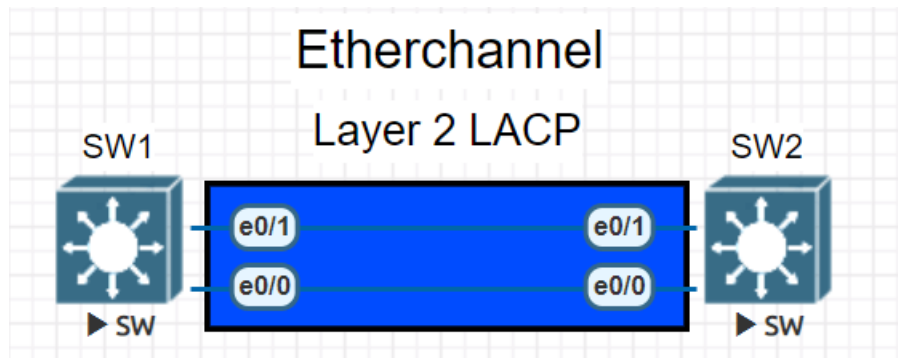


Etherchannel Layer 2 LACP Configuration

In this How To we will cover how to configure LACP for a Layer 2 Etherchannel on Cisco Catalyst switches.



- We will need to first bundle our interfaces into a port-channel

Configuration

- First we must go into global configuration mode, and place our interfaces into a "Channel-group"

```
SW1#configure terminal # This command puts us in Global Config mode
```

```
SW1(config)#interface range eth0/0 - 1 # This command will put you into the interface sub-configuration mode for multiple interfaces
```

```
SW1(config-if-range)#channel-group 44 mode active # This command will bundle the member interfaces into a port-channel using LACP negotiation to actively negotiate with the other side.
```

```
SW1(config)#interface port-channel 44 # This command will put us into the port-channel sub-configuration mode
```

All configuration should now be configured under the port-channel. The port-channel will then push the configuration down to the member interfaces.

```
SW1(config-if)switchport trunk encapsulation dot1q # This command will set the trunk to use the IEEE 802.1q Encapsulation standard
```

```
SW1(config-if)#switchport mode trunk # This command will statically set the interface to trunking mode.
```

- The complete configuration for both switches is shown below

```

SW1(config)#interface range eth0/0 - 1
SW1(config-if-range)#channel-group 44 mode active
SW1(config-if-range)#exit
SW1(config)#
SW1(config)#interface port-channel 44
SW1(config-if)#switchport trunk encapsulation dot1q
SW1(config-if)#switchport mode trunk

SW2(config)#interface range eth0/0 - 1
SW2(config-if-range)#channel-group 44 mode active
SW2(config-if-range)#exit
SW2(config)#
SW2(config)#interface port-channel 44
SW2(config-if)#switchport trunk encapsulation dot1q
SW2(config-if)#switchport mode trunk

```

Verification

- The following show commands will verify if the etherchannel is working properly.

SW1#show etherchannel summary # This command will show us if our Etherchannel is bundled and active.

```

SW1#show etherchannel summary
Flags:  D - down               P - bundled in port-channel
        I - stand-alone s - suspended
        H - Hot-standby (LACP only)
        R - Layer3           S - Layer2
        U - in use           N - not in use, no aggregation
        f - failed to allocate aggregator

        M - not in use, minimum links not met
        m - not in use, port not aggregated due to minimum links not met
        u - unsuitable for bundling
        w - waiting to be aggregated
        d - default port

        A - formed by Auto LAG

Number of channel-groups in use: 1
Number of aggregators:          1

Group  Port-channel  Protocol    Ports
-----
10     Po10(SU)        -           Gi2/0(P)  Gi2/1(P)  Gi2/2(P)
                                     Gi2/3(P)
SW1#

```

Show command to verify
Ether channel information.

Flags

- D = Down
- P = Member interfaces are bundled
- R = Layer 3 EtherChannel
- S = Layer 2 EtherChannel
- U = Currently In Use

Which Etherchannel protocol
is in use.