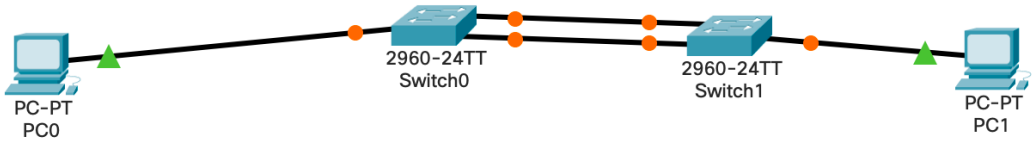
Cisco №30



Switch 0

```
Switch>
Switch>en
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#int range fa0/1-2
Switch(config-if-range)#channel-group 1 mode ?
  active     Enable LACP unconditionally
  auto       Enable PAgP only if a PAgP device is detected
  desirable  Enable PAgP unconditionally
  on         Enable Etherchannel only
  passive    Enable LACP only if a LACP device is detected
Switch(config-if-range)#channel-group 1 mode on
Switch(config-if-range)#
Creating a port-channel interface Port-channel 1

%LINK-5-CHANGED: Interface Port-channel1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Port-channel1, changed state
to up

Switch(config-if-range)#end
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#wr memory
Building configuration...
[OK]
Switch#
```

То же самое сделали со Switch 1, дали ip компам. 192.168.0.1 и .2 и пинганули

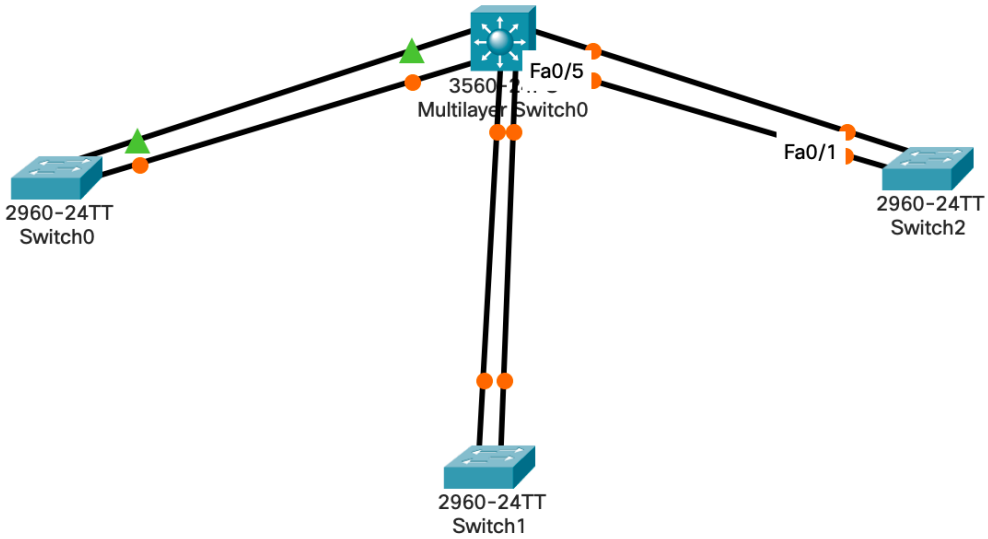
```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.0.2

Pinging 192.168.0.2 with 32 bytes of data:

Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time=16ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 16ms, Average = 4ms

C:\>
```

Пинг показал, что связь стабильна и достаточно быстрая.

Что произойдет, если отключить кабель между коммутаторами:

Отключение кабеля приведет к разрыву сетевого соединения между устройствами (если нет альтернативного пути

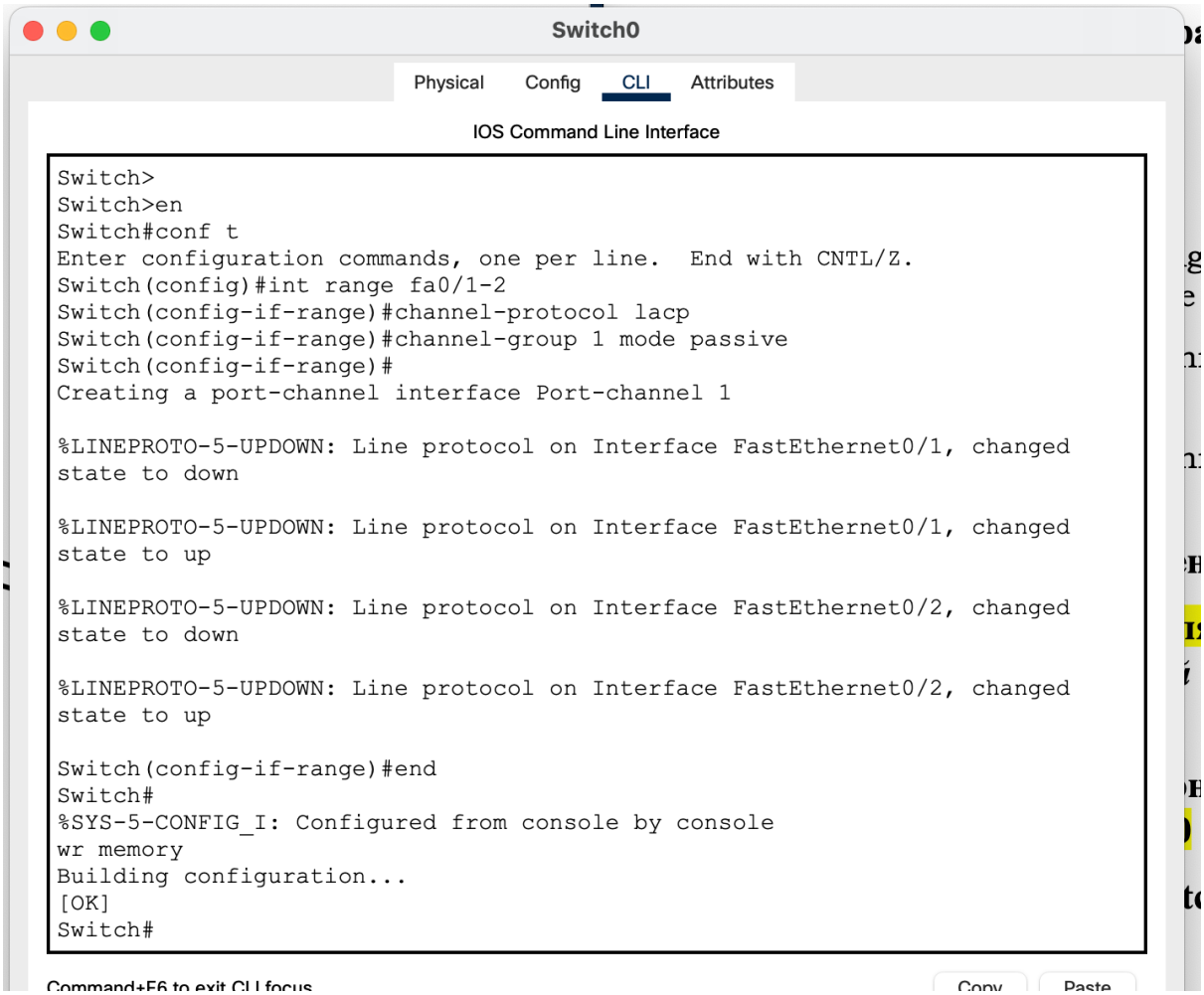
Динамическое агрегирование каналов – LACP




```
Switch>en
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#int range fa0/1-2
Switch(config-if-range)#channel-protocol lacp
Switch(config-if-range)#cgannel-group 1 mode active
                       ^
% Invalid input detected at '^' marker.

Switch(config-if-range)#channel-group 1 mode active
Switch(config-if-range)#
Creating a port-channel interface Port-channel 1

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed
state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed
state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed
state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed
state to up

Switch(config-if-range)#
```

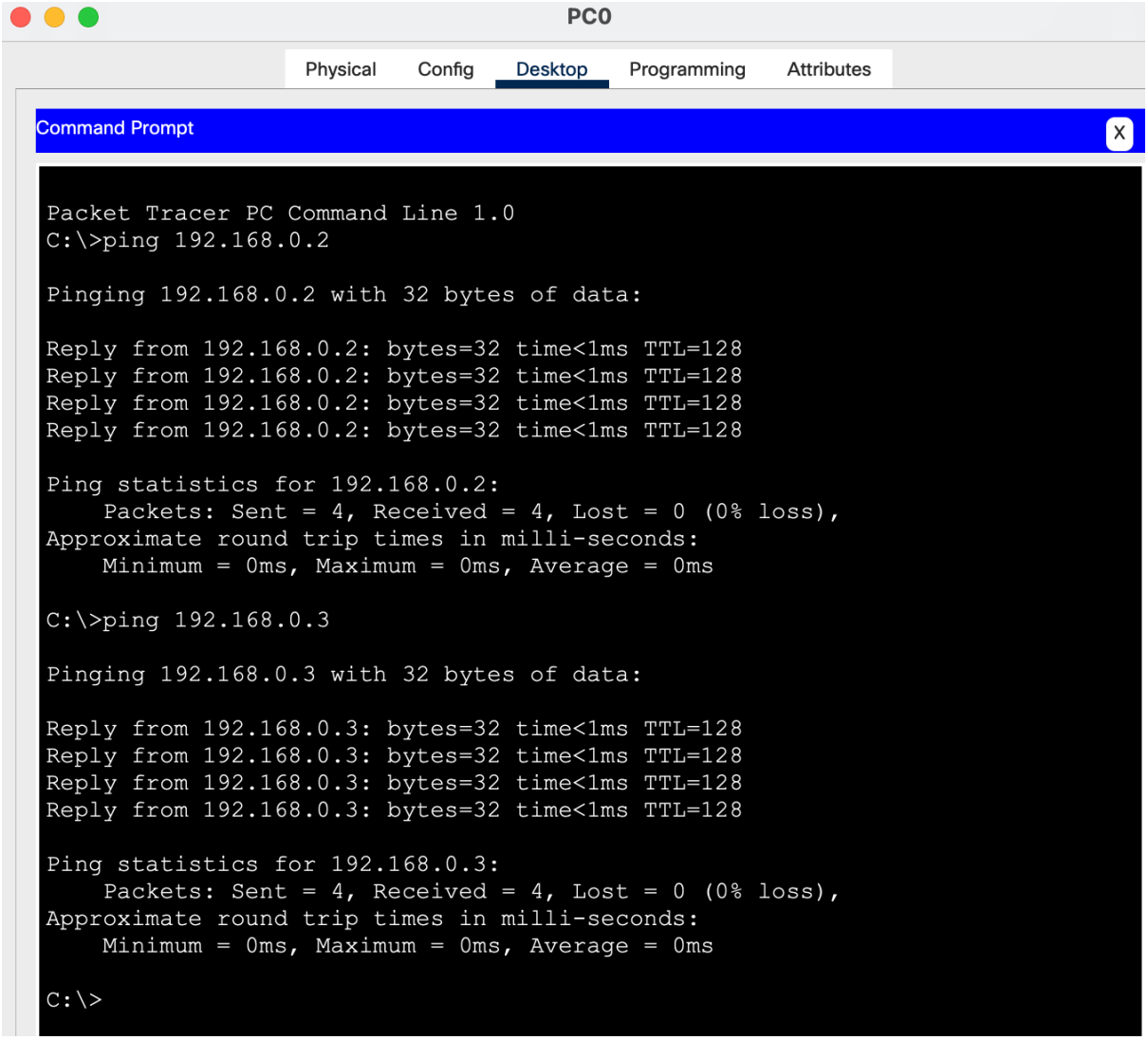
Создали коммутатор с lacp на все коммутаторы

Настроили все switch. 0-2

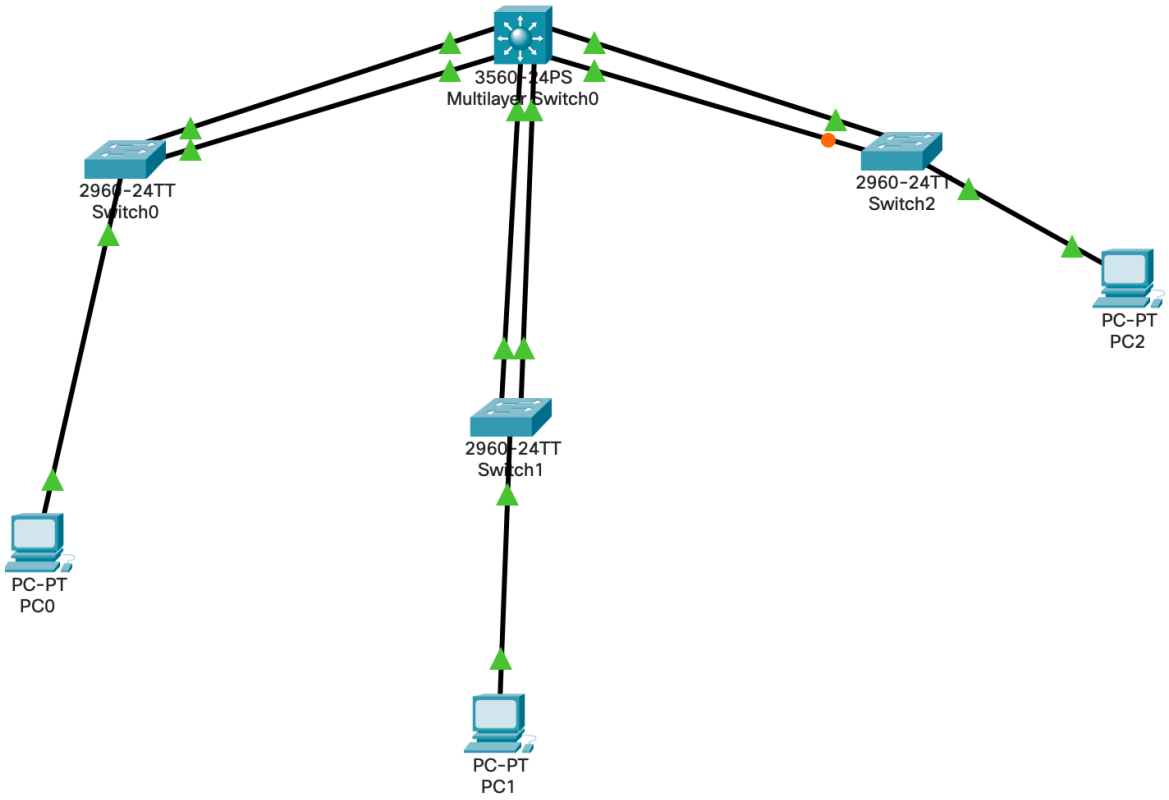


Подключаем компы к коммутаторам, даем им ip 192.168.0.x, где x = 1-3

Пингуем



Такая сеть у нас получилась в итоге


3560-24PS
Multilayer Switch0
2960-24TT
Switch0
2960-24TT
Switch2
PC-PT
PC2
2960-24TT
Switch1
PC-PT
PC0
PC-PT
PC1