

# ALSHAHoud Mohamed

## Labo 6.4.1

### Packet Tracer - Implement EtherChannel

#### SWA

##### Configuration sur SWA :

```
enable
conf t
hostname SWA
exit
conf t
interface range GigabitEthernet0/1 - 2 , FastEthernet0/21 - 22
switchport mode trunk
end
copy running-config startup-config
```

#### SWB

##### Configuration sur SWB :

```
enable
conf t
hostname SWB
exit
conf t
```

```
interface range GigabitEthernet0/1 - 2 , FastEthernet0/23 - 24  
switchport mode trunk  
end  
copy running-config startup-config
```

## **SWC**

### **Configuration sur SWC :**

```
enable  
conf t  
hostname SWC  
exit  
conf t  
interface range FastEthernet0/21 - 24  
switchport mode trunk  
end  
copy running-config startup-config
```

## **Configuration des EtherChannels (Port Channels):**

### **Configurer un PAgP EtherChannel (Port Channel 1) sur SWA et SWB :**

```
conf t  
interface range GigabitEthernet0/1 – 2  
channel-group 1 mode desirable  
end  
copy running-config startup-config
```

**Configurer un LACP EtherChannel (Port Channel 2) sur SWA et SWC :**

```
conf t  
interface range FastEthernet0/21 – 22  
channel-group 2 mode active  
end  
copy running-config startup-config
```

**Configurer un Backup LACP EtherChannel (Port Channel 3) sur SWB :**

```
conf t  
interface range FastEthernet0/23 – 24  
channel-group 3 mode passive  
end  
copy running-config startup-config
```

**Configurer un Backup LACP EtherChannel (Port Channel 3) sur SWC :**

```
conf t  
interface range FastEthernet0/23 – 24  
channel-group 3 mode active  
end  
copy running-config startup-config
```

## Vérification :

### SWA : show etherchannel summary

```
SWA#show etherchannel summary
Flags: D - down          P - in port-channel
      I - stand-alone  S - suspended
      H - Hot-standby (LACP only)
      R - Layer3         S - Layer2
      U - in use          f - failed to allocate aggregator
      u - unsuitable for bundling
      w - waiting to be aggregated
      d - default port

Number of channel-groups in use: 2
Number of aggregators: 2

Group Port-channel Protocol Ports
----+-----+-----+
+-----+
1     Po1 (SU)       PAgP    Gig0/1 (P) Gig0/2 (P)
2     Po2 (SU)       LACP    Fa0/21 (P) Fa0/22 (P)
SWA#
```

### SWA : sh int tru

```
SWA#sh int tru
Port      Mode      Encapsulation  Status      Native vlan
Po1       on        802.1q         trunking   1
Po2       on        802.1q         trunking   1

Port      Vlans allowed on trunk
Po1       1-1005
Po2       1-1005

Port      Vlans allowed and active in management domain
Po1       1
Po2       1

Port      Vlans in spanning tree forwarding state and not pruned
Po1       1
Po2       1

SWA#
```

**SWB : show etherchannel summary**

```
SWB#show etherchannel summary
Flags: D - down          P - in port-channel
      I - stand-alone  s - suspended
      H - Hot-standby (LACP only)
      R - Layer3           S - Layer2
      U - in use           f - failed to allocate aggregator
      u - unsuitable for bundling
      w - waiting to be aggregated
      d - default port

Number of channel-groups in use: 2
Number of aggregators: 2

Group  Port-channel  Protocol     Ports
-----+-----+-----+
+-----+
1      Po1 (SU)       PAgP        Gig0/1(P) Gig0/2(P)
3      Po3 (SU)       LACP        Fa0/23(P) Fa0/24(P)
SWB#|
```

**SWB : sh int tru**

```
SWB#sh int tru
Port      Mode      Encapsulation  Status      Native vlan
Po1       on        802.1q         trunking    1
Po3       on        802.1q         trunking    1

Port      Vlans allowed on trunk
Po1       1-1005
Po3       1-1005

Port      Vlans allowed and active in management domain
Po1       1
Po3       1

Port      Vlans in spanning tree forwarding state and not pruned
Po1       1
Po3       1

SWB#|
```

**SWC : show etherchannel summary**

```
SWC#show etherchannel summary
Flags: D - down          P - in port-channel
      I - stand-alone s - suspended
      H - Hot-standby (LACP only)
      R - Layer3           S - Layer2
      U - in use           f - failed to allocate aggregator
      u - unsuitable for bundling
      w - waiting to be aggregated
      d - default port

Number of channel-groups in use: 2
Number of aggregators: 2

Group  Port-channel  Protocol    Ports
-----+-----+-----+
+-----+
2      Po2 (SU)       LACP        Fa0/21 (P)  Fa0/22 (P)
3      Po3 (SU)       LACP        Fa0/23 (P)  Fa0/24 (P)
SWC#|
```

**SWC : sh int tru**

```
SWC#sh int tru
Port      Mode      Encapsulation  Status      Native vlan
Po2       on        802.1q         trunking   1
Po3       on        802.1q         trunking   1

Port      Vlans allowed on trunk
Po2       1-1005
Po3       1-1005

Port      Vlans allowed and active in management domain
Po2       1
Po3       1

Port      Vlans in spanning tree forwarding state and not pruned
Po2       none
Po3       1

SWC#|
```