МИНИСТЕРСТВО ОБРАЗОВАНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ

БЕЛОРУССКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ

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Кафедра информационных систем управления

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Создание VLAN и назначение портов

Отчет по лабораторной работе №9

Вариант 21

(«Компьютерные сети»)

студентки 3 курса 2 группы

Преподаватель

Рафеенко Е.Д.

Минск 2019

1. Создание схемы.
2. Базовая настройка компьютеров

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3. Настройка коммутатора

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Отразите в отчете ответы на следующие вопросы:

1. Все ли другие порты коммутатора расположены во VLAN 1?

нет, в процессе настройки 4 порта были выделены двум другим сетям

2. Какие порты коммутатора расположены во VLAN 10?

Fa0/5, Fa0/6

3. Какие порты коммутатора расположены во VLAN 20?

Fa0/7, Fa0/8

4. Выполните эхо-запрос с ПК на коммутатор с адресом 185.206.3.2.

4.1. Были ли эхо-запросы с CompVLAN1-1 выполнены успешно?

да

4.2. Были ли эхо-запросы с CompVLAN10-1 выполнены успешно?

нет

4.3. Были ли эхо-запросы с CompVLAN20-1 выполнены успешно?

нет

5. Выполните эхо-запрос с CompVLAN1-3 на CompVLAN10-2 и

CompVLAN20-2.

5.1. Доступен ли CompVLAN10-2 для CompVLAN1-3?

нет

5.2. Доступен ли CompVLAN20-2 для CompVLAN1-3?

нет

6. Почему CompVLAN1-3 может установить связь с коммутатором, а с

CompVLAN10-2 и CompVLAN20-2 - нет?

Потому что для коммутатора был установлен gateway 185.206.3.1

7. Компьютеры не могут установить связь друг с другом. Почему?

Потому что не установлена маршрутизация между комутатором и сетью 2 и 3. Требуется настроить маршрутизацию между VLAN.

5. Настройка маршрутизатора для организации взаимодействия между

VLAN.

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Router#show ip interface

FastEthernet0/0 is up, line protocol is up (connected)

Internet address is 185.206.3.1/24

Broadcast address is 255.255.255.255

Address determined by setup command

MTU is 1500 bytes

Helper address is not set

Directed broadcast forwarding is disabled

Outgoing access list is not set

Inbound access list is not set

Proxy ARP is enabled

Security level is default

Split horizon is enabled

ICMP redirects are always sent

ICMP unreachables are always sent

ICMP mask replies are never sent

IP fast switching is disabled

IP fast switching on the same interface is disabled

IP Flow switching is disabled

IP Fast switching turbo vector

IP multicast fast switching is disabled

IP multicast distributed fast switching is disabled

Router Discovery is disabled

IP output packet accounting is disabled

IP access violation accounting is disabled

TCP/IP header compression is disabled

RTP/IP header compression is disabled

Probe proxy name replies are disabled

Policy routing is disabled

Network address translation is disabled

BGP Policy Mapping is disabled

Input features: MCI Check

WCCP Redirect outbound is disabled

WCCP Redirect inbound is disabled

WCCP Redirect exclude is disabled

FastEthernet0/0.10 is up, line protocol is up (connected)

Internet address is 185.206.1.1/24

Broadcast address is 255.255.255.255

Address determined by setup command

MTU is 1500 bytes

Helper address is not set

Directed broadcast forwarding is disabled

Outgoing access list is not set

Inbound access list is not set

Proxy ARP is enabled

Security level is default

Split horizon is enabled

ICMP redirects are always sent

ICMP unreachables are always sent

ICMP mask replies are never sent

IP fast switching is disabled

IP fast switching on the same interface is disabled

IP Flow switching is disabled

IP Fast switching turbo vector

IP multicast fast switching is disabled

IP multicast distributed fast switching is disabled

Router Discovery is disabled

IP output packet accounting is disabled

IP access violation accounting is disabled

TCP/IP header compression is disabled

RTP/IP header compression is disabled

Probe proxy name replies are disabled

Policy routing is disabled

Network address translation is disabled

BGP Policy Mapping is disabled

Input features: MCI Check

WCCP Redirect outbound is disabled

WCCP Redirect inbound is disabled

WCCP Redirect exclude is disabled

FastEthernet0/0.20 is up, line protocol is up (connected)

Internet address is 185.206.2.1/24

Broadcast address is 255.255.255.255

Address determined by setup command

MTU is 1500 bytes

Helper address is not set

Directed broadcast forwarding is disabled

Outgoing access list is not set

Inbound access list is not set

Proxy ARP is enabled

Security level is default

Split horizon is enabled

ICMP redirects are always sent

ICMP unreachables are always sent

ICMP mask replies are never sent

IP fast switching is disabled

IP fast switching on the same interface is disabled

IP Flow switching is disabled

IP Fast switching turbo vector

IP multicast fast switching is disabled

IP multicast distributed fast switching is disabled

Router Discovery is disabled

IP output packet accounting is disabled

IP access violation accounting is disabled

TCP/IP header compression is disabled

RTP/IP header compression is disabled

Probe proxy name replies are disabled

Policy routing is disabled

Network address translation is disabled

BGP Policy Mapping is disabled

Input features: MCI Check

WCCP Redirect outbound is disabled

WCCP Redirect inbound is disabled

WCCP Redirect exclude is disabled

FastEthernet0/1 is administratively down, line protocol is down (disabled)

Internet protocol processing disabled

Vlan1 is administratively down, line protocol is down

Internet protocol processing disabled

Router#

Проверка подключения:

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