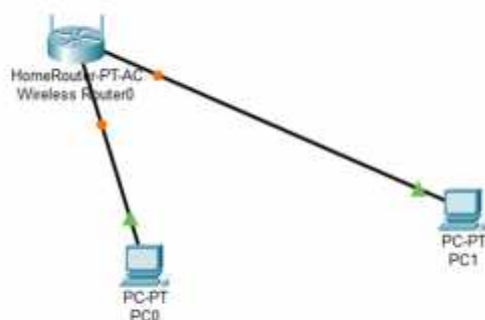
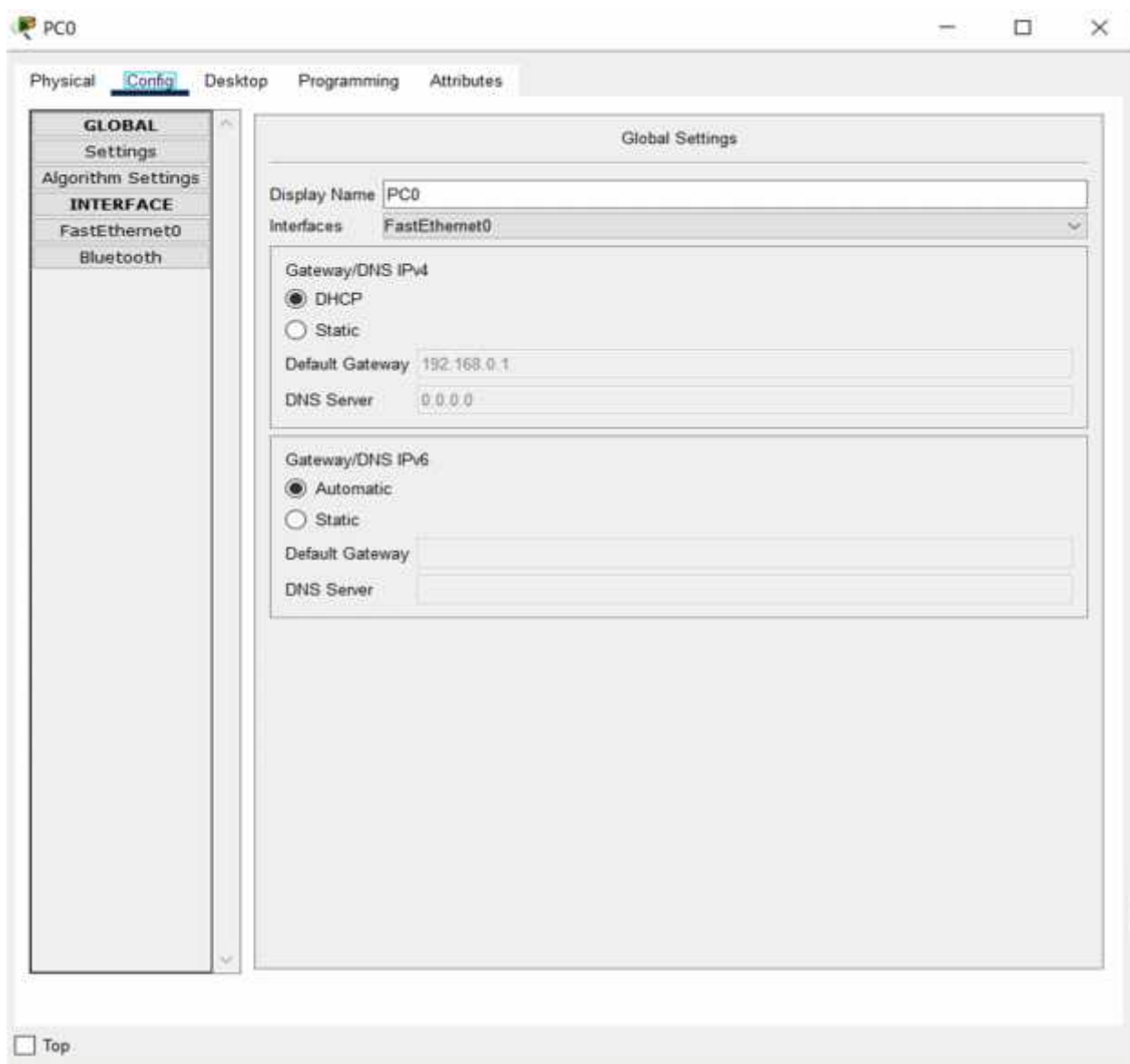


Схема сети



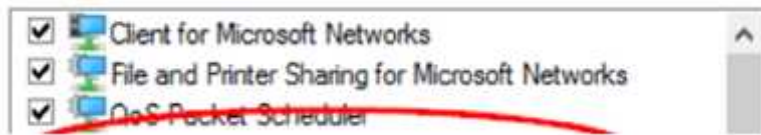
Использование DHCP для определения IP



Какие имя и номер модели сетевой платы указаны в окне «Подключение с помощью:»?



Какие первые три элемента указаны в поле «Компоненты, используемые этим подключением:»?



Проверка IP адреса с помощью команды ipconfig /all

```
FastEthernet0 Connection: (default port)

Connection-specific DNS Suffix...:
Physical Address.....: 00D0.BCCD.080B
Link-local IPv6 Address.....: FE80::2D0:BCFF:FECB:80B
IPv6 Address.....: ::
IPv4 Address.....: 192.168.0.100
Subnet Mask.....: 255.255.255.0
Default Gateway.....: ::
                        192.168.0.1
DHCP Servers.....: 192.168.0.1
DHCPv6 IAID.....:
DHCPv6 Client DUID.....: 00-01-00-01-5E-57-02-E2-00-D0-BC-CD-08-0B
DNS Servers.....: ::
                        0.0.0.0
```

Какой адрес IPv4 у данного компьютера?

```
IPv4 Address.....: 192.168.0.100
```

Укажите маску подсети данного компьютера.

```
Subnet Mask.....: 255.255.255.0
```

Укажите основной шлюз данного компьютера.

```
Default Gateway.....: ::
                        192.168.0.1
```

Каковы серверы DNS для данного компьютера?

```
DNS Servers.....: ::
                        0.0.0.0
```

Какой MAC-адрес (физический адрес) у данного компьютера?

```
Physical Address.....: 00D0.BCCD.080B
```

DHCP включен?

Да

Какой IP-адрес у DHCP-сервера?

```
DHCP Servers.....: 192.168.0.1
```

Какова дата получения аренды?

```
Lease Obtained. . . . . : Sunday, July 24, 2016 4:58:26 PM
```

Какова дата окончания срока аренды?

```
Lease Expires . . . . . : Monday, July 25, 2016 4:58:12 AM
```

Проверка TCP/IP PC-A

```
C:\>ping 127.0.0.1

Pinging 127.0.0.1 with 32 bytes of data:

Reply from 127.0.0.1: bytes=32 time=13ms TTL=128
Reply from 127.0.0.1: bytes=32 time=10ms TTL=128
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
Reply from 127.0.0.1: bytes=32 time=10ms TTL=128

Ping statistics for 127.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 13ms, Average = 8ms
```

Запишите один из ответов на команду ping.

Аналогичная настройка В-PC. Проверка подключения

```
FastEthernet0 Connection: (default port)

Connection-specific DNS Suffix...:
Physical Address.....: 0009.7C53.B300
Link-local IPv6 Address.....: FE80::209:7CFF:FE53:B300
IPv6 Address.....: ::
IPv4 Address.....: 192.168.0.101
Subnet Mask.....: 255.255.255.0
Default Gateway.....: ::
                        192.168.0.1
DHCP Servers.....: 192.168.0.1
DHCPv6 IAID.....:
DHCPv6 Client DUID.....: 00-01-00-01-A4-17-22-A1-00-09-7C-53-B3-00
DNS Servers.....: ::
                        0.0.0.0
```

Укажите IP-адрес данного компьютера.

```
IPv4 Address.....: 192.168.0.101
```

Укажите маску подсети данного компьютера.

```
Subnet Mask.....: 255.255.255.0
```

Укажите основной шлюз данного компьютера.

```
Default Gateway.....: ::
                        192.168.0.1
```

Каковы серверы DNS для данного компьютера?

```
DNS Servers.....: ::  
0.0.0.0
```

Какой IP-адрес у DHCP-сервера?

```
DHCP Servers.....: 192.168.0.1  
192.168.0.1
```

Настройка PC-B вручную

The screenshot shows the configuration window for PC0, specifically the 'Desktop' tab. The 'IP Configuration' section is active, showing settings for the 'FastEthernet0' interface. The 'Static' radio button is selected under 'IP Configuration'. The 'IPv4 Address' is set to '192.168.0.101', the 'Subnet Mask' is '255.255.255.0', the 'Default Gateway' is '192.168.0.1', and the 'DNS Server' is '0.0.0.0'. The 'IPv6 Configuration' section shows 'Automatic' selected, with an 'IPv6 Address' field containing 'FE80::2D0:BCFF:FECD:80B'. The '802.1X' section has 'Use 802.1X Security' unchecked, and the 'Authentication' dropdown is set to 'MD5'. The 'Username' and 'Password' fields are empty.

Interface	FastEthernet0
IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IPv4 Address	192.168.0.101
Subnet Mask	255.255.255.0
Default Gateway	192.168.0.1
DNS Server	0.0.0.0
IPv6 Configuration	
<input checked="" type="radio"/> Automatic	<input type="radio"/> Static
IPv6 Address	FE80::2D0:BCFF:FECD:80B
Link Local Address	
Default Gateway	
DNS Server	
802.1X	
<input type="checkbox"/> Use 802.1X Security	
Authentication	MD5
Username	
Password	

Откройте окно командной строки и отправьте ping-запрос на адрес только что настроенного компьютера PC-B. Успешно ли выполнен эхо-запрос?

Да, успешно

```
C:\>ping 192.168.1.11

Pinging 192.168.1.11 with 32 bytes of data:

Reply from 192.168.1.11: bytes=32 time<1ms TTL=128
Reply from 192.168.1.11: bytes=32 time<1ms TTL=128
Reply from 192.168.1.11: bytes=32 time<1ms TTL=128
Reply from 192.168.1.11: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.11:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

С помощью утилиты ping проверьте связь компьютера PC-B с IP-адресом PC-A. Успешно ли выполнен эхо-запрос?

Да, успешно

```
Pinging 192.168.0.100 with 32 bytes of data:

Reply from 192.168.0.100: bytes=32 time<1ms TTL=128
Reply from 192.168.0.100: bytes=32 time<1ms TTL=128
Reply from 192.168.0.100: bytes=32 time<1ms TTL=128
Reply from 192.168.0.100: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

```
Pinging 192.168.0.101 with 32 bytes of data:

Reply from 192.168.0.101: bytes=32 time<1ms TTL=128
Reply from 192.168.0.101: bytes=32 time=1ms TTL=128
Reply from 192.168.0.101: bytes=32 time<1ms TTL=128
Reply from 192.168.0.101: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.101:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```