

Лабораторная работа №14

Администрирование локальных сетей

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- Настроить 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

1. Настроить связь между территориями.
2. Настроить оборудование, расположенное в квартале 42 в Москве.
3. Настроить оборудование, расположенное в филиале в г. Сочи.
4. Настроить статическую маршрутизацию между территориями.
5. Настроить статическую маршрутизацию на территории квартала 42 в г. Москве.
6. Настроить NAT на маршрутизаторе msk-donskaya-gw-1.
7. При выполнении работы необходимо учитывать соглашение об именовании.

Выполнение лабораторной работы

Настройка линка между площадками

```
provider-aamishina-sw-1>en
Password:
provider-aamishina-sw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
provider-aamishina-sw-1(config)#interface f0/3
provider-aamishina-sw-1(config-if)#switchport mode trunk
% Invalid input detected at '^' marker.
^
provider-aamishina-sw-1(config-if)#switchport mode trunk

provider-aamishina-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-aamishina-sw-1(config-if)#exit
provider-aamishina-sw-1(config)#interface f0/4
provider-aamishina-sw-1(config-if)#switchport mode trunk
provider-aamishina-sw-1(config-if)#exit
provider-aamishina-sw-1(config)#vlan 5
provider-aamishina-sw-1(config-vlan)#name q42
provider-aamishina-sw-1(config-vlan)#exit
provider-aamishina-sw-1(config)#interface vlan 5
provider-aamishina-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-aamishina-sw-1(config-if)#no shutdown
provider-aamishina-sw-1(config-if)#exit
provider-aamishina-sw-1(config)#vlan 6
provider-aamishina-sw-1(config-vlan)#name sochi
provider-aamishina-sw-1(config-vlan)#exit
provider-aamishina-sw-1(config)#interface vlan 6
provider-aamishina-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-aamishina-sw-1(config-if)#no shutdown
provider-aamishina-sw-1(config-if)#exit
provider-aamishina-sw-1(config)#
```

Рис. 1: Настройка интерфейсов коммутатора provider-aamishina-sw-1

Настройка линка между площадками

```
msk-donskaya-aamishina-gw-1>en
Password:
msk-donskaya-aamishina-gw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-donskaya-aamishina-gw-1(config)#interface f0/1.5
msk-donskaya-aamishina-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-aamishina-gw-1(config-subif)#encapsulation dot1Q 5
msk-donskaya-aamishina-gw-1(config-subif)#ip address 10.128.255.1 255.255.255.252
msk-donskaya-aamishina-gw-1(config-subif)#description q42
msk-donskaya-aamishina-gw-1(config-subif)#exit
msk-donskaya-aamishina-gw-1(config)#interface f0/1.6
msk-donskaya-aamishina-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-aamishina-gw-1(config-subif)#encapsulation dot1Q 6
msk-donskaya-aamishina-gw-1(config-subif)#ip address 10.128.255.5 255.255.255.252
msk-donskaya-aamishina-gw-1(config-subif)#description sochi
msk-donskaya-aamishina-gw-1(config-subif)#exit
msk-donskaya-aamishina-gw-1(config)#exit
msk-donskaya-aamishina-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

msk-donskaya-aamishina-gw-1#
```

Рис. 2: Настройка интерфейсов маршрутизатора msk-donskaya-aamishina-gw-1

Настройка линка между площадками

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

msk-q42-aamishina-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-aamishina-gw-1(config-if)#exit
msk-q42-aamishina-gw-1(config)#interface f0/1.5
msk-q42-aamishina-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-aamishina-gw-1(config-subif)#encapsulation dot1Q 5
msk-q42-aamishina-gw-1(config-subif)#ip address 10.128.255.2 255.255.255.252
msk-q42-aamishina-gw-1(config-subif)#description donskaya
msk-q42-aamishina-gw-1(config-subif)#exit
msk-q42-aamishina-gw-1(config)#exit
msk-q42-aamishina-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

msk-q42-aamishina-gw-1#
```

Рис. 3: Настройка интерфейсов маршрутизатора msk-q42-aamishina-gw-1

Настройка линка между площадками

```
User Access Verification

Password:

sch-sochi-aamishina-sw-1>en
Password:
sch-sochi-aamishina-sw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
sch-sochi-aamishina-sw-1(config)#interface f0/23
sch-sochi-aamishina-sw-1(config-if)#switchport mode trunk
sch-sochi-aamishina-sw-1(config-if)#exit
sch-sochi-aamishina-sw-1(config)#interface f0/24
sch-sochi-aamishina-sw-1(config-if)#switchport mode trunk
sch-sochi-aamishina-sw-1(config-if)#exit
sch-sochi-aamishina-sw-1(config)#vlan 6
sch-sochi-aamishina-sw-1(config-vlan)#name sochi
sch-sochi-aamishina-sw-1(config-vlan)#exit
sch-sochi-aamishina-sw-1(config)#interface vlan6
sch-sochi-aamishina-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-aamishina-sw-1(config-if)#no shutdown
sch-sochi-aamishina-sw-1(config-if)#exit
sch-sochi-aamishina-sw-1(config)#^Z
sch-sochi-aamishina-sw-1#
%SYS-5-CONFIG_I: Configured from console by console

sch-sochi-aamishina-sw-1#
```

Рис. 4: Настройка интерфейсов коммутатора sch-sochi-aamishina-sw-1

Настройка линка между площадками

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

sch-sochi-aamishina-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-aamishina-gw-1(config-if)#exit
sch-sochi-aamishina-gw-1(config)#interface f0/0.6
sch-sochi-aamishina-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-aamishina-gw-1(config-subif)#encapsulation dot1Q 6
sch-sochi-aamishina-gw-1(config-subif)#ip address 10.128.255.6 255.255.255.252
sch-sochi-aamishina-gw-1(config-subif)#description donskaya
sch-sochi-aamishina-gw-1(config-subif)#exit
sch-sochi-aamishina-gw-1(config)#exit
sch-sochi-aamishina-gw-1#
%SYS-5-CONFIG_I: Configured from console by console

sch-sochi-aamishina-gw-1#
```

Рис. 5: Настройка интерфейсов маршрутизатора sch-sochi-aamishina-gw-1

Настройка площадки 42-го квартала

```
msk-q42-aamishina-gw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-q42-aamishina-gw-1(config)#interface f0/0
msk-q42-aamishina-gw-1(config-if)#no shutdown

msk-q42-aamishina-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

msk-q42-aamishina-gw-1(config-if)#exit
msk-q42-aamishina-gw-1(config)#interface f0/0.201
msk-q42-aamishina-gw-1(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-aamishina-gw-1(config-subif)#encapsulation dot1Q 201
msk-q42-aamishina-gw-1(config-subif)#ip address 10.129.0.1 255.255.255.0
msk-q42-aamishina-gw-1(config-subif)#description q42-main
msk-q42-aamishina-gw-1(config-subif)#exit
msk-q42-aamishina-gw-1(config)#
msk-q42-aamishina-gw-1(config)#interface f1/0
msk-q42-aamishina-gw-1(config-if)#no shutdown

msk-q42-aamishina-gw-1(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up

msk-q42-aamishina-gw-1(config-if)#exit
msk-q42-aamishina-gw-1(config)#interface f1/0.202
msk-q42-aamishina-gw-1(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet1/0.202, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0.202, changed state to up

msk-q42-aamishina-gw-1(config-subif)#encapsulation dot1Q 202
msk-q42-aamishina-gw-1(config-subif)#ip address 10.129.1.1 255.255.255.0
msk-q42-aamishina-gw-1(config-subif)#description q42-management
msk-q42-aamishina-gw-1(config-subif)#exit
msk-q42-aamishina-gw-1(config)#
```

Сов

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Рис. 6: Настройка интерфейсов маршрутизатора msk-q42-aamishina-gw-1

Настройка площадки 42-го квартала

```
msk-q42-aamishina-sw-1>en
Password:
msk-q42-aamishina-sw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-q42-aamishina-sw-1(config)#interface f0/24
msk-q42-aamishina-sw-1(config-if)#switchport mode trunk
msk-q42-aamishina-sw-1(config-if)#exit
msk-q42-aamishina-sw-1(config)#interface f0/1
msk-q42-aamishina-sw-1(config-if)#switchport mode access
msk-q42-aamishina-sw-1(config-if)#switchport access vlan 201
% Access VLAN does not exist. Creating vlan 201
msk-q42-aamishina-sw-1(config-if)#exit
msk-q42-aamishina-sw-1(config)#vlan 201
msk-q42-aamishina-sw-1(config-vlan)#name q42-main
msk-q42-aamishina-sw-1(config-vlan)#exit
msk-q42-aamishina-sw-1(config)#interface vlan201
msk-q42-aamishina-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-aamishina-sw-1(config-if)#no shutdown
msk-q42-aamishina-sw-1(config-if)#exit
msk-q42-aamishina-sw-1(config)#
msk-q42-aamishina-sw-1(config)#
```

Рис. 7: Настройка интерфейсов коммутатора msk-q42-aamishina-sw-1

Настройка площадки 42-го квартала

```
msk-hostel-aamishina-gw-1>en
Password:
msk-hostel-aamishina-gw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-hostel-aamishina-gw-1(config)#interface g0/1
msk-hostel-aamishina-gw-1(config-if)#switchport trunk encapsulation dot1q
msk-hostel-aamishina-gw-1(config-if)#switchport mode trunk

msk-hostel-aamishina-gw-1(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

msk-hostel-aamishina-gw-1(config-if)#exit
msk-hostel-aamishina-gw-1(config)#interface f0/1
msk-hostel-aamishina-gw-1(config-if)#switchport trunk encapsulation dot1q
msk-hostel-aamishina-gw-1(config-if)#switchport mode trunk
msk-hostel-aamishina-gw-1(config-if)#exit
msk-hostel-aamishina-gw-1(config)#
msk-hostel-aamishina-gw-1(config)#vlan 202
msk-hostel-aamishina-gw-1(config-vlan)#name q42-management
msk-hostel-aamishina-gw-1(config-vlan)#exit
msk-hostel-aamishina-gw-1(config)#
msk-hostel-aamishina-gw-1(config)#interface vlan202
msk-hostel-aamishina-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-aamishina-gw-1(config-if)#no shutdown
msk-hostel-aamishina-gw-1(config-if)#ip address 10.129.1.2 255.255.255.0
msk-hostel-aamishina-gw-1(config-if)#exit
msk-hostel-aamishina-gw-1(config)#
msk-hostel-aamishina-gw-1(config)#vlan 301
msk-hostel-aamishina-gw-1(config-vlan)#name hostel-main
msk-hostel-aamishina-gw-1(config-vlan)#exit
msk-hostel-aamishina-gw-1(config)#
msk-hostel-aamishina-gw-1(config)#interface vlan301
msk-hostel-aamishina-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-aamishina-gw-1(config-if)#no shutdown
msk-hostel-aamishina-gw-1(config-if)#ip address 10.129.128.1 255.255.255.0
msk-hostel-aamishina-gw-1(config-if)#exit
msk-hostel-aamishina-gw-1(config)#
msk-hostel-aamishina-gw-1(config)#
```

Рис. 8: Настройка интерфейсов маршрутизирующего коммутатора msk-hostel-aamishina-gw-1

Настройка площадки 42-го квартала

```
Password:
msk-hostel-aamishina-sw-1>en
Password:
msk-hostel-aamishina-sw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-hostel-aamishina-sw-1(config)#interface g0/1
msk-hostel-aamishina-sw-1(config-if)#switchport mode trunk
msk-hostel-aamishina-sw-1(config-if)#exit
msk-hostel-aamishina-sw-1(config)#interface f0/1
msk-hostel-aamishina-sw-1(config-if)#switchport mode access
msk-hostel-aamishina-sw-1(config-if)#switchport access vlan 301
% Access VLAN does not exist. Creating vlan 301
msk-hostel-aamishina-sw-1(config-if)#exit
msk-hostel-aamishina-sw-1(config)#vlan 301
msk-hostel-aamishina-sw-1(config-vlan)#name hostel-main
msk-hostel-aamishina-sw-1(config-vlan)#exit
msk-hostel-aamishina-sw-1(config)#interface vlan301
msk-hostel-aamishina-sw-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-aamishina-sw-1(config-if)#no shutdown
msk-hostel-aamishina-sw-1(config-if)#exit
msk-hostel-aamishina-sw-1(config)#
```

Рис. 9: Настройка интерфейсов коммутатора msk-hostel-aamishina-sw-1

Настройка площадки в Сочи

```
sch-sochi-aamishina-gw-1>en
Password:
sch-sochi-aamishina-gw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
sch-sochi-aamishina-gw-1(config)#interface f0/0.401
sch-sochi-aamishina-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-aamishina-gw-1(config-subif)#encapsulation dot1Q 401
sch-sochi-aamishina-gw-1(config-subif)#ip address 10.130.0.1 255.255.255.0
sch-sochi-aamishina-gw-1(config-subif)#description sochi-main
sch-sochi-aamishina-gw-1(config-subif)#exit
sch-sochi-aamishina-gw-1(config)#interface f0/0.402
sch-sochi-aamishina-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-aamishina-gw-1(config-subif)#encapsulation dot1Q 402
sch-sochi-aamishina-gw-1(config-subif)#ip addresss 10.130.1.1 255.255.255.0
                                     ^
% Invalid input detected at '^' marker.

sch-sochi-aamishina-gw-1(config-subif)#ip address 10.130.1.1 255.255.255.0
sch-sochi-aamishina-gw-1(config-subif)#description sochi-management
sch-sochi-aamishina-gw-1(config-subif)#exit
sch-sochi-aamishina-gw-1(config)#
```

Рис. 10: Настройка интерфейсов маршрутизатора sch-sochi-aamishina-gw-1

```
sch-sochi-aamishina-sw-1>en
Password:
sch-sochi-aamishina-sw-1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
sch-sochi-aamishina-sw-1(config)#interface f0/1
sch-sochi-aamishina-sw-1(config-if)#switchport mode access
sch-sochi-aamishina-sw-1(config-if)#switchport access vlan 401
% Access VLAN does not exist. Creating vlan 401
sch-sochi-aamishina-sw-1(config-if)#exit
sch-sochi-aamishina-sw-1(config)#vlan 401
sch-sochi-aamishina-sw-1(config-vlan)#name sochi-main
sch-sochi-aamishina-sw-1(config-vlan)#exit
sch-sochi-aamishina-sw-1(config)#interface vlan401
sch-sochi-aamishina-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-aamishina-sw-1(config-if)#no shutdown
sch-sochi-aamishina-sw-1(config-if)#exit
sch-sochi-aamishina-sw-1(config)#
sch-sochi-aamishina-sw-1(config)#
```

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Рис. 11: Настройка интерфейсов коммутатора sch-sochi-sw-1

Настройка маршрутизации между площадками

```
Password:
msk-donskaya-aamishina-gw-1>en
Password:
msk-donskaya-aamishina-gw-1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
msk-donskaya-aamishina-gw-1(config)#ip route 10.129.0.0 255.255.0.0 10.128.255.2
msk-donskaya-aamishina-gw-1(config)#ip route 10.130.0.0 255.255.0.0 10.128.255.6
msk-donskaya-aamishina-gw-1(config)#
```

Рис. 12: Настройка маршрутизатора msk-donskaya-aamishina-gw-1

Настройка маршрутизации между площадками

```
Password:
msk-q42-aamishina-gw-1>en
Password:
msk-q42-aamishina-gw-1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
msk-q42-aamishina-gw-1(config)#ip route 0.0.0.0 0.0.0.0 10.128.255.1
msk-q42-aamishina-gw-1(config)#
```

Copy

Рис. 13: Настройка маршрутизатора msk-q42-aamishina-gw-1

```
sch-sochi-aamishina-gw-1#  
sch-sochi-aamishina-gw-1#conf t  
Enter configuration commands, one per line. End with CNTL/Z.  
sch-sochi-aamishina-gw-1(config)#ip route 0.0.0.0 0.0.0.0 10.128.255.5  
sch-sochi-aamishina-gw-1(config)#
```

Рис. 14: Настройка маршрутизатора sch-sochi-aamishina-gw-1

Настройка маршрутизации на 42 квартале

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

Рис. 15: Настройка маршрутизатора msk-q42-aamishina-gw-1

Настройка маршрутизации на 42 квартале

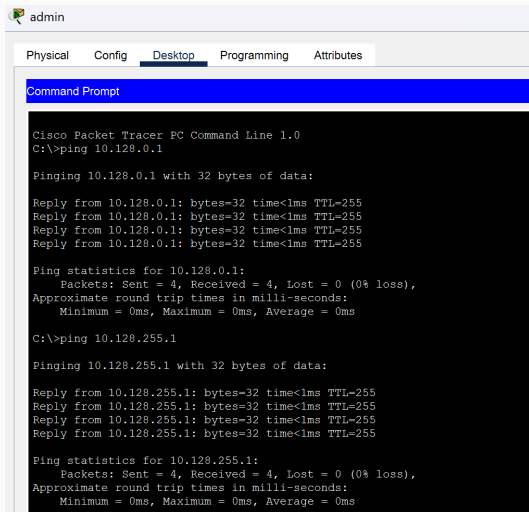
```
password:
msk-hostel-aamishina-gw-1>en
Password:
msk-hostel-aamishina-gw-1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
msk-hostel-aamishina-gw-1(config)#ip routing
msk-hostel-aamishina-gw-1(config)#ip route 0.0.0.0 0.0.0.0 10.129.1.1
msk-hostel-aamishina-gw-1(config)#^Z
msk-hostel-aamishina-gw-1#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

Рис. 16: Настройка интерфейсов маршрутизирующего коммутатора msk-hostel-aamishina-gw-1

Настройка NAT на маршрутизаторе msk-donskaya-gw-1

```
msk-donskaya-aamishina-gw-1#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
msk-donskaya-aamishina-gw-1(config)#interface f0/1.5
msk-donskaya-aamishina-gw-1(config-subif)#ip nat inside
msk-donskaya-aamishina-gw-1(config-subif)#exit
msk-donskaya-aamishina-gw-1(config)#interface f0/1.6
msk-donskaya-aamishina-gw-1(config-subif)#ip nat inside
msk-donskaya-aamishina-gw-1(config-subif)#exit
msk-donskaya-aamishina-gw-1(config)#
msk-donskaya-aamishina-gw-1(config)#ip access-list extended nat-inet
msk-donskaya-aamishina-gw-1(config-ext-nacl)#remark q42
msk-donskaya-aamishina-gw-1(config-ext-nacl)#permit ip host 10.129.0.200 any
msk-donskaya-aamishina-gw-1(config-ext-nacl)#permit ip host 10.129.128.200 any
msk-donskaya-aamishina-gw-1(config-ext-nacl)#remark sochi
msk-donskaya-aamishina-gw-1(config-ext-nacl)#permit ip host 10.130.0.200 any
msk-donskaya-aamishina-gw-1(config-ext-nacl)#exit
msk-donskaya-aamishina-gw-1(config)#
```

Рис. 17: Настройка NAT на маршрутизаторе msk-donskaya-aamishina-gw-1



The screenshot shows the Cisco Packet Tracer PC Command Line interface for a device named 'admin'. The 'Desktop' tab is selected. The Command Prompt displays the following output:

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 10.128.0.1

Pinging 10.128.0.1 with 32 bytes of data:

Reply from 10.128.0.1: bytes=32 time<1ms TTL=255
Reply from 10.128.0.1: bytes=32 time<1ms TTL=255
Reply from 10.128.0.1: bytes=32 time<1ms TTL=255
Reply from 10.128.0.1: bytes=32 time<1ms TTL=255

Ping statistics for 10.128.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 10.128.255.1

Pinging 10.128.255.1 with 32 bytes of data:

Reply from 10.128.255.1: bytes=32 time<1ms TTL=255
Reply from 10.128.255.1: bytes=32 time<1ms TTL=255
Reply from 10.128.255.1: bytes=32 time<1ms TTL=255
Reply from 10.128.255.1: bytes=32 time<1ms TTL=255

Ping statistics for 10.128.255.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Рис. 18: Проверка доступа администратора с Донской к маршрутизирующим устройствам

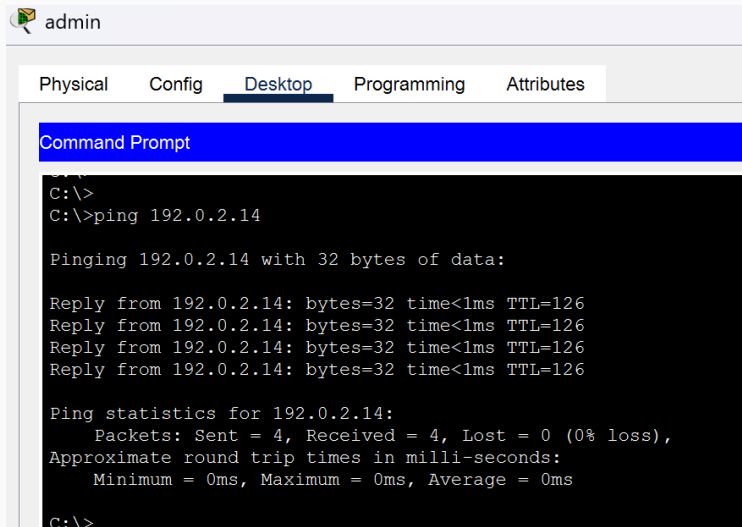


Рис. 19: Проверка доступа в Интернет

- В результате выполнения лабораторной были приобретены практические навыки по настройке взаимодействия 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.