

# Лабораторная работа №4

- Настройка на коммутаторах логической топологии используя протокол IEEE 802.1Q

- L2-SW-1, L2-SW-2

```
vlan 20
name VLAN20
exit
vlan 333
name VLAN333
exit

int range g0/0-3
shut
switchport trunk encapsulation dot1q
switchport trunk native vlan 333
switchport mode trunk
no shut
exit

int range g1/0-3
shut
switchport trunk encapsulation dot1q
switchport trunk native vlan 333
switchport mode trunk
no shut
exit

spanning-tree vlan 20,333 root primary / secondary
```

- L2-SW-3, L2-SW-4, L2-SW-5

```
vlan 20
name VLAN20
exit
vlan 333
name VLAN333
exit

int range g0/0-3
shut
switchport trunk encapsulation dot1q
switchport trunk native vlan 333
switchport mode trunk
no shut
exit

int g1/0
shut
switchport mode access
switchport access vlan 20
no shut
exit
int g1/1
shut
switchport mode access
switchport access vlan 333
no shut
exit
```

- Схема сети



```
PC2> ping 192.168.2.1
```

```
host (192.168.2.1) not reachable
```

- To PC4

```
PC2> ping 192.168.2.2
```

```
84 bytes from 192.168.2.2 icmp_seq=1 ttl=64 time=6.300 ms
84 bytes from 192.168.2.2 icmp_seq=2 ttl=64 time=7.769 ms
84 bytes from 192.168.2.2 icmp_seq=3 ttl=64 time=6.838 ms
84 bytes from 192.168.2.2 icmp_seq=4 ttl=64 time=6.340 ms
84 bytes from 192.168.2.2 icmp_seq=5 ttl=64 time=7.459 ms
```

- To PC5

```
PC2> ping 192.168.3.1
```

```
host (192.168.3.1) not reachable
```

- To PC6

```
PC2> ping 192.168.3.2
```

```
84 bytes from 192.168.3.2 icmp_seq=1 ttl=64 time=10.107 ms
84 bytes from 192.168.3.2 icmp_seq=2 ttl=64 time=7.374 ms
84 bytes from 192.168.3.2 icmp_seq=3 ttl=64 time=5.063 ms
84 bytes from 192.168.3.2 icmp_seq=4 ttl=64 time=7.512 ms
84 bytes from 192.168.3.2 icmp_seq=5 ttl=64 time=13.720 ms
```

- PC3

- To PC4

```
PC3> ping 192.168.2.2
```

```
host (192.168.2.2) not reachable
```

- To PC5

```
PC3> ping 192.168.3.1
```

```
84 bytes from 192.168.3.1 icmp_seq=1 ttl=64 time=12.363 ms
84 bytes from 192.168.3.1 icmp_seq=2 ttl=64 time=6.695 ms
84 bytes from 192.168.3.1 icmp_seq=3 ttl=64 time=6.125 ms
84 bytes from 192.168.3.1 icmp_seq=4 ttl=64 time=5.094 ms
84 bytes from 192.168.3.1 icmp_seq=5 ttl=64 time=6.932 ms
```

- To PC6

```
PC3> ping 192.168.3.2
```

```
host (192.168.3.2) not reachable
```

- PC4

- To PC5

```
PC4> ping 192.168.3.1
```

```
host (192.168.3.1) not reachable
```

- To PC6

```
PC4> ping 192.168.3.2
```

```
84 bytes from 192.168.3.2 icmp_seq=1 ttl=64 time=4.335 ms  
84 bytes from 192.168.3.2 icmp_seq=2 ttl=64 time=6.939 ms  
84 bytes from 192.168.3.2 icmp_seq=3 ttl=64 time=4.280 ms  
84 bytes from 192.168.3.2 icmp_seq=4 ttl=64 time=3.755 ms  
84 bytes from 192.168.3.2 icmp_seq=5 ttl=64 time=6.591 ms
```

- PC5

- To PC6

```
PC5> ping 192.168.3.2
```

```
host (192.168.3.2) not reachable
```