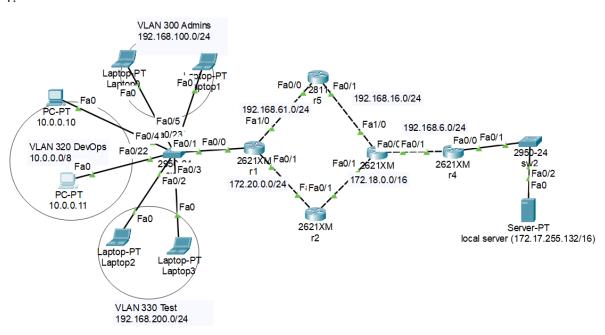
Домашнее задание к семинару 4. Студент: Асылбаев Марат Марсович.

Исправленная схема, все линки зеленые:

1.



2.tracert от сервера до 10.0.0.11 прошел двумя маршрутами:

```
Tracing route to 10.0.0.11 over a maximum of 30 hops:
                             0 ms
  1
                                        172.17.0.1
      0 ms
                  0
                   ms
  2
      5 ms
                                        192.168.6.2
                 0
                   ms
                             0
                              ms
  3
                                        172.18.0.1
      0 ms
                 0
                   ms
                             0
                               ms
                                        172.20.0.2
  4
      0
                 0
                             0
        ms
                   ms
                               ms
      0 ms
                             0 ms
                                        10.0.0.11
                  4
                   ms
Trace complete.
C:\>tracert 10.0.0.11
Tracing route to 10.0.0.11 over a maximum of 30 hops:
                                        172.17.0.1
      0 ms
                  0 ms
                             0 ms
  2
                  0
                                        192.168.6.2
      0 ms
                   ms
                             0 ms
  3
                 0
                                        192.168.16.1
      0 ms
                   ms
                             0
                               ms
  4
      0 ms
                 0 ms
                             0
                              ms
                                        172.20.0.2
                 0 ms
                                        10.0.0.11
      0 ms
                             0
                              ms
Trace complete.
```

3. Таблица маршрутизации для r1:

```
Gateway of last resort is not set
     10.0.0.0/8 is directly connected, FastEthernet0/0.320
     172.17.0.0/16 [110/4] via 192.168.61.1, 00:17:56,
FastEthernet1/0
                   [110/4] via 172.20.0.1, 00:17:56, FastEthernet0/1
     172.18.0.0/16 [110/2] via 172.20.0.1, 00:24:29, FastEthernet0/1
0
     172.20.0.0/24 is subnetted, 1 subnets
        172.20.0.0 is directly connected, FastEthernet0/1
     192.168.6.0/24 [110/3] via 192.168.61.1, 00:17:56,
FastEthernet1/0
                    [110/3] via 172.20.0.1, 00:17:56,
FastEthernet0/1
     192.168.16.0/24 [110/2] via 192.168.61.1, 00:40:09,
FastEthernet1/0
    192.168.61.0/24 is directly connected, FastEthernet1/0
     192.168.100.0/24 is directly connected, FastEthernet0/0.300
     192.168.200.0/24 is directly connected, FastEthernet0/0.330
```

4. трейс от сервера до 10.0.0.11 с целой сеткой:

```
Tracing route to 10.0.0.11 over a maximum of 30 hops:
       0 \, \text{ms}
                  0 \, \text{ms}
                              0 ms
                                          172.17.0.1
  2
                                          192.168.6.2
       0 ms
                  0 ms
                              0 ms
                                          192.168.16.1
  3
       0 ms
                  0 ms
                              0 ms
  4
                              0 ms
                                          172.20.0.2
       0 ms
                  0 ms
  5
                                          10.0.0.11
       0 ms
                  0 ms
                              0 ms
Trace complete.
```

трейс после удаления линка r5 - r3:

```
Tracing route to 10.0.0.11 over a maximum of 30 hops:
                                      172.17.0.1
      0 ms
                 0 ms
                            0 ms
  2
                                      192.168.6.2
      0 ms
                 0 ms
                            0 ms
  3
                                      172.18.0.1
      0 ms
                 0 ms
                            0 ms
  4
      0 ms
                 0 ms
                           0 ms
                                      172.20.0.2
  5
                 0 ms
                                      10.0.0.11
      0 ms
                           0 ms
Trace complete.
```

ip route для r5 с "оборванным линком":

```
10.0.0.0/8 [110/2] via 192.168.61.2, 00:51:15, FastEthernet0/0
     172.17.0.0/16 [110/5] via 192.168.61.2, 00:00:35,
FastEthernet0/0
     172.18.0.0/16 [110/3] via 192.168.61.2, 00:00:35,
FastEthernet0/0
     172.20.0.0/24 is subnetted, 1 subnets
        172.20.0.0/24 [110/2] via 192.168.61.2, 00:49:01,
FastEthernet0/0
     192.168.6.0/24 [110/4] via 192.168.61.2, 00:00:35,
0
FastEthernet0/0
     192.168.61.0/24 is variably subnetted, 2 subnets, 2 masks
        192.168.61.0/24 is directly connected, FastEthernet0/0
        192.168.61.1/32 is directly connected, FastEthernet0/0
0
     192.168.100.0/24 [110/2] via 192.168.61.2, 00:51:15,
     192.168.200.0/24 [110/2] via 192.168.61.2, 00:51:15,
FastEthernet0/0
```