

**TEC-Redes Avanzadas**

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# 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

The image displays two screenshots of the Cisco Packet Tracer interface, illustrating a network configuration and testing process.

**Top Screenshot:** The network diagram shows a central switch (2950T-24) connected to two VLANs. VLAN10 (172.168.10.1) is connected to Laptop1 (172.168.10.4) via Fa0/6. VLAN20 (172.168.20.4) is connected to Laptop3 (172.168.20.4) via Fa0. The switch has two interfaces connected to the VLANs: Fa0/13 and Fa0/14 for VLAN10, and Fa0/15 and Fa0/16 for VLAN20. A Command Prompt window for Laptop1 shows a successful ping to 172.168.10.4.

```

Packet Tracer PC Command Line 1.0
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<2ms 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:\>
  
```

**Bottom Screenshot:** The network diagram shows a similar setup, but with a dashed line representing an Etherchannel connection between the two switches. The Command Prompt window for Laptop0 shows a successful ping to 172.168.20.4.

```

Packet Tracer PC Command Line 1.0
C:\>
C:\>
C:\>ping 172.168.20.4

Pinging 172.168.20.4 with 32 bytes of data:
Reply from 172.168.20.4: bytes=32 time<1ms TTL=128
Reply from 172.168.20.4: bytes=32 time<1ms TTL=128
Reply from 172.168.20.4: bytes=32 time<1ms TTL=128
Reply from 172.168.20.4: bytes=32 time<1ms TTL=128

Ping statistics for 172.168.20.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
C:\>
  
```

**Etherchannel manual test sin cables**

Cisco Packet Tracer - C:\Users\Priscilla\Cisco Packet Tracer 7.0\saves\lab6.pkt

Logical

Command Prompt

```
Packet Tracer PC Command Line 1.0
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=2ms 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:\>
```

Physical

Network Diagram:

- Switch0 (2950T-24) connected to Laptop2 (VLAN10, 172.168.10.4) and Laptop3 (VLAN10, 172.168.20.4).
- Switch0 connected to Laptop4 (PT, 172.168.10.1) and Laptop5 (PT, 172.168.20.1).
- Switch0 connected to Switch1 (2950T-24) via a fiber link (10,11 y12).
- Switch1 connected to Laptop1 (PT, 172.168.10.2) and Laptop2 (PT, 172.168.10.4).

Realtime

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
Success	Success	Laptop0	Laptop3	ICMP	Green	0.000	N	0	(e...)	(delete)
Success	Success	Laptop0	Laptop2	ICMP	Green	0.000	N	1	(e...)	(delete)

Time: 01:28:52

Power Cycle Devices | Fast Forward Time

Copper Cross-Over

Scenario 0

New | Delete

Toggle PDU List Window

9:46 AM 10/21/2017

Cisco Packet Tracer - C:\Users\Priscilla\Cisco Packet Tracer 7.0\saves\lab6.pkt

Logical

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 172.168.20.4

Pinging 172.168.20.4 with 32 bytes of data:
Reply from 172.168.20.4: bytes=32 time=1ms TTL=128
Reply from 172.168.20.4: bytes=32 time<1ms TTL=128
Reply from 172.168.20.4: bytes=32 time<1ms TTL=128
Reply from 172.168.20.4: bytes=32 time=3ms TTL=128

Ping statistics for 172.168.20.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 3ms
C:\>
```

Physical

Network Diagram:

- Switch0 (2950T-24) connected to Laptop2 (VLAN10, 172.168.10.4) and Laptop3 (VLAN10, 172.168.20.4).
- Switch0 connected to Laptop4 (PT, 172.168.10.1) and Laptop5 (PT, 172.168.20.1).
- Switch0 connected to Switch1 (2950T-24) via a fiber link (10,11 y12).
- Switch1 connected to Laptop1 (PT, 172.168.10.2) and Laptop2 (PT, 172.168.10.4).

Realtime

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
Success	Success	Laptop0	Laptop3	ICMP	Green	0.000	N	0	(e...)	(delete)
Success	Success	Laptop0	Laptop2	ICMP	Green	0.000	N	1	(e...)	(delete)

Time: 01:27:34

Power Cycle Devices | Fast Forward Time

Copper Cross-Over

Scenario 0

New | Delete

Toggle PDU List Window

9:46 AM 10/21/2017

Lacp test sin cables

