

## Assignment 5:

Show etherchannel summary on AS1

The screenshot shows a network device CLI window titled "AS1". The window has tabs for "Physical", "Config", "CLI", and "Attributes", with "CLI" currently selected. The CLI session shows the following commands and output:

```
User Access Verification
Username: student
Password:

AS1>enable
Password:
AS1#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(SD)          LACP        Fa0/1(D) Fa0/2(D)
5      Po5(SU)          LACP        Fa0/5(P) Fa0/6(P)
AS1#show spanning-tree vlan 100
VLAN0100
  Spanning tree enabled protocol rstp
    Root ID    Priority    32868
              Address    0001.6355.072B
              Cost      12
              Port      28 (Port-channel5)
              Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec

    Bridge ID   Priority    32868 (priority 32768 sys-id-ext 100)
              Address    0090.2B75.56DC
              Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec
              Aging Time 20

Interface      Role Sts Cost      Prio.Nbr Type
-----+-----+-----+-----
Po5            Root FWD 12        128.28  P2p
AS1#
```

At the bottom of the window, there are "Copy" and "Paste" buttons, and a "Top" link.

## On AS 2

AS2

Physical Config CLI Attributes

```
Password:
% Login invalid

Username: student
Password:

AS2>enable
Password:
AS2#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
-----+-----+-----+-----
3      Po3(SD)          LACP        Fa0/3(D) Fa0/4(D)
5      Po5(SU)          LACP        Fa0/5(P) Fa0/6(P)

AS2#show spanning-tree vlan 100
VLAN0100
  Spanning tree enabled protocol rstp
  Root ID    Priority    32868
            Address      0001.6355.072B
            This bridge is the root
            Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

  Bridge ID  Priority    32868 (priority 32768 sys-id-ext 100)
            Address      0001.6355.072B
            Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
            Aging Time 20

Interface    Role Sts Cost      Prio.Nbr Type
-----
Po5          Desg FWD 12      128.28 P2p

AS2#
```

Copy Paste

Top

Scenario 0

## On DS1

DS1

Physical Config CLI Attributes

```
User Access Verification

Username: student
Password:

DS1>enable
Password:
DS1#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(SD)        LACP       Fa0/1(D) Fa0/2(D)
3      Po3(SD)        LACP       Fa0/3(D) Fa0/4(D)
DS1#show spanning-tree vlan 100
VLAN0100
  Spanning tree enabled protocol rstp
  Root ID    Priority    4196
            Address     0060.70BA.4444
            This bridge is the root
            Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    4196 (priority 4096 sys-id-ext 100)
            Address     0060.70BA.4444
            Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time  20

Interface    Role Sts Cost      Prio.Nbr Type
-----+-----+-----+-----
Fa0/24       Desg FWD 19       128.24   P2p

DS1#
```

Copy Paste

Top

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Activity Results

Time Elapsed: 03:59:32

Congratulations Guest! You completed the activity.

Overall Feedback Assessment Items Connectivity Tests

Expand/Collapse All Show Incorrect Items

Assessment Items	Status	Points	Component(s)	Feedback
Network				
AS1				
Ports				
FastEthernet0/1	Channel Group Correct	1	Switching	
FastEthernet0/2	Channel Mode Correct	1	Switching	
FastEthernet0/3	Channel Group Correct	1	Switching	
FastEthernet0/4	Channel Mode Correct	1	Switching	
FastEthernet0/5	Access VLAN Correct	0	Other	
FastEthernet0/6	Channel Group Correct	1	Switching	
FastEthernet0/7	Channel Mode Correct	1	Switching	
Port-channel1	Channel Group Correct	1	Switching	
Port-channel1	Channel Mode Correct	1	Switching	
Port-channel1	Port Mode Correct	1	Other	
Port-channel1	Port Status Correct	1	Physical	
Trunk VLANs	Correct	0	Switching	
100	Correct	1	Switching	
Port-channel5	Port Mode Correct	1	Other	
Port-channel5	Port Status Correct	1	Physical	
VLANs	Correct	0	Other	
VLAN 100	Correct	0	Switching	
VLAN Name	Correct	1	Switching	
AS2				
Ports				
FastEthernet0/24	Access VLAN Correct	0	Other	
FastEthernet0/1	Channel Group Correct	1	Switching	
FastEthernet0/2	Channel Mode Correct	1	Switching	
FastEthernet0/3	Channel Group Correct	1	Switching	
FastEthernet0/4	Channel Mode Correct	1	Switching	
FastEthernet0/5	Channel Group Correct	1	Switching	
FastEthernet0/6	Channel Mode Correct	1	Switching	
FastEthernet0/7	Channel Group Correct	1	Switching	
FastEthernet0/8	Channel Mode Correct	1	Switching	
Port-channel3	Port Mode Correct	0	Other	

Close

4°C Partly cloudy

Search

9:10 PM

2025-10-25

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Activity Results

Time Elapsed: 03:59:06

Congratulations Guest! You completed the activity.

Overall Feedback **Assessment Items** Connectivity Tests

Expand/Collapse All Show Incorrect Items

Assessment Items	Status	Points	Component(s)	Feedback
- Ports				
- FastEthernet0/24		0	Other	
- Access VLAN	Correct	1	Switching	
- FastEthernet0/3				
- Channel Group	Correct	1	Switching	
- Channel Mode	Correct	1	Switching	
- FastEthernet0/4				
- Channel Group	Correct	1	Switching	
- Channel Mode	Correct	1	Switching	
- FastEthernet0/5				
- Channel Group	Correct	1	Switching	
- Channel Mode	Correct	1	Switching	
- FastEthernet0/6				
- Channel Group	Correct	1	Switching	
- Channel Mode	Correct	1	Switching	
- Port-channel3	Correct	0	Other	
- Port Status	Correct	1	Physical	
- Port-channel5	Correct	1	Other	
- Port Status	Correct	1	Physical	
- VLANs				
- VLAN 100	Correct	0	Other	
- VLAN Name	Correct	1	Switching	
- DS1				
- Ports				
- FastEthernet0/1				
- Channel Group	Correct	1	Switching	
- Channel Mode	Correct	1	Switching	
- FastEthernet0/2				
- Channel Group	Correct	1	Switching	
- Channel Mode	Correct	1	Switching	
- FastEthernet0/24				
- Access VLAN	Correct	1	Switching	
- FastEthernet0/3				
- Channel Group	Correct	1	Switching	
- Channel Mode	Correct	1	Switching	
- FastEthernet0/4				
- Channel Group	Correct	1	Switching	
- Channel Mode	Correct	1	Switching	
- Port-channel1	Correct	1	Other	
- Port Status	Correct	1	Physical	
- Port-channel3	Correct	0	Other	
- Port Status	Correct	1	Physical	
- VLANs				
- VLAN 100	Correct	0	Other	
- VLAN Name	Correct	1	Switching	

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Logical Physical x 1000 y 400

Configure the network.

Objectives:

1. Create VLAN 100. Name it Cheese.
2. Configure all PCs into VLAN 100.
3. Configure all switches to use PVST.
4. Configure LACP Etherchannel trunks between the switches.
5. Configure DS1 to be the root bridge for VLAN 100 by assigning a priority value of 4096.
6. Ensure only VLAN 100 can traverse each trunk.

You are not required to configure routing for this activity. PCs already have IP addresses on them.

Passwords:

Username: student

Password: cisco123

Enable Secret: cisco

Etherchannels:

For the connection from DS1 to AS1 - Channel-Group 1 (A-P)

For the connection from DS1 to AS2 - Channel-Group 3 (A-P)

For the connection from AS1 to AS2 - Channel-Group 5 (A-A)

Note:

Don't worry if the switches seem like they are constantly going crazy. It's just a Packet Tracer thing.

And, if some of the lights aren't green, also, don't worry. You can verify functionality with the following commands:

```
# show etherchannel summary
and
# show spanning-tree vlan 100
```

Time Elapsed: 04:00:45

Completion: 100%

Back 1/1 Next

Time: 03:52:03

Realtime Simulation

Scenario 0

New Delete

Toggle PDU List Window

File Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete

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