



# Etherchannel

? Tags	
▼ Klaar	JA
:≡ Week	Week 2

## PAGP (cisco proprietary)

PAGP modes:

- On: channel member without negotiation
- Desirable: actively asking if the other side can or will participate
- Auto: passively waiting for the other side

S1	S2	Channel established?
On	On	Yes
Auto/Desirable	Desirable	Yes
On/Auto/Desirable	Not Configured	No
On	Desirable	No
Auto/On	Auto	No

## LACP (multi-vendor)

LACP modes:

- On: channel member without negotiation
- Active: actively asking if the other side can or will participate
- Passive: passively waiting for the other side

S1	S2	Channel established?
On	On	Yes
Active/Passive	Active	Yes
On/Active/Passive	Not Configured	No
On	Active	No
Passive/On	Passive	No

## Configuration guidelines

- Same speed ports/cables on both switches
- Same duplex on both switches
- All interfaces in the etherchannel must be assigned to the same VLAN, or configured as trunk
- Trunk must allow the same vlans

## Configuration example

1. Specify the physical interfaces for the etherchannel
2. Create the port channel with `channel-group`
3. Change the layer2 settings in the port-channel interface

```
S1(config)# interface range FastEthernet0/1-2
S1(config-if-range)# channel-group 1 mode active
Creating a port-channel interface Port-channel 1
S1(config-if-range)# interface port-channel 1
S1(config-if)# switchport mode trunk
S1(config-if)# switchport trunk allowed vlan 1,2,20
```

# Verifying configuration

Verify the status of the Etherchannel using the following commands:

```
show interfaces port-channel 1
```

```
show etherchannel summary
```

```
show etherchannel port-channel
```

```
show interfaces fa0/1 etherchannel
```