

Лабораторная работа №14

Статическая маршрутизация в Интернете. Настройка

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Информация

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Ход работы



Рис. 1: Создание нового проекта

Настройка линка между площадками

```
provider-svkuznecova-sw-1>en
Password:
provider-svkuznecova-sw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
provider-svkuznecova-sw-1(config)#interface f0/3
provider-svkuznecova-sw-1(config-if)#switchport mode trunk

provider-svkuznecova-sw-1(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up

provider-svkuznecova-sw-1(config-if)#exit
provider-svkuznecova-sw-1(config)#interface f0/4
provider-svkuznecova-sw-1(config-if)#switchport mode trunk
provider-svkuznecova-sw-1(config-if)#exit
provider-svkuznecova-sw-1(config)#vlan 5
provider-svkuznecova-sw-1(config-vlan)#name q42
provider-svkuznecova-sw-1(config-vlan)#exit
provider-svkuznecova-sw-1(config)#interface vlan5
provider-svkuznecova-sw-1(config-if)#
%LINK-5-CHANGED: Interface Vlan5, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan5, changed state to up

provider-svkuznecova-sw-1(config-if)#no shutdown
provider-svkuznecova-sw-1(config-if)#exit
provider-svkuznecova-sw-1(config)#vlan 6
provider-svkuznecova-sw-1(config-vlan)#name sochi
provider-svkuznecova-sw-1(config-vlan)#exit
provider-svkuznecova-sw-1(config)#interface vlan6
provider-svkuznecova-sw-1(config-if)#
%LINK-5-CHANGED: Interface Vlan6, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan6, changed state to up

provider-svkuznecova-sw-1(config-if)#no shutdown
provider-svkuznecova-sw-1(config-if)#exit
provider-svkuznecova-sw-1(config)#exit
provider-svkuznecova-sw-1#
%SYS-5-CONFIG_I: Configured from console by console

provider-svkuznecova-sw-1#wr me
Building configuration...
[OK]
provider-svkuznecova-sw-1#
```

Рис. 2: Настройка интерфейсов коммутатора provider-svkuznecova-sw-1

Настройка линка между площадками

```
msk-donskaya-svkuznecova-gw-1>en
Password:
msk-donskaya-svkuznecova-gw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-donskaya-svkuznecova-gw-1(config)#interface f0/1.5
msk-donskaya-svkuznecova-gw-1(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/1.5, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1.5, changed state to up

msk-donskaya-svkuznecova-gw-1(config-subif)#encapsulation dot1Q 5
msk-donskaya-svkuznecova-gw-1(config-subif)#ip address 10.120.255.1 255.255.255.252
msk-donskaya-svkuznecova-gw-1(config-subif)#description q42
msk-donskaya-svkuznecova-gw-1(config-subif)#exit
msk-donskaya-svkuznecova-gw-1(config)#interface f0/1.6
msk-donskaya-svkuznecova-gw-1(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/1.6, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1.6, changed state to up

msk-donskaya-svkuznecova-gw-1(config-subif)#encapsulation dot1Q 6
msk-donskaya-svkuznecova-gw-1(config-subif)#ip address 10.120.255.5 255.255.255.252
msk-donskaya-svkuznecova-gw-1(config-subif)#description sochi
msk-donskaya-svkuznecova-gw-1(config-subif)#exit
msk-donskaya-svkuznecova-gw-1(config)#exit
msk-donskaya-svkuznecova-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

msk-donskaya-svkuznecova-gw-1#wr me
Building configuration...
[OK]
msk-donskaya-svkuznecova-gw-1#
```

Рис. 3: Настройка интерфейсов маршрутизатора msk-donskaya-svkuznecova-gw-1

Настройка линка между площадками

```
msk-q42-svkuznecova-gw-1>en
Password:
msk-q42-svkuznecova-gw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-q42-svkuznecova-gw-1(config)#interface f0/1
msk-q42-svkuznecova-gw-1(config-if)#no shutdown

msk-q42-svkuznecova-gw-1(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

msk-q42-svkuznecova-gw-1(config-if)#exit
msk-q42-svkuznecova-gw-1(config)#interface f0/1.5
msk-q42-svkuznecova-gw-1(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/1.5, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1.5, changed state to up

msk-q42-svkuznecova-gw-1(config-subif)#encapsulation dot1Q 5
msk-q42-svkuznecova-gw-1(config-subif)#ip address 10.128.255.2 255.255.255.252
msk-q42-svkuznecova-gw-1(config-subif)#description donskaya
msk-q42-svkuznecova-gw-1(config-subif)#exit
msk-q42-svkuznecova-gw-1(config)#exit
msk-q42-svkuznecova-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

msk-q42-svkuznecova-gw-1#wr me
Building configuration...
[OK]
msk-q42-svkuznecova-gw-1#
```

Рис. 4: Настройка интерфейсов маршрутизатора msk-q42-svkuznecova-gw-1

Настройка линка между площадками

```
sch-sochi-svkuznecova-sw-1>en
Password:
sch-sochi-svkuznecova-sw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
sch-sochi-svkuznecova-sw-1(config)#interface f0/23
sch-sochi-svkuznecova-sw-1(config-if)#switchport mode trunk
sch-sochi-svkuznecova-sw-1(config-if)#exit
sch-sochi-svkuznecova-sw-1(config)#interface f0/24
sch-sochi-svkuznecova-sw-1(config-if)#switchport mode trunk
sch-sochi-svkuznecova-sw-1(config-if)#exit
sch-sochi-svkuznecova-sw-1(config)#vlan 6
sch-sochi-svkuznecova-sw-1(config-vlan)#name sochi
sch-sochi-svkuznecova-sw-1(config-vlan)#exit
sch-sochi-svkuznecova-sw-1(config)#interface vlan6
sch-sochi-svkuznecova-sw-1(config-if)#
%LINK-5-CHANGED: Interface Vlan6, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan6, changed state to up

sch-sochi-svkuznecova-sw-1(config-if)#no shutdown
sch-sochi-svkuznecova-sw-1(config-if)#exit
sch-sochi-svkuznecova-sw-1(config)#exit
sch-sochi-svkuznecova-sw-1#
%SYS-5-CONFIG_I: Configured from console by console

sch-sochi-svkuznecova-sw-1#wr me
Building configuration...
[OK]
sch-sochi-svkuznecova-sw-1#
```

Рис. 5: Настройка интерфейсов коммутатора sch-sochi-svkuznecova-sw-1

Настройка линка между площадками

```
sch-sochi-svkuznecova-gw-1>en
Password:
sch-sochi-svkuznecova-gw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
sch-sochi-svkuznecova-gw-1(config)#interface f0/0
sch-sochi-svkuznecova-gw-1(config-if)#no shutdown

sch-sochi-svkuznecova-gw-1(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

sch-sochi-svkuznecova-gw-1(config-if)#exit
sch-sochi-svkuznecova-gw-1(config)#interface f0/0.6
sch-sochi-svkuznecova-gw-1(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.6, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.6, changed state to up

sch-sochi-svkuznecova-gw-1(config-subif)#encapsulation dot1Q 6
sch-sochi-svkuznecova-gw-1(config-subif)#ip address 10.120.255.6 255.255.255.252
sch-sochi-svkuznecova-gw-1(config-subif)#description donskaya
sch-sochi-svkuznecova-gw-1(config-subif)#exit
sch-sochi-svkuznecova-gw-1(config)#exit
sch-sochi-svkuznecova-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

sch-sochi-svkuznecova-gw-1#wr me
Building configuration...
[OK]
sch-sochi-svkuznecova-gw-1#
```

Рис. 6: Настройка интерфейсов маршрутизатора sch-sochi-svkuznecova-gw-1

Настройка площадки 42-го квартала

```
msk-q42-svkuznecova-gu-l#en
msk-q42-svkuznecova-gu-l#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-q42-svkuznecova-gu-l(config)#interface f0/0
msk-q42-svkuznecova-gu-l(config-if)#no shutdown

msk-q42-svkuznecova-gu-l(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

msk-q42-svkuznecova-gu-l(config-if)#exit
msk-q42-svkuznecova-gu-l(config)#interface f0/0.201
msk-q42-svkuznecova-gu-l(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.201, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.201, changed state to up

msk-q42-svkuznecova-gu-l(config-subif)#encapsulation dot1Q 201
msk-q42-svkuznecova-gu-l(config-subif)#ip address 10.129.0.1 255.255.255.0
msk-q42-svkuznecova-gu-l(config-subif)#description q42main
msk-q42-svkuznecova-gu-l(config-subif)#description q42-main
msk-q42-svkuznecova-gu-l(config-subif)#exit
msk-q42-svkuznecova-gu-l(config)#interface f1/0
%Invalid interface type and number
msk-q42-svkuznecova-gu-l(config)#no shutdown

% Invalid input detected at '^' marker.

msk-q42-svkuznecova-gu-l(config)#interface f1/0
%Invalid interface type and number
msk-q42-svkuznecova-gu-l(config)#interface f0/1
msk-q42-svkuznecova-gu-l(config-if)#no shutdown
msk-q42-svkuznecova-gu-l(config-if)#exit
msk-q42-svkuznecova-gu-l(config)#interface f1/0.202
%Invalid interface type and number
msk-q42-svkuznecova-gu-l(config)#interface f0/1.202
msk-q42-svkuznecova-gu-l(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/1.202, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1.202, changed state to up

msk-q42-svkuznecova-gu-l(config-subif)#encapsulation dot1Q 202
msk-q42-svkuznecova-gu-l(config-subif)#ip address 10.129.1.1 255.255.255.0
msk-q42-svkuznecova-gu-l(config-subif)#description q42-management
msk-q42-svkuznecova-gu-l(config-subif)#exit
msk-q42-svkuznecova-gu-l(config)#exit
msk-q42-svkuznecova-gu-l#
%SYS-5-CONFIG_I: Configured from console by console

msk-q42-svkuznecova-gu-l#wr me
Building configuration...
[OK]
msk-q42-svkuznecova-gu-l#
```

Рис. 7: Настройка интерфейсов маршрутизатора msk-q42-svkuznecova-gw-1

Настройка площадки 42-го квартала

```
msk-q42-svkuznecova-sw-1>en
Password:
msk-q42-svkuznecova-sw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-q42-svkuznecova-sw-1(config)#interface f0/24
msk-q42-svkuznecova-sw-1(config-if)#switchport mode trunk
msk-q42-svkuznecova-sw-1(config-if)#exit
msk-q42-svkuznecova-sw-1(config)#interface f0/1
msk-q42-svkuznecova-sw-1(config-if)#switchport mode access
msk-q42-svkuznecova-sw-1(config-if)#switchport access vlan 201
% Access VLAN does not exist. Creating vlan 201
msk-q42-svkuznecova-sw-1(config-if)#exit
msk-q42-svkuznecova-sw-1(config)#vlan 201
msk-q42-svkuznecova-sw-1(config-vlan)#name q42main
msk-q42-svkuznecova-sw-1(config-vlan)#name q42-main
msk-q42-svkuznecova-sw-1(config-vlan)#exit
msk-q42-svkuznecova-sw-1(config)#interface vlan201
msk-q42-svkuznecova-sw-1(config-if)#
%LINK-5-CHANGED: Interface Vlan201, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan201, changed state to up

msk-q42-svkuznecova-sw-1(config-if)#no shutdown
msk-q42-svkuznecova-sw-1(config-if)#exit
msk-q42-svkuznecova-sw-1(config)#exit
msk-q42-svkuznecova-sw-1#
%SYS-5-CONFIG_I: Configured from console by console

msk-q42-svkuznecova-sw-1#wr me
Building configuration...
[OK]
msk-q42-svkuznecova-sw-1#
```

Рис. 8: Настройка интерфейсов коммутатора msk-q42-svkuznecova-sw-1

Настройка площадки 42-го квартала

```
msk-hostel-svkuznecova-gw-1>en
Password:
msk-hostel-svkuznecova-gw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-hostel-svkuznecova-gw-1(config)#interface g0/1
msk-hostel-svkuznecova-gw-1(config-if)#switchport trunk encapsulation dot1q
msk-hostel-svkuznecova-gw-1(config-if)#switchport mode trunk
msk-hostel-svkuznecova-gw-1(config-if)#exit
msk-hostel-svkuznecova-gw-1(config)#interface f0/1
msk-hostel-svkuznecova-gw-1(config-if)#switchport trunk encapsulation dot1q
msk-hostel-svkuznecova-gw-1(config-if)#switchport mode trunk
msk-hostel-svkuznecova-gw-1(config-if)#exit
msk-hostel-svkuznecova-gw-1(config)#vlan 202
msk-hostel-svkuznecova-gw-1(config-vlan)#name q42management
msk-hostel-svkuznecova-gw-1(config-vlan)#name q42-management
msk-hostel-svkuznecova-gw-1(config-vlan)#exit
msk-hostel-svkuznecova-gw-1(config)#interface vlan202
msk-hostel-svkuznecova-gw-1(config-if)#
%LINK-5-CHANGED: Interface Vlan202, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan202, changed state to up

msk-hostel-svkuznecova-gw-1(config-if)#no shutdown
msk-hostel-svkuznecova-gw-1(config-if)#ip address 10.129.1.2 255.255.255.0
msk-hostel-svkuznecova-gw-1(config-if)#exit
msk-hostel-svkuznecova-gw-1(config)#vlan 301
msk-hostel-svkuznecova-gw-1(config-vlan)#name hostel-main
msk-hostel-svkuznecova-gw-1(config-vlan)#exit
msk-hostel-svkuznecova-gw-1(config)#interface vlan301
msk-hostel-svkuznecova-gw-1(config-if)#
%LINK-5-CHANGED: Interface Vlan301, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan301, changed state to up

msk-hostel-svkuznecova-gw-1(config-if)#no shutdown
msk-hostel-svkuznecova-gw-1(config-if)#ip address 10.129.128.1 255.255.255.0
msk-hostel-svkuznecova-gw-1(config-if)#exit
msk-hostel-svkuznecova-gw-1(config)#exit
msk-hostel-svkuznecova-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

msk-hostel-svkuznecova-gw-1#wr me
Building configuration...
[OK]
msk-hostel-svkuznecova-gw-1#
```

Рис. 9: Настройка интерфейсов маршрутизирующего коммутатора msk-hostel-svkuznecova-gw-1

Настройка площадки 42-го квартала

```
msk-hostel-svkznecova-sw-1>en
Password:
msk-hostel-svkznecova-sw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-hostel-svkznecova-sw-1(config)#interface g0/1
msk-hostel-svkznecova-sw-1(config-if)#switchport mode trunk
msk-hostel-svkznecova-sw-1(config-if)#exit
msk-hostel-svkznecova-sw-1(config)#interface f0/1
msk-hostel-svkznecova-sw-1(config-if)#switchport mode access
msk-hostel-svkznecova-sw-1(config-if)#switchport access vlan 301
% Access VLAN does not exist. Creating vlan 301
msk-hostel-svkznecova-sw-1(config-if)#exit
msk-hostel-svkznecova-sw-1(config)#vlan 301
msk-hostel-svkznecova-sw-1(config-vlan)#name hostel main
^
% Invalid input detected at '^' marker.

msk-hostel-svkznecova-sw-1(config-vlan)#name hostel-main
msk-hostel-svkznecova-sw-1(config-vlan)#exit
msk-hostel-svkznecova-sw-1(config)#interface vlan301
msk-hostel-svkznecova-sw-1(config-if)#
%LINK-S-CHANGED: Interface Vlan301, changed state to up

%LINEPROTO-S-UPDOWN: Line protocol on Interface Vlan301, changed state to up

msk-hostel-svkznecova-sw-1(config-if)#no shutdown
msk-hostel-svkznecova-sw-1(config-if)#exit
msk-hostel-svkznecova-sw-1(config)#exit
msk-hostel-svkznecova-sw-1#
%SYS-S-CONFIG_I: Configured from console by console

msk-hostel-svkznecova-sw-1#vr me
Building configuration...
[OK]
msk-hostel-svkznecova-sw-1#
```

Рис. 10: Настройка интерфейсов коммутатора msk-hostel-svkuznecova-sw-1

```
sch-sochi-svkuznecova-gw-1>en
Password:
sch-sochi-svkuznecova-gw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
sch-sochi-svkuznecova-gw-1(config)#interface f0/0.401
sch-sochi-svkuznecova-gw-1(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.401, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.401, changed state to up

sch-sochi-svkuznecova-gw-1(config-subif)#encapsulation dot1Q 401
sch-sochi-svkuznecova-gw-1(config-subif)#ip address 10.130.0.1 255.255.255.0
sch-sochi-svkuznecova-gw-1(config-subif)#description sochi-main
sch-sochi-svkuznecova-gw-1(config-subif)#exit
sch-sochi-svkuznecova-gw-1(config)#interface f0/0.402
sch-sochi-svkuznecova-gw-1(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.402, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.402, changed state to up

sch-sochi-svkuznecova-gw-1(config-subif)#encapsulation dot1Q 402
sch-sochi-svkuznecova-gw-1(config-subif)#ip address 10.130.1.1 255.255.255.0
sch-sochi-svkuznecova-gw-1(config-subif)#description sochi-management
sch-sochi-svkuznecova-gw-1(config-subif)#exit
sch-sochi-svkuznecova-gw-1(config)#exit
^
% Invalid input detected at '^' marker.

sch-sochi-svkuznecova-gw-1(config)#exit
^
% Invalid input detected at '^' marker.

sch-sochi-svkuznecova-gw-1(config)#exit
sch-sochi-svkuznecova-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

sch-sochi-svkuznecova-gw-1#vr me
Building configuration...
[OK]
sch-sochi-svkuznecova-gw-1#
```

Рис. 11: Настройка интерфейсов маршрутизатора sch-sochi-svkuznecova-gw-1

```
sch-sochi-svkuznecova-sw-1>en
Password:
sch-sochi-svkuznecova-sw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
sch-sochi-svkuznecova-sw-1(config)#interface f0/1
sch-sochi-svkuznecova-sw-1(config-if)#switchport mode access
sch-sochi-svkuznecova-sw-1(config-if)#switchport access vlan 401
% Access VLAN does not exist. Creating vlan 401
sch-sochi-svkuznecova-sw-1(config-if)#exit
sch-sochi-svkuznecova-sw-1(config)#vlan 401
sch-sochi-svkuznecova-sw-1(config-vlan)#name sochi-main
sch-sochi-svkuznecova-sw-1(config-vlan)#exit
sch-sochi-svkuznecova-sw-1(config)#interface vlan401
sch-sochi-svkuznecova-sw-1(config-if)#
%LINK-5-CHANGED: Interface Vlan401, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan401, changed state to up

sch-sochi-svkuznecova-sw-1(config-if)#no shutdown
sch-sochi-svkuznecova-sw-1(config-if)#exit
sch-sochi-svkuznecova-sw-1(config)#exit
sch-sochi-svkuznecova-sw-1#
%SYS-5-CONFIG_I: Configured from console by console

sch-sochi-svkuznecova-sw-1#wr me
Building configuration...
[OK]
sch-sochi-svkuznecova-sw-1#
```

Рис. 12: Настройка интерфейсов коммутатора sch-sochi-svkuznecova-sw-1

Настройка маршрутизации между площадками

```
msk-donskaya-svkuznecova-gw-1>en
Password:
msk-donskaya-svkuznecova-gw-1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
msk-donskaya-svkuznecova-gw-1(config)#ip route 10.129.0.0 255.255.0.0 10.128.255.2
msk-donskaya-svkuznecova-gw-1(config)#ip route 10.130.0.0 255.255.0.0 10.128.255.6
msk-donskaya-svkuznecova-gw-1(config)#exit
msk-donskaya-svkuznecova-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

msk-donskaya-svkuznecova-gw-1#wr me
Building configuration...
[OK]
msk-donskaya-svkuznecova-gw-1#
```

Рис. 13: Настройка маршрутизатора msk-donskaya-svkuznecova-gw-1

Настройка маршрутизации между площадками

```
msk-q42-svkuznecova-gw-1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
msk-q42-svkuznecova-gw-1(config)#ip route 0.0.0.0 0.0.0.0 10.128.255.1
msk-q42-svkuznecova-gw-1(config)#exit
msk-q42-svkuznecova-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

msk-q42-svkuznecova-gw-1#wr me
Building configuration...
[OK]
msk-q42-svkuznecova-gw-1#
```

Рис. 14: Настройка маршрутизатора msk-q42-svkuznecova-gw-1

Настройка маршрутизации между площадками

```
sch-sochi-svkuznecova-gw-1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
sch-sochi-svkuznecova-gw-1(config)#ip route 0.0.0.0 0.0.0.0 10.128.255.5
sch-sochi-svkuznecova-gw-1(config)#exit
sch-sochi-svkuznecova-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

sch-sochi-svkuznecova-gw-1#wr me
Building configuration...
[OK]
sch-sochi-svkuznecova-gw-1#
```

Рис. 15: Настройка маршрутизатора sch-sochi-svkuznecova-gw-1

Настройка маршрутизации на 42 квартале

```
msk-q42-svkuznecova-gw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-q42-svkuznecova-gw-1(config)#ip route 10.129.128.0 255.255.128.0 10.129.1.2
msk-q42-svkuznecova-gw-1(config)#exit
msk-q42-svkuznecova-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

msk-q42-svkuznecova-gw-1#wr me
Building configuration...
[OK]
msk-q42-svkuznecova-gw-1#
```

Рис. 16: Настройка маршрутизатора msk-q42-svkuznecova-gw-1

Настройка маршрутизации на 42 квартале

```
msk-hostel-svkuznecova-gw-1>en
Password:
msk-hostel-svkuznecova-gw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-hostel-svkuznecova-gw-1(config)#ip routing
msk-hostel-svkuznecova-gw-1(config)#ip route 0.0.0.0 0.0.0.0 10.129.1.1
msk-hostel-svkuznecova-gw-1(config)#exit
msk-hostel-svkuznecova-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

msk-hostel-svkuznecova-gw-1#wr me
Building configuration...
[OK]
msk-hostel-svkuznecova-gw-1#
```

Рис. 17: Настройка интерфейсов маршрутизирующего коммутатора msk-hostel-svkuznecova-gw-1

Настройка NAT на маршрутизаторе msk-donskaya-svkuznecova-gw-1

```
msk-donskaya-svkuznecova-gw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-donskaya-svkuznecova-gw-1(config)#interface f0/1.5
msk-donskaya-svkuznecova-gw-1(config-subif)#ip nat inside
msk-donskaya-svkuznecova-gw-1(config-subif)#exit
msk-donskaya-svkuznecova-gw-1(config)#interface f0/1.6
msk-donskaya-svkuznecova-gw-1(config-subif)#ip nat inside
msk-donskaya-svkuznecova-gw-1(config-subif)#exit
msk-donskaya-svkuznecova-gw-1(config)#ip access list extended natinet
^
% Invalid input detected at '^' marker.

msk-donskaya-svkuznecova-gw-1(config)#ip access-list extended nat-inet
msk-donskaya-svkuznecova-gw-1(config-ext-nacl)#remark q42
msk-donskaya-svkuznecova-gw-1(config-ext-nacl)#permit ip host 10.129.0.200 any
msk-donskaya-svkuznecova-gw-1(config-ext-nacl)#permit ip host 10.129.128.200 any
msk-donskaya-svkuznecova-gw-1(config-ext-nacl)#remark sochi
msk-donskaya-svkuznecova-gw-1(config-ext-nacl)#permit ip host 10.130.0.200 any
msk-donskaya-svkuznecova-gw-1(config-ext-nacl)#exit
msk-donskaya-svkuznecova-gw-1(config)#exit
msk-donskaya-svkuznecova-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

msk-donskaya-svkuznecova-gw-1#wr me
Building configuration...
[OK]
msk-donskaya-svkuznecova-gw-1#
```

Рис. 18: Настройка NAT на маршрутизаторе msk-donskaya-svkuznecova-gw-1

Выводы

В ходе выполнения лабораторной работы мы настроили взаимодействие через сеть провайдера посредством статической маршрутизации локальной сети организации с сетью основного здания, расположенного в 42-м квартале в Москве, и сетью филиала, расположенного в г. Сочи.

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