

**penguinpunk.net**  
**cisco – fixing mis-configured port-channels**  
**revision 0.1**

**synopsis**

The following is a brief outline of the steps taken to fix some port-channel brokenness between a Cisco 9124e and 9513.

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I was making some port-channels between one of our MDS 9513 director switches and a 9124e edge switch and managed to add the interfaces to the wrong port-channel. Here're the basic steps on the 9124e end that I took to rectify the issue.

Here's where I noticed that maybe I'd done something wrong.

```
EdgeSwitch1(config)# do show interface port-channel 35
port-channel 35 is down (No operational members)
Hardware is Fibre Channel
Port WWN is 24:23:00:0d:ec:de:16:40
Admin port mode is auto, trunk mode is on
snmp link state traps are enabled
Port vsan is 1
5 minutes input rate 0 bits/sec, 0 bytes/sec, 0 frames/sec
5 minutes output rate 0 bits/sec, 0 bytes/sec, 0 frames/sec
0 frames input, 0 bytes
0 discards, 0 errors
0 CRC, 0 unknown class
0 too long, 0 too short
0 frames output, 0 bytes
0 discards, 0 errors
0 input OLS, 0 LRR, 0 NOS, 0 loop inits
0 output OLS, 0 LRR, 0 NOS, 0 loop inits
No members

EdgeSwitch1(config)# do show int brief

[snip]

-----
Interface          Vsan  Admin  Status          Oper  Oper  IP
Trunk              Mode  Speed  Address
Mode              (Gbps)
-----
port-channel 33    13    on     trunking        TE    8     --
port-channel 35    1     on     noOperMembers  --    --    --
```

Figure 1

So it's not a good sign that I have two port-channels coming from an edge switch. And this is the bit where I've already saved the running config and needed to manually re-do stuff. I first removed the ports from the port-channel and deleted the erroneous port-channel.

```
EdgeSwitch1(config)# int ext1, ext2
EdgeSwitch1(config-if)# no channel-group 33
ext1 ext2 removed from port-channel 33 and disabled
please do the same operation on the switch at the other end of the port-channel
EdgeSwitch1(config-if)# exit
EdgeSwitch1# config t
Enter configuration commands, one per line. End with CNTL/Z.
EdgeSwitch1(config)# interface ext1
EdgeSwitch1(config-if)# shut
EdgeSwitch1(config-if)# switchport trunk mode on
ext1: (error) port already in a port-channel
```

Figure 2

So far, so good. Here's where I tried to get flash and just re-run the initial commands. But you'll see how well that goes.

```

EdgeSwitch1(config)# interface ext1, ext2
EdgeSwitch1(config-if)# channel-group 35
command failed: port not compatible [port VSAN]
EdgeSwitch1(config-if)# switchport description "to MDS9513 Port Channel 35"
EdgeSwitch1(config-if)# exit
EdgeSwitch1(config)# interface port-channel 35
EdgeSwitch1(config-if)# switchport trunk mode on
EdgeSwitch1(config-if)# switchport trunk allowed vsan 13
EdgeSwitch1(config-if)# exit
EdgeSwitch1(config)# int port-channel 35
EdgeSwitch1(config-if)# no shut
EdgeSwitch1(config-if)# exit
EdgeSwitch1(config)# do show int brief

[snip]

-----
Interface          Vsan  Admin  Status          Oper  Oper  IP
                  Trunk  Mode          Mode  Speed  Address
                  Mode          (Gbps)
-----
port-channel 33    13    on     noOperMembers  --    --    --
port-channel 35    1     on     noOperMembers  --    --    --
    
```

Figure 3

Screw it, let's just redo it all again. Oh wait, I didn't get rid of the port-channel from that VSAN previously, did I?

```

EdgeSwitch1# conf t
Enter configuration commands, one per line. End with CNTL/Z.
EdgeSwitch1(config)# vsan database
EdgeSwitch1(config-vsan-db)# vsan 13
EdgeSwitch1(config-vsan-db)# no interface port-channel 33
port-channel 33 deleted and all its members disabled
please do the same operation on the switch at the other end of the port-channel
EdgeSwitch1(config)# interface port-channel 35
EdgeSwitch1(config-if)# switchport trunk mode on
EdgeSwitch1(config-if)# switchport trunk allowed vsan 13
EdgeSwitch1(config-if)# exit
EdgeSwitch1(config)# end

[snip]

-----
Interface          Vsan  Admin  Status          Oper  Oper  IP
                  Trunk  Mode          Mode  Speed  Address
                  Mode          (Gbps)
-----
port-channel 35    1     on     noOperMembers  --    --    --
    
```

Figure 4

Let's really get rid of it now.

```

EdgeSwitch1(config)# no interface port-channel 35
port-channel 35 deleted and all its members disabled
please do the same operation on the switch at the other end of the port-channel
    
```

Figure 5

And start from scratch. Which leads nicely into a preview of "How to create port-channels between Core and Edge". I'd like to elaborate a little on why you'd create these port-channels in this fashion but frankly, that's a story for another time.

```

EdgeSwitch1(config)# vsan database
EdgeSwitch1(config-vsan-db)# vsan 13
EdgeSwitch1(config-vsan-db)# vsan 13 name "DC2 Production Traffic"
EdgeSwitch1(config-vsan-db)# vsan 13 interface ext1, ext2
ext1:membership being configured is already configured for the interface
ext2:membership being configured is already configured for the interface
EdgeSwitch1(config-vsan-db)# fcdomain domain 69 static vsan 13
EdgeSwitch1(config)# fcdomain fcid persistent vsan 13
FCID persistent feature is enabled.
EdgeSwitch1(config)# end
EdgeSwitch1# config t
Enter configuration commands, one per line. End with CNTL/Z.
EdgeSwitch1(config)# interface ext1
EdgeSwitch1(config-if)# shut
EdgeSwitch1(config-if)# switchport trunk mode on
EdgeSwitch1(config-if)# interface ext2
EdgeSwitch1(config-if)# shut
EdgeSwitch1(config-if)# switchport trunk mode on
EdgeSwitch1(config-if)# exit
EdgeSwitch1(config)# interface ext1, ext2
EdgeSwitch1(config-if)# channel-group 35
ext1 ext2 added to port-channel 35 and disabled
please do the same operation on the switch at the other end of the port-channel,
then do "no shutdown" at both ends to bring them up
EdgeSwitch1(config-if)# switchport description "to MDS9513 Port Channel 35"
EdgeSwitch1(config-if)# exit
EdgeSwitch1(config)# interface port-channel 35
EdgeSwitch1(config-if)# switchport trunk mode on
EdgeSwitch1(config-if)# switchport trunk allowed vsan 13
EdgeSwitch1(config-if)# exit
    
```

**Figure 6**

At this point we bring up the port-channel on the 9513, and then do the same on the edge switch.

```

EdgeSwitch1(config)# int port-channel 35
EdgeSwitch1(config-if)# no shut
    
```

**Figure 7**

Once you bring up the ports in the port-channel (ext1, ext2 in this case), you can run the following command to confirm that it's working.

```

EdgeSwitch1(config-if)# do show int brief

[snip]

-----
Interface          Vsan  Admin  Status          Oper  Oper  IP
                   Trunk Mode          Mode  Speed  Address
                   Mode                               (Gbps)
-----
port-channel 35    13    on     trunking        TE    8     --
    
```

**Figure 8**

Success! Meh, I really need to brush up on my SAN-OS commands ...