

Switch 1

Switch#show etherchannel port-channel
Channel-group listing:

Group: 1

Port-channels in the group:

Port-channel: Po1 (Primary Aggregator)

Age of the Port-channel = 00d:00h:34m:25s

Logical slot/port = 2/1 Number of ports = 2

GC = 0x00000000 HotStandBy port = null

Port state = Port-channel

Protocol = LACP

Port Security = Disabled

Ports in the Port-channel:

Index Load Port EC state No of bits

-----+-----+-----+-----+-----

0 00 Fa0/13 Automatic 0

0 00 Fa0/14 Automatic 0

Time since last port bundled: 00d:00h:01m:47s Fa0/14

Group: 2

Port-channels in the group:

Port-channel: Po2

Age of the Port-channel = 00d:00h:37m:43s

Logical slot/port = 2/2 Number of ports = 3

GC = 0x00000000 HotStandBy port = null

Port state = Port-channel

Protocol = PAGP

Port Security = Disabled

Ports in the Port-channel:

Index Load Port EC state No of bits

-----+-----+-----+-----+-----+-----

0 00 Fa0/10 Automatic 0

0 00 Fa0/11 Automatic 0

0 00 Fa0/12 Automatic 0

Time since last port bundled: 00d:00h:01m:19s Fa0/12

Switch 2

Switch#show etherchannel port-channel

Channel-group listing:

Group: 1

Port-channels in the group:

Port-channel: Po1 (Primary Aggregator)

Age of the Port-channel = 00d:00h:51m:59s

Logical slot/port = 2/1 Number of ports = 2

GC = 0x00000000 HotStandBy port = null

Port state = Port-channel

Protocol = LACP

Port Security = Disabled

Ports in the Port-channel:

Index Load Port EC state No of bits

-----+-----+-----+-----+-----+-----

0 00 Fa0/13 Active 0

0 00 Fa0/14 Active 0

Time since last port bundled: 00d:00h:04m:32s Fa0/14

Group: 3

Port-channels in the group:

Port-channel: Po3

Age of the Port-channel = 00d:00h:48m:56s

Logical slot/port = 2/3 Number of ports = 2

GC = 0x00000000 HotStandBy port = null

Port state = Port-channel

Protocol = PAGP

Port Security = Disabled

Ports in the Port-channel:

Index Load Port EC state No of bits

-----+-----+-----+-----+-----

0 00 Fa0/15 Active 0

0 00 Fa0/16 Active 0

Time since last port bundled: 00d:00h:08m:13s Fa0/16

Switch 3

Switch#show etherchannel port-channel

Channel-group listing:

Group: 2

Port-channels in the group:

Port-channel: Po2

Age of the Port-channel = 00d:00h:42m:43s

Logical slot/port = 2/2 Number of ports = 3

GC = 0x00000000 HotStandBy port = null

Port state = Port-channel
Protocol = PAGP
Port Security = Disabled

Ports in the Port-channel:

Index	Load	Port	EC state	No of bits
0 00		Fa0/10	On 0	
0 00		Fa0/11	On 0	
0 00		Fa0/12	On 0	

Time since last port bundled: 00d:00h:02m:59s Fa0/12
Group: 3

Port-channels in the group:

Port-channel: Po3

Age of the Port-channel = 00d:00h:45m:01s
Logical slot/port = 2/3 Number of ports = 2
GC = 0x00000000 HotStandBy port = null
Port state = Port-channel
Protocol = PAGP
Port Security = Disabled

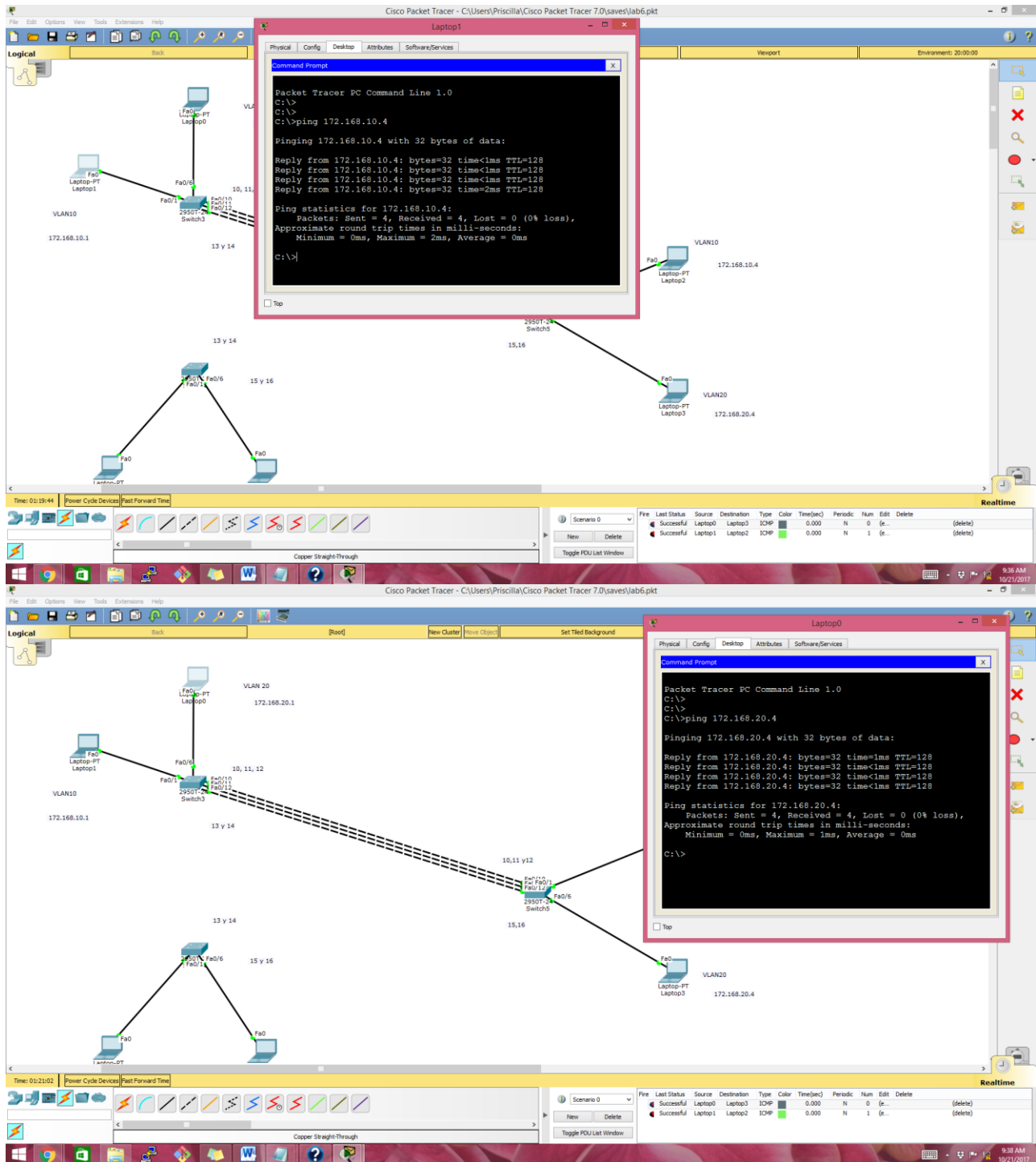
Ports in the Port-channel:

Index	Load	Port	EC state	No of bits
0 00		Fa0/15	On 0	
0 00		Fa0/16	On 0	

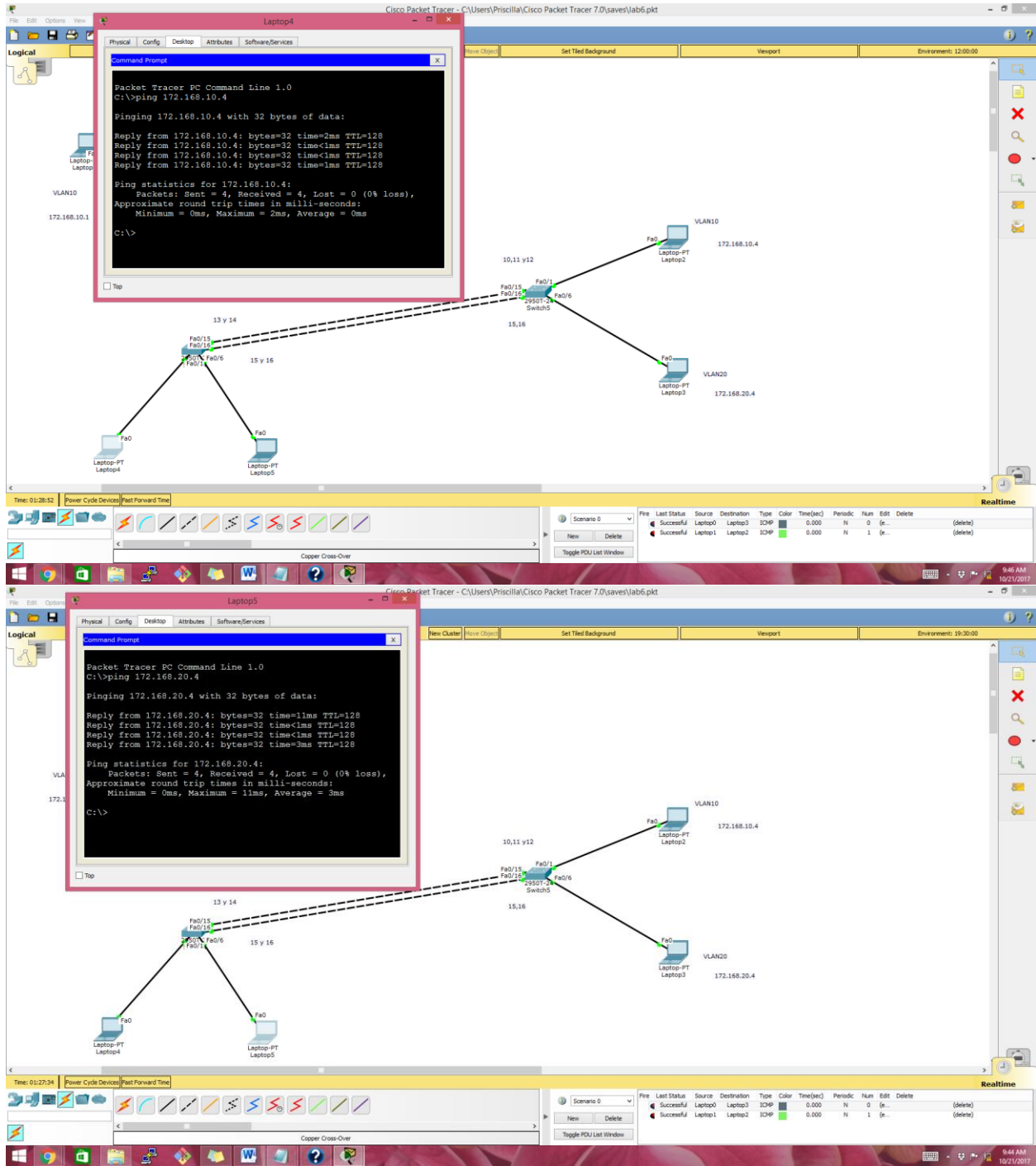
Time since last port bundled: 00d:00h:07m:08s Fa0/16

Ping test

PAgP test sin cables



Etherchannel manual test sin cables



Lacp test sin cables

The network diagram shows a central switch (L2980-PT) with two VLANs: VLAN 20 (172.168.20.1) and VLAN 10 (172.168.10.1). The switch is connected to three laptops (Laptop1, Laptop4, Laptop5) and a server (L2980-PT). The switch is connected to the laptops via a LACP bundle of interfaces Fa0/13, Fa0/14, and Fa0/15. The server is connected to the switch via Fa0/24. The switch is also connected to a server (L2980-PT) via Fa0/24. The switch is connected to the laptops via Fa0/13, Fa0/14, and Fa0/15. The switch is connected to the server via Fa0/24. The switch is connected to the laptops via Fa0/13, Fa0/14, and Fa0/15. The switch is connected to the server via Fa0/24.

Top Screenshot: Laptop1 Command Prompt

```
C:\>
C:\>
C:\>ping 172.168.10.4

Pinging 172.168.10.4 with 32 bytes of data:

Reply from 172.168.10.4: bytes=32 time<1ms TTL=128
Reply from 172.168.10.4: bytes=32 time<1ms TTL=128
Reply from 172.168.10.4: bytes=32 time<1ms TTL=128
Reply from 172.168.10.4: bytes=32 time<1ms TTL=128

Ping statistics for 172.168.10.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 0ms

C:\>ping 172.168.10.2

Pinging 172.168.10.2 with 32 bytes of data:

Reply from 172.168.10.2: bytes=32 time<1ms TTL=128
Reply from 172.168.10.2: bytes=32 time<1ms TTL=128
Reply from 172.168.10.2: bytes=32 time<1ms TTL=128
Reply from 172.168.10.2: bytes=32 time<1ms TTL=128

Ping statistics for 172.168.10.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 0ms

C:\>
```

Bottom Screenshot: Laptop0 Command Prompt

```
C:\>ping 172.168.20.2

Pinging 172.168.20.2 with 32 bytes of data:

Request timed out.
Request timed out.

Ping statistics for 172.168.20.2:
    Packets: Sent = 3, Received = 0, Lost = 3 (100% loss),

Control-C
^C
C:\>
C:\>
C:\>
C:\>
C:\>ping 172.168.20.2

Pinging 172.168.20.2 with 32 bytes of data:

Reply from 172.168.20.2: bytes=32 time<1ms TTL=128
Reply from 172.168.20.2: bytes=32 time<1ms TTL=128
Reply from 172.168.20.2: bytes=32 time<1ms TTL=128
Reply from 172.168.20.2: bytes=32 time<1ms TTL=128

Ping statistics for 172.168.20.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 2ms

C:\>
```