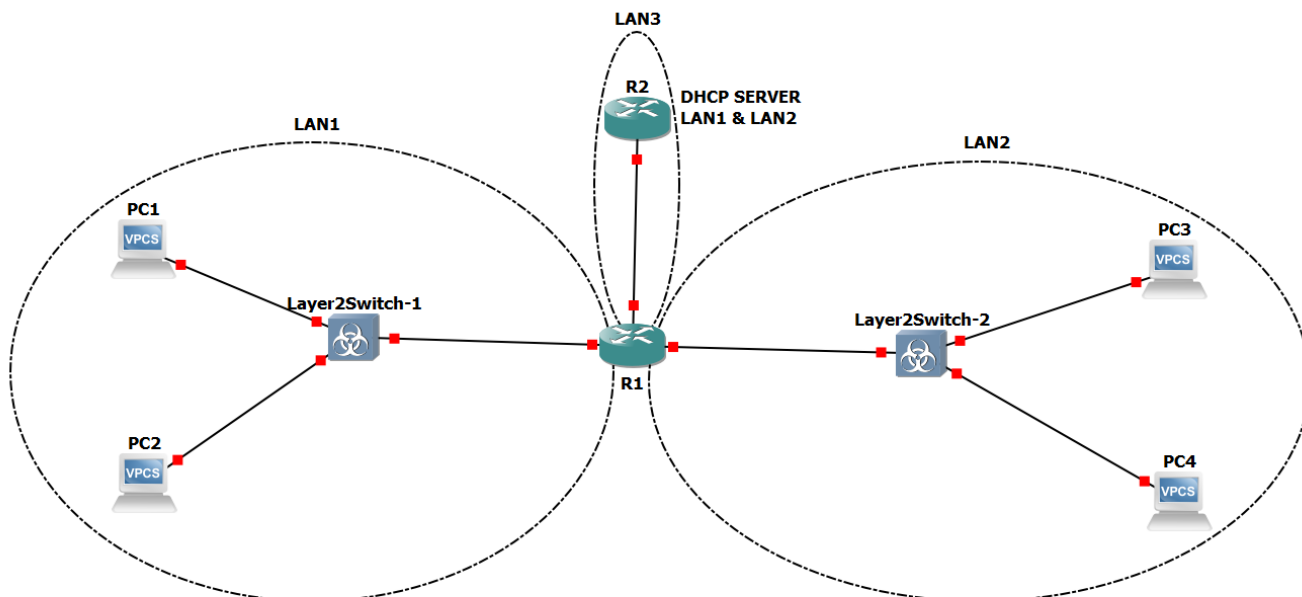


Туртугешев А.В.

Тема: Настройка протокола DHCP

Схема



1) Для заданной на схеме schema-lab4 сети, состоящей из управляемых коммутаторов, маршрутизаторов и персональных компьютеров выполнить планирование и документирование адресного пространства в подсетях LAN1, LAN2, LAN3 и назначить статические адреса маршрутизаторам и динамическое конфигурирование адресов для VPC

Адресное пространство:

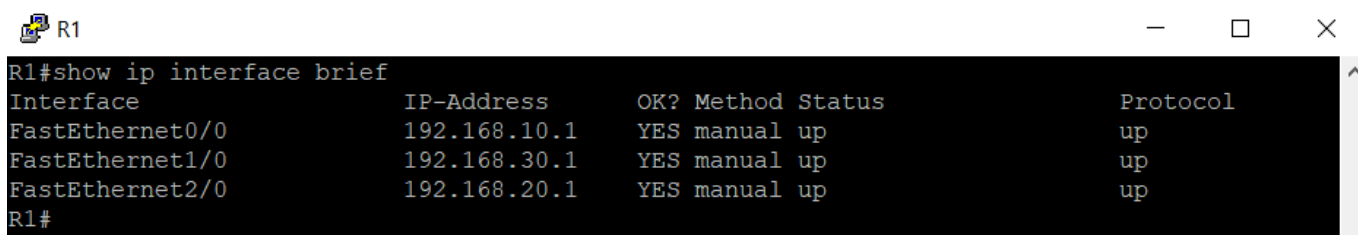
- LAN1 (Подсеть 1): 192.168.10.0/24
 - Устройства: PC1, PC2, Switch1, R1 (VLAN1)
 - Gateway (шлюз) 192.168.10.1 (на маршрутизаторе R1)
 - DHCP-диапазон (на R2) 192.168.10.100 – 192.168.10.200
- LAN2 (Подсеть 2): 192.168.20.0/24
 - Устройства PC3, PC4, Switch2, R1 (VLAN2)
 - Gateway 192.168.20.1 (на маршрутизаторе R1)
 - DHCP-диапазон (на R2) 192.168.20.100 – 192.168.20.200
- LAN3 (Подсеть 3): 192.168.30.0/24
 - адрес интерфейса R1: 192.168.30.1

- адрес интерфейса R2: 192.168.30.2

2) Настроить сервер DHCP на маршрутизаторе R2 для обслуживания адресных пулов адресного пространства подсетей LAN1 и LAN2

- **R1**

```
R1#conf ter
R1(config)#interface fa0/0
R1(config-if)#ip address 192.168.10.1 255.255.255.0
R1(config-if)#no shutdown
R1(config-if)#exit
R1(config)#interface fa2/0
R1(config-if)#ip address 192.168.20.1 255.255.255.0
R1(config-if)#no shutdown
R1(config-if)#exit
R1(config)#interface fa1/0
R1(config-if)#ip address 192.168.30.1 255.255.255.0
R1(config-if)#no shutdown
R1(config)#^Z
R1#wr
```

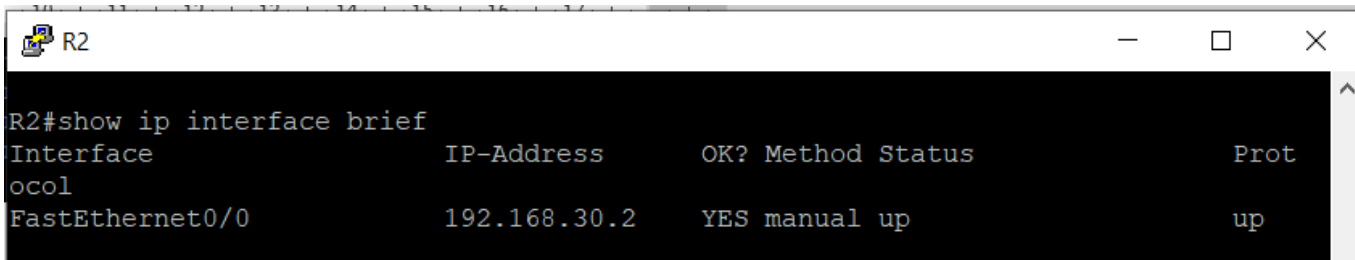


```
R1#show ip interface brief
Interface                IP-Address      OK? Method Status      Protocol
FastEthernet0/0          192.168.10.1    YES manual  up          up
FastEthernet1/0          192.168.30.1    YES manual  up          up
FastEthernet2/0          192.168.20.1    YES manual  up          up
R1#
```

- **R2**

```
R2#conf ter
R2(config)#interface fa0/0
R2(config-if)#ip address 192.168.30.2 255.255.255.0
R2(config-if)#no shutdown
R2(config-if)#^Z
```

```
R2#wr
```



```
R2#show ip interface brief
Interface                IP-Address      OK? Method Status    Prot
FastEthernet0/0          192.168.30.2    YES manual  up        up
```

Исключаем указанные IP-адреса из DHCP-выдачи

У нас диапазоны 192.168.10.100 – 192.168.10.200, 192.168.20.100 – 192.168.20.200

```
R2#conf ter
R2(config)# ip dhcp excluded-address 192.168.10.1 192.168.10.99
R2(config)# ip dhcp excluded-address 192.168.10.201 192.168.10.254
R2(config)# ip dhcp excluded-address 192.168.20.1 192.168.20.99
R2(config)# ip dhcp excluded-address 192.168.20.201 192.168.20.254
```

Создание DHCP-пула с именем LAN1 и LAN2

```
R2#conf ter
R2(config)#ip dhcp pool LAN1
R2(dhcp-config)#network 192.168.10.0 255.255.255.0
R2(dhcp-config)#default-router 192.168.10.1
R2(dhcp-config)#dns-server 192.168.10.1
R2(dhcp-config)#lease 30
R2(dhcp-config)#exit
R2(config)#ip dhcp pool LAN2
R2(dhcp-config)#network 192.168.20.0 255.255.255.0
R2(dhcp-config)#default-router 192.168.20.1
R2(dhcp-config)#dns-server 192.168.20.1
R2(dhcp-config)#lease 30
R2(dhcp-config)#^Z
R2#wr
```

Так же необходимо **настройка DHCP Relay** на R1, чтобы DHCP-запросы (broadcast) в подсетях (LAN1 и LAN2) могли доходить до DHCP сервера на R2 в виде unicast.

```
R1#conf ter
R1(config)#interface fa0/0
R1(config-if)#ip helper-address 192.168.30.2
R1(config-if)#exit
R1(config)#interface fa2/0
R1(config-if)#ip helper-address 192.168.30.2
R1(config-if)#exit
R1(config)#^Z
R1#wr
```

3) Настроить статическую (nb!) маршрутизацию между подсетями

Чтобы R2 знал, как доставлять пакеты в подсети LAN1 и LAN2 через R2.

```
R1#conf ter
R1(config)#ip route 192.168.30.0 255.255.255.0 192.168.30.2
R1(config)#exit
R1#wr
```

R2 обслуживает только LAN3, поэтому ему нужно знать, как добраться до LAN1 и LAN2 через R1.

```
R2#conf ter
R2(config)#ip route 192.168.10.0 255.255.255.0 192.168.30.1
R2(config)#ip route 192.168.20.0 255.255.255.0 192.168.30.1
R2(config)#exit
R2#wr
```

```
R1#show ip route
Codes: 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
       i - IS-IS, su - IS-IS summary, 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

C    192.168.30.0/24 is directly connected, FastEthernet1/0
C    192.168.10.0/24 is directly connected, FastEthernet0/0
C    192.168.20.0/24 is directly connected, FastEthernet2/0
R1#
```

```
R2#show ip route
Codes: 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
       i - IS-IS, su - IS-IS summary, 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

C    192.168.30.0/24 is directly connected, FastEthernet0/0
S    192.168.10.0/24 [1/0] via 192.168.30.1
S    192.168.20.0/24 [1/0] via 192.168.30.1
R2#
```

4) Проверить работоспособность протокола DHCP и маршрутизации, выполнив ping между всеми VPC

Выданные ip адреса

```
R2#show ip dhcp binding
Bindings from all pools not associated with VRF:
IP address      Client-ID/      Lease expiration        Type
                Hardware address/
                User name
192.168.10.100   0100.5079.6668.00   Mar 31 2002 02:12 AM    Automatic
192.168.10.101   0100.5079.6668.01   Mar 31 2002 02:12 AM    Automatic
192.168.20.100   0100.5079.6668.02   Mar 31 2002 02:17 AM    Automatic
192.168.20.101   0100.5079.6668.03   Mar 31 2002 02:18 AM    Automatic
R2#
```

- Пингуем с PC1

```
PC1 - PuTTY

PC1> ping 192.168.10.101

84 bytes from 192.168.10.101 icmp_seq=1 ttl=64 time=1.618 ms
84 bytes from 192.168.10.101 icmp_seq=2 ttl=64 time=2.955 ms
84 bytes from 192.168.10.101 icmp_seq=3 ttl=64 time=0.632 ms
84 bytes from 192.168.10.101 icmp_seq=4 ttl=64 time=0.530 ms
84 bytes from 192.168.10.101 icmp_seq=5 ttl=64 time=0.794 ms

PC1> ping 192.168.20.100

84 bytes from 192.168.20.100 icmp_seq=1 ttl=63 time=25.751 ms
84 bytes from 192.168.20.100 icmp_seq=2 ttl=63 time=18.574 ms
84 bytes from 192.168.20.100 icmp_seq=3 ttl=63 time=17.749 ms
84 bytes from 192.168.20.100 icmp_seq=4 ttl=63 time=16.209 ms
84 bytes from 192.168.20.100 icmp_seq=5 ttl=63 time=16.393 ms

PC1> ping 192.168.20.101

84 bytes from 192.168.20.101 icmp_seq=1 ttl=63 time=24.591 ms
84 bytes from 192.168.20.101 icmp_seq=2 ttl=63 time=17.687 ms
84 bytes from 192.168.20.101 icmp_seq=3 ttl=63 time=15.650 ms
84 bytes from 192.168.20.101 icmp_seq=4 ttl=63 time=19.240 ms
84 bytes from 192.168.20.101 icmp_seq=5 ttl=63 time=16.624 ms

PC1> 
```

- Пингуем с PC2

```
PC2 - PuTTY

PC2> ping 192.168.10.100

84 bytes from 192.168.10.100 icmp_seq=1 ttl=64 time=0.561 ms
84 bytes from 192.168.10.100 icmp_seq=2 ttl=64 time=2.952 ms
84 bytes from 192.168.10.100 icmp_seq=3 ttl=64 time=0.735 ms
84 bytes from 192.168.10.100 icmp_seq=4 ttl=64 time=0.623 ms
84 bytes from 192.168.10.100 icmp_seq=5 ttl=64 time=1.881 ms

PC2> ping 192.168.20.100

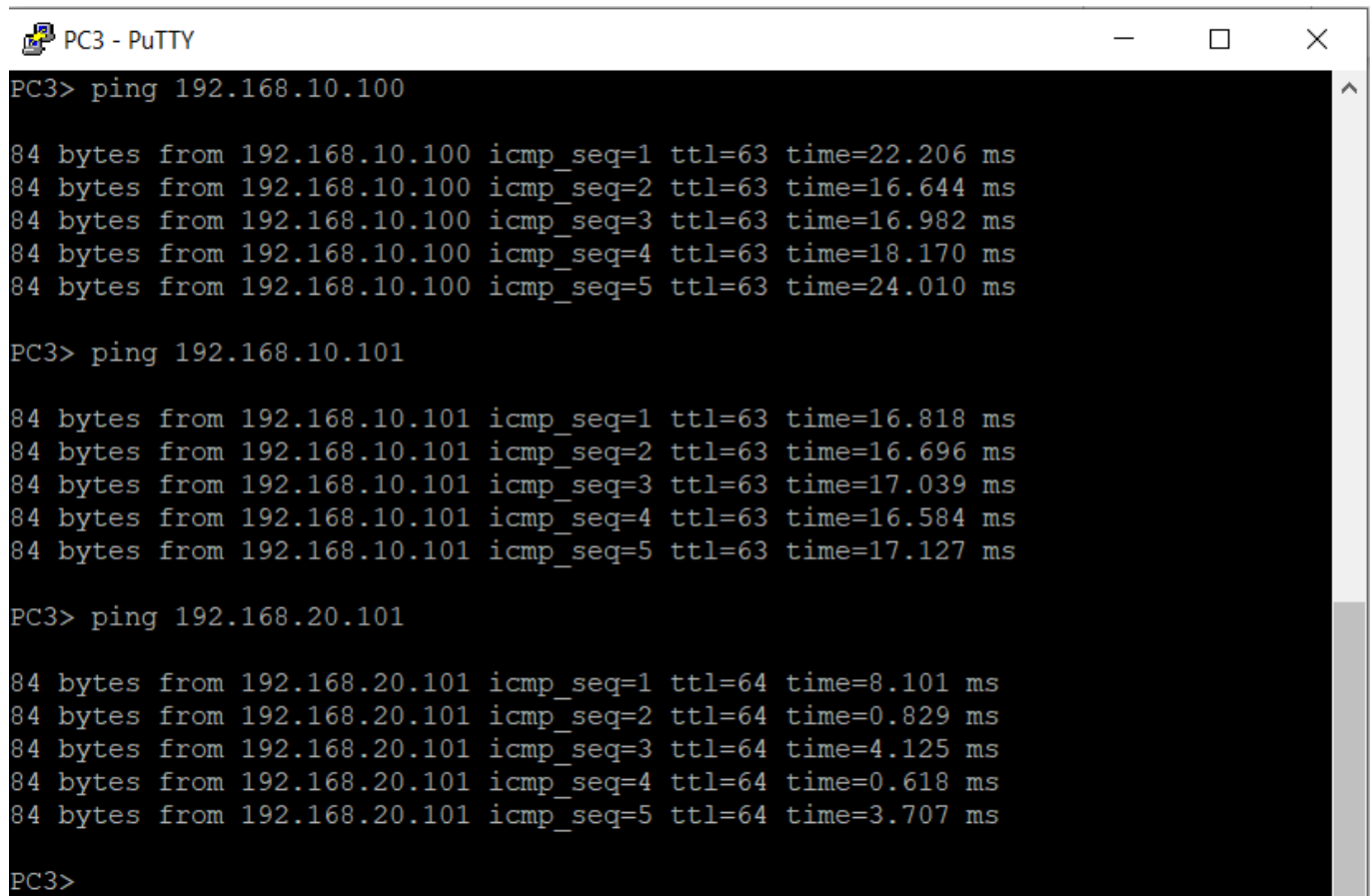
84 bytes from 192.168.20.100 icmp_seq=1 ttl=63 time=30.128 ms
84 bytes from 192.168.20.100 icmp_seq=2 ttl=63 time=16.930 ms
84 bytes from 192.168.20.100 icmp_seq=3 ttl=63 time=17.711 ms
84 bytes from 192.168.20.100 icmp_seq=4 ttl=63 time=16.892 ms
84 bytes from 192.168.20.100 icmp_seq=5 ttl=63 time=16.977 ms

PC2> ping 192.168.20.101

84 bytes from 192.168.20.101 icmp_seq=1 ttl=63 time=23.588 ms
84 bytes from 192.168.20.101 icmp_seq=2 ttl=63 time=17.052 ms
84 bytes from 192.168.20.101 icmp_seq=3 ttl=63 time=17.002 ms
84 bytes from 192.168.20.101 icmp_seq=4 ttl=63 time=15.635 ms
84 bytes from 192.168.20.101 icmp_seq=5 ttl=63 time=17.324 ms

PC2> 
```

- Пингуем с PC3



```
PC3 - PuTTY
PC3> ping 192.168.10.100
84 bytes from 192.168.10.100 icmp_seq=1 ttl=63 time=22.206 ms
84 bytes from 192.168.10.100 icmp_seq=2 ttl=63 time=16.644 ms
84 bytes from 192.168.10.100 icmp_seq=3 ttl=63 time=16.982 ms
84 bytes from 192.168.10.100 icmp_seq=4 ttl=63 time=18.170 ms
84 bytes from 192.168.10.100 icmp_seq=5 ttl=63 time=24.010 ms

PC3> ping 192.168.10.101
84 bytes from 192.168.10.101 icmp_seq=1 ttl=63 time=16.818 ms
84 bytes from 192.168.10.101 icmp_seq=2 ttl=63 time=16.696 ms
84 bytes from 192.168.10.101 icmp_seq=3 ttl=63 time=17.039 ms
84 bytes from 192.168.10.101 icmp_seq=4 ttl=63 time=16.584 ms
84 bytes from 192.168.10.101 icmp_seq=5 ttl=63 time=17.127 ms

PC3> ping 192.168.20.101
84 bytes from 192.168.20.101 icmp_seq=1 ttl=64 time=8.101 ms
84 bytes from 192.168.20.101 icmp_seq=2 ttl=64 time=0.829 ms
84 bytes from 192.168.20.101 icmp_seq=3 ttl=64 time=4.125 ms
84 bytes from 192.168.20.101 icmp_seq=4 ttl=64 time=0.618 ms
84 bytes from 192.168.20.101 icmp_seq=5 ttl=64 time=3.707 ms

PC3>
```

- Пингуем с PC4

```
PC4 - PuTTY
PC4> ping 192.168.10.100

84 bytes from 192.168.10.100 icmp_seq=1 ttl=63 time=19.948 ms
84 bytes from 192.168.10.100 icmp_seq=2 ttl=63 time=17.480 ms
84 bytes from 192.168.10.100 icmp_seq=3 ttl=63 time=17.267 ms
84 bytes from 192.168.10.100 icmp_seq=4 ttl=63 time=15.791 ms
84 bytes from 192.168.10.100 icmp_seq=5 ttl=63 time=17.585 ms

PC4> ping 192.168.10.101

84 bytes from 192.168.10.101 icmp_seq=1 ttl=63 time=24.640 ms
84 bytes from 192.168.10.101 icmp_seq=2 ttl=63 time=19.221 ms
84 bytes from 192.168.10.101 icmp_seq=3 ttl=63 time=14.029 ms
84 bytes from 192.168.10.101 icmp_seq=4 ttl=63 time=17.446 ms
84 bytes from 192.168.10.101 icmp_seq=5 ttl=63 time=17.524 ms

PC4> ping 192.168.20.100

84 bytes from 192.168.20.100 icmp_seq=1 ttl=64 time=7.863 ms
84 bytes from 192.168.20.100 icmp_seq=2 ttl=64 time=0.998 ms
84 bytes from 192.168.20.100 icmp_seq=3 ttl=64 time=4.650 ms
84 bytes from 192.168.20.100 icmp_seq=4 ttl=64 time=0.786 ms
84 bytes from 192.168.20.100 icmp_seq=5 ttl=64 time=2.573 ms

PC4> 
```

5) Перехватить в Wireshark диалог одного из VPC с сервером DHCP, разобрать с комментариями

В списке пакетов видны 4 ключевых сообщения DHCP.

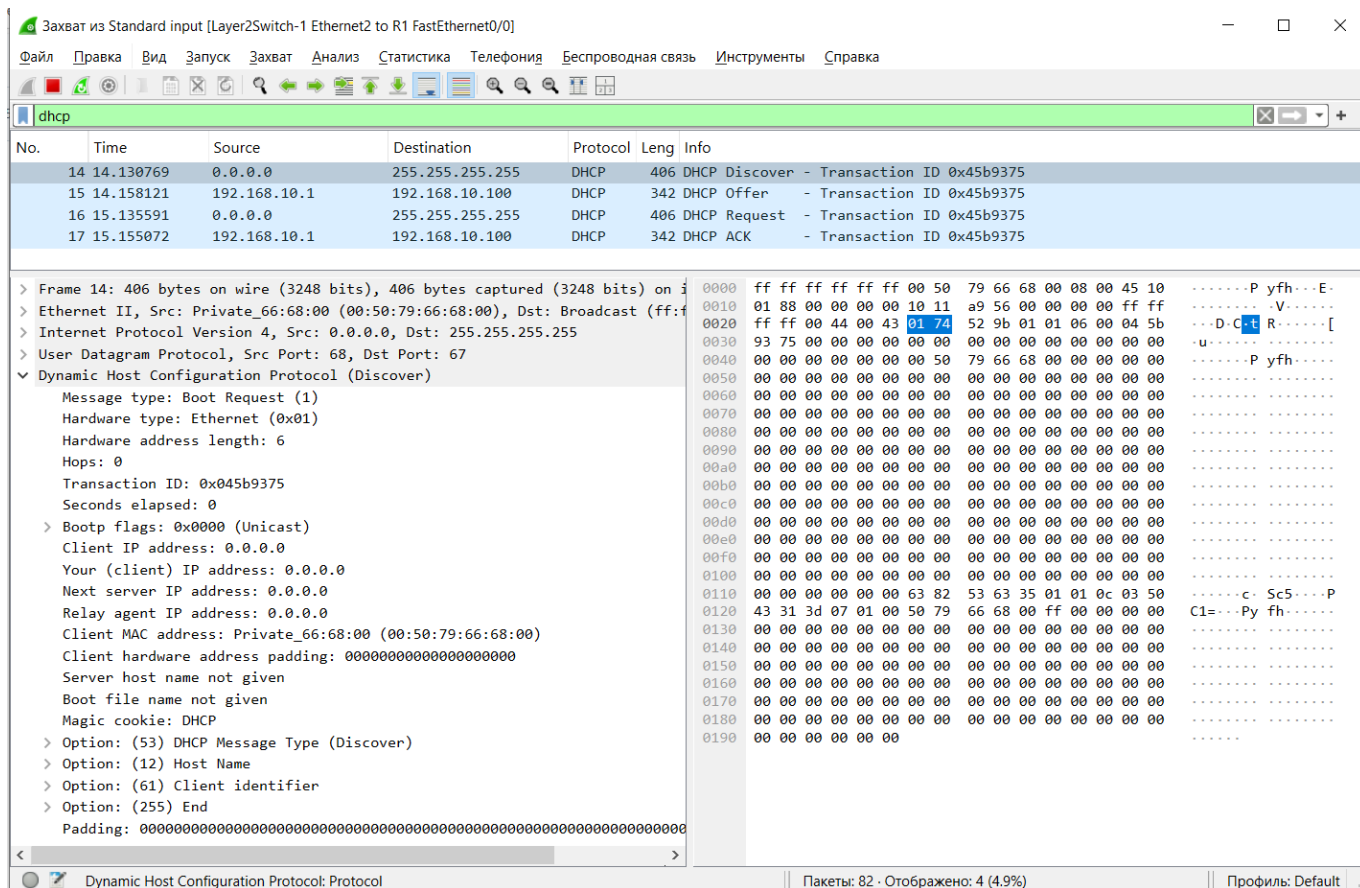
DHCP Discover - клиент ищет сервер (широковещательный запрос)

DHCP Offer - сервер предлагает IP-адрес

DHCP Request - клиент запрашивает предложенный IP

DHCP ACK - сервер подтверждает выдачу IP

- DHCP Discover



Клиент отправляет широковещательный запрос (255.255.255.255), чтобы найти DHCP-сервер. В пакете указывается MAC-адрес клиента, а IP-адреса - 0.0.0.0, которые еще не назначен.

- DHCP Offer

Захват из Standard input [Layer2Switch-1 Ethernet2 to R1 FastEthernet0/0]

Файл Правка Вид Запуск Захват Анализ Статистика Телефония Беспроводная связь Инструменты Справка

dhcp

No.	Time	Source	Destination	Protocol	Leng	Info
14	14.130769	0.0.0.0	255.255.255.255	DHCP	406	DHCP Discover - Transaction ID 0x45b9375
15	14.158121	192.168.10.1	192.168.10.100	DHCP	342	DHCP Offer - Transaction ID 0x45b9375
16	15.135591	0.0.0.0	255.255.255.255	DHCP	406	DHCP Request - Transaction ID 0x45b9375
17	15.155072	192.168.10.1	192.168.10.100	DHCP	342	DHCP ACK - Transaction ID 0x45b9375

> Frame 15: 342 bytes on wire (2736 bits), 342 bytes captured (2736 bits) on
 > Ethernet II, Src: cc:01:1f:e7:00:00 (cc:01:1f:e7:00:00), Dst: Private_66:
 > Internet Protocol Version 4, Src: 192.168.10.1, Dst: 192.168.10.100
 > User Datagram Protocol, Src Port: 67, Dst Port: 68
 > Dynamic Host Configuration Protocol (Offer)
 Message type: Boot Reply (2)
 Hardware type: Ethernet (0x01)
 Hardware address length: 6
 Hops: 0
 Transaction ID: 0x045b9375
 Seconds elapsed: 0
 > Bootp flags: 0x0000 (Unicast)
 Client IP address: 0.0.0.0
 Your (client) IP address: 192.168.10.100
 Next server IP address: 0.0.0.0
 Relay agent IP address: 192.168.10.1
 Client MAC address: Private_66:68:00 (00:50:79:66:68:00)
 Client hardware address padding: 00000000000000000000
 Server host name not given
 Boot file name not given
 Magic cookie: DHCP
 > Option: (53) DHCP Message Type (Offer)
 > Option: (54) DHCP Server Identifier (192.168.30.2)
 > Option: (51) IP Address Lease Time
 > Option: (58) Renewal Time Value
 > Option: (59) Rebinding Time Value
 > Option: (1) Subnet Mask (255.255.255.0)
 > Option: (3) Router
 > Option: (6) Domain Name Server
 > Option: (255) End
 Padding: 00000000000000000000000000000000

0000 00 50 79 66 68 00 cc 01 1f e7 00 00 08 00 45 00 Pyfh... ..E-
 0010 01 48 00 33 00 00 ff 11 24 bc c0 a8 0a 01 c0 a8 H.3... \$.....
 0020 0a 64 00 43 00 44 01 34 79 e4 02 01 06 00 04 5b d.C.D.4 y.....[
 0030 93 75 00 00 00 00 00 00 00 00 c0 a8 0a 64 00 00 u.....d..
 0040 00 00 c0 a8 0a 01 00 50 79 66 68 00 00 00 00 00P yfh.....
 0050 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 0060 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 0070 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 0080 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 0090 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 00a0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 00b0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 00c0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 00d0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 00e0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 00f0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 0100 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 0110 00 00 00 00 00 00 63 82 53 63 35 01 02 36 04 c0c..Sc5...6..
 0120 a8 1e 02 33 04 00 27 88 9a 3a 04 00 13 c4 d3 b3...:....M;
 0130 04 00 22 97 86 01 04 ff ff ff 00 03 04 c0 a8 0a
 0140 01 06 04 c0 a8 0a 01 ff 00 00 00 00 00 00 00
 0150 00 00 00 00 00 00

Dynamic Host Configuration Protocol: Protocol | Пакеты: 385 - Отображено: 4 (1.0%) | Профиль: Default

DHCP Offer. Этот пакет отправляется сервером DHCP в ответ на запрос клиента с типом сообщения DHCP Message Type offer. Сервер предлагает клиенту IP-адрес Your (client) IP address: 192.168.10.100.

- DHCP Request

Захват из Standard input [Layer2Switch-1 Ethernet2 to R1 FastEthernet0/0]

Файл

Правка

Вид

Запуск

Захват

Анализ

Статистика

Телефония

Беспроводная связь

Инструменты

Справка

dhcp

No.

Time

Source

Destination

Protocol

Leng

Info

14	14.130769	0.0.0.0	255.255.255.255	DHCP	406	DHCP Discover - Transaction ID 0x45b9375
15	14.158121	192.168.10.1	192.168.10.100	DHCP	342	DHCP Offer - Transaction ID 0x45b9375
16	15.135591	0.0.0.0	255.255.255.255	DHCP	406	DHCP Request - Transaction ID 0x45b9375
17	15.155072	192.168.10.1	192.168.10.100	DHCP	342	DHCP ACK - Transaction ID 0x45b9375

> Frame 16: 406 bytes on wire (3248 bits), 406 bytes captured (3248 bits) on 1

Ethernet II, Src: Private_66:68:00 (00:50:79:66:68:00), Dst: cc:01:1f:e7:00:50

Internet Protocol Version 4, Src: 0.0.0.0, Dst: 255.255.255.255

User Datagram Protocol, Src Port: 68, Dst Port: 67

Dynamic Host Configuration Protocol (Request)

Message type: Boot Request (1)

Hardware type: Ethernet (0x01)

Hardware address length: 6

Hops: 0

Transaction ID: 0x045b9375

Seconds elapsed: 0

Bootp flags: 0x0000 (Unicast)

Client IP address: 192.168.10.100

Your (client) IP address: 0.0.0.0

Next server IP address: 0.0.0.0

Relay agent IP address: 0.0.0.0

Client MAC address: Private_66:68:00 (00:50:79:66:68:00)

Client hardware address padding: 00000000000000000000

Server host name not given

Boot file name not given

Magic cookie: DHCP

Option: (53) DHCP Message Type (Request)

Option: (54) DHCP Server Identifier (192.168.30.2)

Option: (50) Requested IP Address (192.168.10.100)

Option: (61) Client identifier

Option: (12) Host Name

Option: (55) Parameter Request List

Option: (255) End

Padding: 00

0000

cc 01 1f e7 00 00 00 50 79 66 68 00 08 00 45 10

.....P yfh...E

0010

01 88 00 00 00 00 10 11 a9 56 00 00 00 00 ff ff

.....V.....

0020

ff ff 00 44 00 43 01 74 74 79 01 01 06 00 04 5b

...D-C-t ty....[

0030

93 75 00 00 00 00 c0 a8 0a 64 00 00 00 00 00 00

...u...d....

0040

00 00 00 00 00 00 50 79 66 68 00 00 00 00 00 00

.....P yfh....

0050

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

0060

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

0070

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

0080

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

0090

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

00a0

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

00b0

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

00c0

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

00d0

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

00e0

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

00f0

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

0100

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

0110

00 00 00 00 00 00 63 82 53 63 35 01 03 36 04 c0

.....c Sc5...6..

0120

a8 1e 02 32 04 c0 a8 0a 64 3d 07 01 00 50 79 66

...2...d=...Pyf

0130

68 00 0c 03 50 43 31 37 04 01 03 06 0f ff 00 00

h...PC17.....

0140

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

0150

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

0160

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

0170

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

0180

00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

.....

0190

00 00 00 00 00 00

.....

<

Your (client) IP address (dhcp.ip.your), 4 байта

>

Пакеты: 801 · Отображено: 4 (0.5%)

Профиль: Default

Клиент подтвердил выбор сервера DHCP и запрашивает выделение IP-адреса 192.168.10.100.

- DHCP ACK

Захват из Standard input [Layer2Switch-1 Ethernet2 to R1 FastEthernet0/0]

Файл Правка Вид Запуск Захват Анализ Статистика Телефония Беспроводная связь Инструменты Справка

dhcp

No.	Time	Source	Destination	Protocol	Leng	Info
14	14.130769	0.0.0.0	255.255.255.255	DHCP	406	DHCP Discover - Transaction ID 0x45b9375
15	14.158121	192.168.10.1	192.168.10.100	DHCP	342	DHCP Offer - Transaction ID 0x45b9375
16	15.135591	0.0.0.0	255.255.255.255	DHCP	406	DHCP Request - Transaction ID 0x45b9375
17	15.155072	192.168.10.1	192.168.10.100	DHCP	342	DHCP ACK - Transaction ID 0x45b9375

> Frame 17: 342 bytes on wire (2736 bits), 342 bytes captured (2736 bits) on
 > Ethernet II, Src: cc:01:1f:e7:00:00 (cc:01:1f:e7:00:00), Dst: Private_66:
 > Internet Protocol Version 4, Src: 192.168.10.1, Dst: 192.168.10.100
 > User Datagram Protocol, Src Port: 67, Dst Port: 68
 > Dynamic Host Configuration Protocol (ACK)
 Message type: Boot Reply (2)
 Hardware type: Ethernet (0x01)
 Hardware address length: 6
 Hops: 0
 Transaction ID: 0x045b9375
 Seconds elapsed: 0
 > Bootp flags: 0x0000 (Unicast)
 Client IP address: 192.168.10.100
 Your (client) IP address: 192.168.10.100
 Next server IP address: 0.0.0.0
 Relay agent IP address: 192.168.10.1
 Client MAC address: Private_66:68:00 (00:50:79:66:68:00)
 Client hardware address padding: 00000000000000000000
 Server host name not given
 Boot file name not given
 Magic cookie: DHCP
 > Option: (53) DHCP Message Type (ACK)
 > Option: (54) DHCP Server Identifier (192.168.30.2)
 > Option: (51) IP Address Lease Time
 > Option: (58) Renewal Time Value
 > Option: (59) Rebinding Time Value
 > Option: (1) Subnet Mask (255.255.255.0)
 > Option: (3) Router
 > Option: (6) Domain Name Server
 > Option: (255) End
 Padding: 00000000000000000000000000000000

0000 00 50 79 66 68 00 cc 01 1f e7 00 00 08 00 45 00 Pyfh...E-
 0010 01 48 00 35 00 00 ff 11 24 ba c0 a8 0a 01 c0 a8 H.5...\$.....
 0020 0a 64 00 43 00 44 01 34 38 cd 02 01 06 00 04 5b d.C.D.4 8.....[
 0030 93 75 00 00 00 00 c0 a8 0a 64 c0 a8 0a 64 00 00 u.....d..d..
 0040 00 00 c0 a8 0a 01 00 50 79 66 68 00 00 00 00 00P yfh.....
 0050 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 0060 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 0070 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 0080 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 0090 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 00a0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 00b0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 00c0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 00d0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 00e0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 00f0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 0100 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
 0110 00 00 00 00 00 00 63 82 53 63 35 01 05 36 04 c0c- Sc5--6--
 0120 a8 1e 02 33 04 00 27 8d 00 3a 04 00 13 c6 80 3b ...3...:.....;
 0130 04 00 22 9b 60 01 04 ff ff ff 00 03 04 c0 a8 0a ".....
 0140 01 06 04 c0 a8 0a 01 ff 00 00 00 00 00 00 00 00
 0150 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00

Your (client) IP address (dhcp.ip.your), 4 байта

Пакеты: 891 · Отображено: 4 (0.4%)

Профиль: Default

Сервер DHCP подтверждает выделение IP-адреса 192.168.10.100 клиенту. Поле Your (client) IP address содержит этот адрес.

6) Сохранить файлы конфигураций устройств в виде набора файлов с именами, соответствующими именам устройств

Полезная информация: возможно, что вам потребуется DHCP Relay