw-1(config)#
mskdonskaya-gw-1(config)#username admin privilege 1 secret?
secret
mskdonskaya-gw-1(config)#username admin privilege 1 secret ?
  0      Specifies an UNENCRYPTED secret will follow
  5      Specifies a HIDDEN secret will follow
  LINE   The UNENCRYPTED (cleartext) user secret
mskdonskaya-gw-1(config)#username admin privilege 1 secret cisc
mskdonskaya-gw-1(config)#username admin privilege 1 secret cisco
mskdonskaya-gw-1(config)#ip domain-name donskaya.rudn.edu
mskdonskaya-gw-1(config)#crypto key generate rsa
The name for the keys will be: mskdonskaya-gw-1.donskaya.rudn.edu
Choose the size of the key modulus in the range of 360 to 4096 for you
  General Purpose Keys. Choosing a key modulus greater than 512 may ta
  a few minutes.

How many bits in the modulus [512]: 2048
% Generating 2048 bit RSA keys, keys will be non-exportable...[OK]

mskdonskaya-gw-1(config)#line vty 0 4
*Mar 1 0:6:43.992: %SSH-5-ENABLED: SSH 1.99 has been enabled
mskdonskaya-gw-1(config-line)#transport input ssh
mskdonskaya-gw-1(config-line)#exi
mskdonskaya-gw-1(config-line)#exit
mskdonskaya-gw-1(config)#exi
mskdonskaya-gw-1(config)#exit
mskdonskaya-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

mskdonskaya-gw-1#wri
mskdonskaya-gw-1#write mem
mskdonskaya-gw-1#write memory
Building configuration...
[OK]
mskdonskaya-gw-1#
```

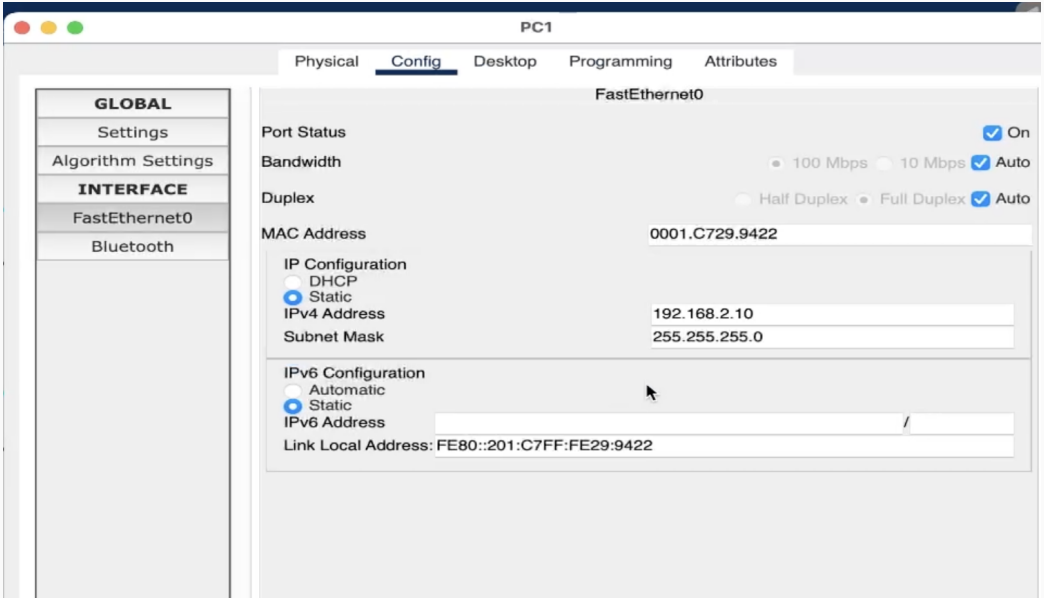
Строим схему с коммутатором .



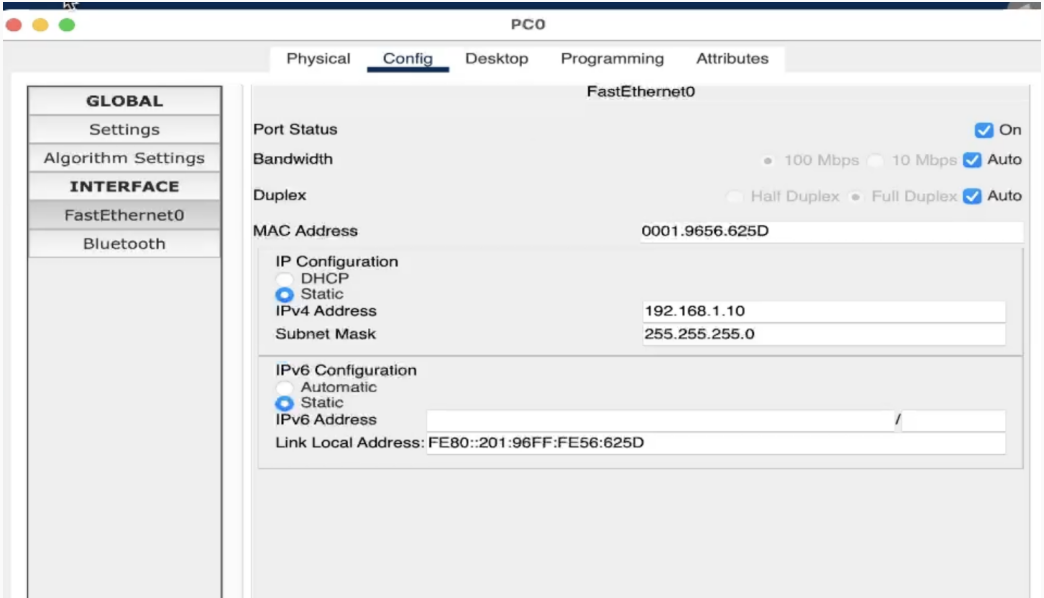
конфигурируем коммутатор .

```
Switch>enable
Switch#conf
Switch#configure ter
Switch#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname mskdonskaya-sw-1
mskdonskaya-sw-1(config)#interface vlan2
mskdonskaya-sw-1(config-if)#no shutdown
mskdonskaya-sw-1(config-if)#ip address 192.168.2.1 255.255.255.0
mskdonskaya-sw-1(config-if)#interface f0/1
mskdonskaya-sw-1(config-if)#switchport mode access
mskdonskaya-sw-1(config-if)#switchport access vlan 2
% Access VLAN does not exist. Creating vlan 2
mskdonskaya-sw-1(config-if)#
%LINK-5-CHANGED: Interface Vlan2, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan2, changed state

mskdonskaya-sw-1(config-if)#ip default gateway 192.168.2.254
                           ^
% Invalid input detected at '^' marker.

mskdonskaya-sw-1(config-if)#ip default-gateway 192.168.2.254
mskdonskaya-sw-1(config)#line vty 0 4
mskdonskaya-sw-1(config-line)#pass
mskdonskaya-sw-1(config-line)#password cisco
mskdonskaya-sw-1(config-line)#login
mskdonskaya-sw-1(config-line)#line console 0
mskdonskaya-sw-1(config-line)#password cisco
mskdonskaya-sw-1(config-line)#login
mskdonskaya-sw-1(config-line)#enable secret cisco
mskdonskaya-sw-1(config)#service password-encryption
mskdonskaya-sw-1(config)#username admin privilege 1 secret cisco
mskdonskaya-sw-1(config)#ip domain-name donskaya.rudn.edu
```

Информация о PDU: форматы пакетов .

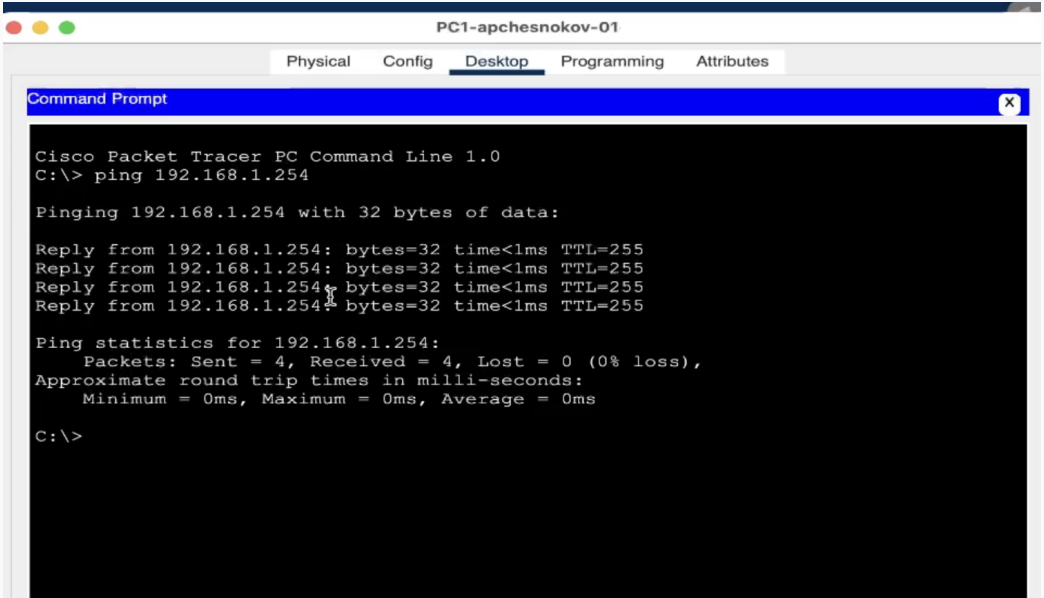


Второе устройство .

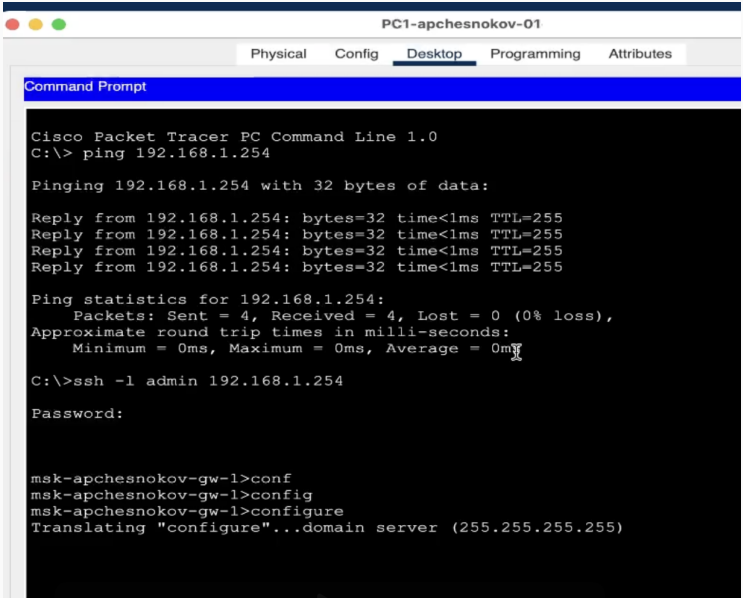


В PC-1 открываем командную консоль .

Пингуем .


PC1-apchesnokov-01
Physical
Config
Desktop
Programming
Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\> ping 192.168.1.254
Pinging 192.168.1.254 with 32 bytes of data:
Reply from 192.168.1.254: bytes=32 time<1ms TTL=255
Reply from 192.168.1.254: bytes=32 time<1ms TTL=255
Reply from 192.168.1.254: bytes=32 time<1ms TTL=255
Reply from 192.168.1.254: bytes=32 time<1ms TTL=255
Ping statistics for 192.168.1.254:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>

Подключаемся по ssh .



Аналогично стучимся к коммутатору .

```
C:\>
C:\>
C:\>
C:\>ping 192.168.2.1

Pinging 192.168.2.1 with 32 bytes of data:

Reply from 192.168.2.1: bytes=32 time<1ms TTL=255
Reply from 192.168.2.1: bytes=32 time<1ms TTL=255
Reply from 192.168.2.1: bytes=32 time<1ms TTL=255
Reply from 192.168.2.1: bytes=32 time<1ms TTL=255

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

C:\>ssh -l admin 192.168.2.1

Password:



msk-donskaya-sw-1>exit

[Connection to 192.168.2.1 closed by foreign host]
C:\>telnet -l admin 192.168.2.1
Invalid Command.

C:\>telnet  admin 192.168.2.1
Invalid Command.

C:\>telnet 192.168.2.1
Trying 192.168.2.1 ...Open

[Connection to 192.168.2.1 closed by foreign host]
C:\>
```

Спасибо за внимание.