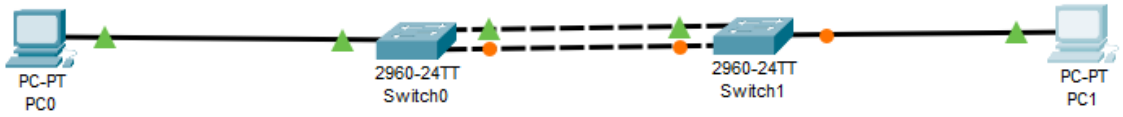
Практическая работа 30 – Агрегирование каналов

Строим сеть



Switch0 и Switch1

```
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 st

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

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

Если прописать show etherchannel summary

```
Group  Port-channel  Protocol    Ports
------+-------------+-----------+-----------------------------

1      Po1(SU)           -      Fa0/1(P) Fa0/2(P)
```

Будут отображены активные порты, которые объединены в одну группу

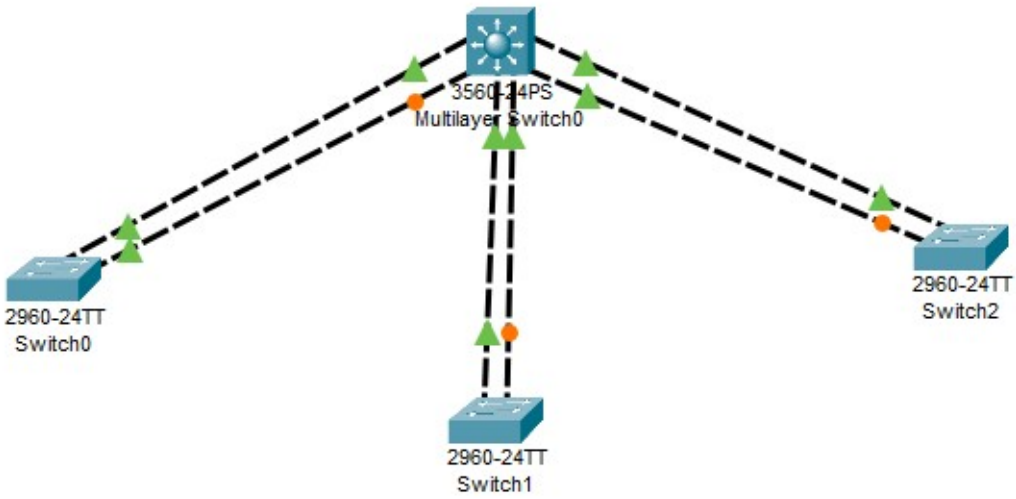
Отключим один порт

```
Group  Port-channel  Protocol    Ports
------+-------------+-----------+-----------------------------------

1      Po1(SU)           -      Fa0/1(D) Fa0/2(P)
```

И видим, что порт помечен как D (Deactivated) – выключен

Строим сеть



В мультикоммутаторе прописываем

```
Switch(config)#int range fa0/1-2
Switch(config-if-range)#channel-protocol lacp
Switch(config-if-range)#channel-group 1 mode active
Switch(config-if-range)#
Creating a port-channel interface Port-channel 1
```

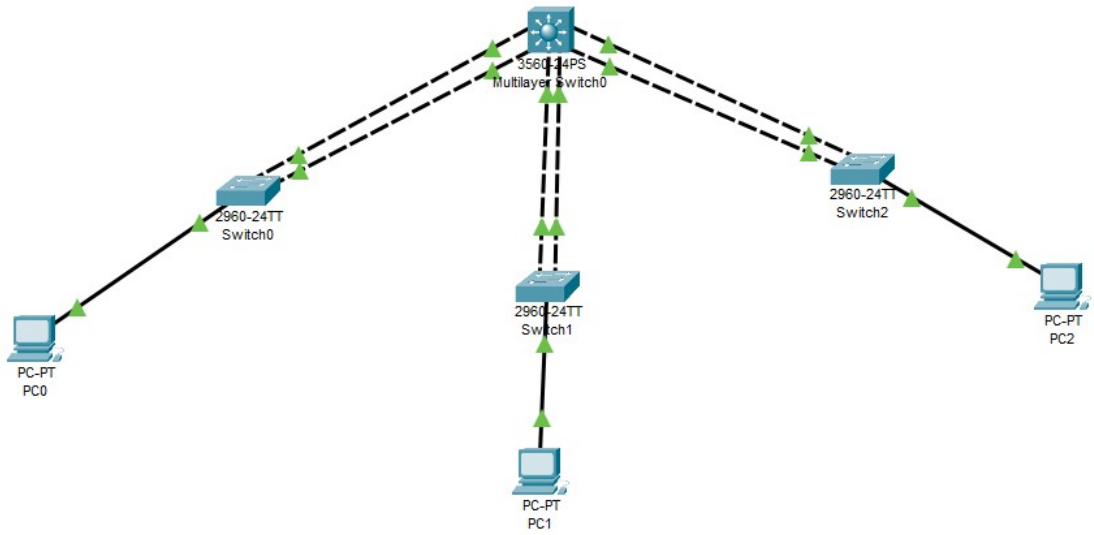
И для остальных также создаем группы 2 и 3

Далее переходим в Switch0

```
Switch(config)#int range fa0/1-2
Switch(config-if-range)#channel-protocol lacp
Switch(config-if-range)#channel-group 1 mode passive
```

И для остальных коммутаторов также

Далее подключаем ПК



Пингуем ПК

```
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<1ms 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 = 0ms, Average = 0ms

C:\>ping 192.168.0.3

Pinging 192.168.0.3 with 32 bytes of data:

Reply from 192.168.0.3: bytes=32 time<1ms TTL=128
Reply from 192.168.0.3: bytes=32 time<1ms TTL=128
Reply from 192.168.0.3: bytes=32 time<1ms TTL=128
Reply from 192.168.0.3: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```