



Отчет по практической работе № 2.

Настройка статической и динамической маршрутизации.

ФИО	Сток Иван Павлович
Поток	28 группа
Последние цифры ст. билета (XX вашего варианта)	28

Проверяем работу маршрута до шлюза и в соседний сегмент в доп. сети.

Заполните таблицу, если работает +, нет –

Компьютеры	PC vlan 82	PC vlan 83	Шлюз маршрутизатора
PC vlan 82	+	+	+
PC vlan 83	+	+	+
Шлюз маршрутизатора	+	+	+

Проверяем работу маршрута до шлюза из внутренней сети кампуса.

Заполните таблицу, если работает +, нет –

Компьютеры	Шлюз маршрутизатора	PC (vlan 28)
PC (vlan 28)	+	+
Шлюз маршрутизатора	+	+

Вывести результаты команды **show ip route** на обоих маршрутизаторах и коммутаторе 3 уровня.

```
Codes: L - local, 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, E - EGP
        i - IS-IS, 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 192.168.78.1 to network 0.0.0.0
```

```
192.168.78.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.168.78.0/30 is directly connected, GigabitEthernet0/2
L    192.168.78.2/32 is directly connected, GigabitEthernet0/2
192.168.82.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.168.82.0/24 is directly connected, GigabitEthernet0/1.82
L    192.168.82.1/32 is directly connected, GigabitEthernet0/1.82
192.168.83.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.168.83.0/24 is directly connected, GigabitEthernet0/1.83
L    192.168.83.1/32 is directly connected, GigabitEthernet0/1.83
192.168.85.0/24 is variably subnetted, 2 subnets, 2 masks
C    192.168.85.0/24 is directly connected, GigabitEthernet0/1.85
L    192.168.85.1/32 is directly connected, GigabitEthernet0/1.85
S*   0.0.0.0/0 [1/0] via 192.168.78.1
```



```
Codes: L - local, 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, E - EGP
       i - IS-IS, 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 192.168.78.2 to network 0.0.0.0
```

```
192.168.8.0/24 is variably subnetted, 2 subnets, 2 masks
C      192.168.8.0/24 is directly connected, GigabitEthernet0/1
L      192.168.8.1/32 is directly connected, GigabitEthernet0/1
S      192.168.28.0/24 [1/0] via 192.168.8.2
S      192.168.38.0/24 [1/0] via 192.168.8.2
S      192.168.58.0/24 [1/0] via 192.168.8.2
192.168.78.0/24 is variably subnetted, 2 subnets, 2 masks
C      192.168.78.0/30 is directly connected, GigabitEthernet0/2
L      192.168.78.1/32 is directly connected, GigabitEthernet0/2
S      192.168.128.0/24 [1/0] via 192.168.8.2
S*    0.0.0.0/0 [1/0] via 192.168.78.2
```

```
Codes: C - connected, S - static, I - IGRP, 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, E - EGP
       i - IS-IS, 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      192.168.8.0/24 is directly connected, Vlan8
C      192.168.28.0/24 is directly connected, Vlan28
C      192.168.38.0/24 is directly connected, Vlan38
C      192.168.58.0/24 is directly connected, Vlan58
C      192.168.128.0/24 is directly connected, Vlan128
```

Проверяем работу динамической маршрутизации после настройки OSPF

Заполните таблицу, если работает +, нет –

Компьютеры	PC 0	PC 2	PC 4	PC 6	PC 7	PC 8
PC 0	+	+	+	-	-	-
PC 2	+	+	+	-	-	-
PC 4	+	+	+	-	-	-
PC 6	-	-	-	+	+	+
PC 7	-	-	-	+	+	+
PC 8	-	-	-	+	+	+



Вывести результаты команды **show ip ospf neighbor** на маршрутизаторах.

```
Router(config)#do sh ip os nei
```

Neighbor ID	Pri	State	Dead Time	Address	Interface
192.168.208.1	1	FULL/DR	00:00:34	192.168.38.1	GigabitEthernet0/0
192.168.208.3	1	FULL/DR	00:00:36	192.168.78.2	GigabitEthernet0/2

```
Router(config)#do sh ip os nei
```

Neighbor ID	Pri	State	Dead Time	Address	Interface
192.168.208.1	1	FULL/BDR	00:00:35	192.168.58.1	GigabitEthernet0/1
192.168.208.2	1	FULL/BDR	00:00:38	192.168.78.1	GigabitEthernet0/2

```
Router(config)#do sh ip os nei
```

Neighbor ID	Pri	State	Dead Time	Address	Interface
192.168.208.2	1	FULL/DR	00:00:33	192.168.38.2	GigabitEthernet0/0
192.168.208.3	1	FULL/DR	00:00:36	192.168.58.2	GigabitEthernet0/0

```
Sw-Netw(config)#do sh ip os nei
```

```
Sw-Netw(config)#
```

