VLANs

SWITCH Module 2

Lab 2.1: Create Mgmt and Parking VLANs

DLS1

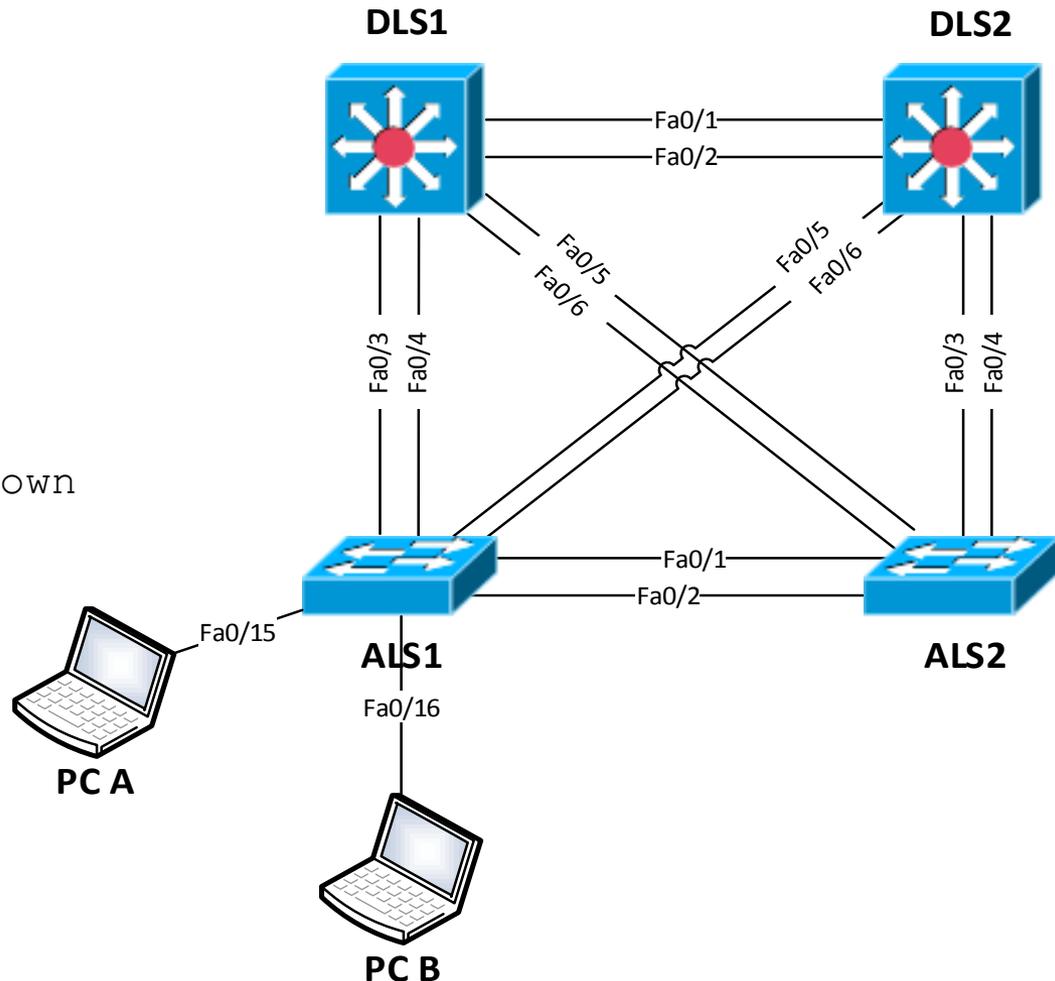**DLS2**

- ALS1 and ALS2:
  - ```
    (conf)# vlan 99
    ```
  - ```
    (conf-vlan)# name Management
    ```
  - ```
    (conf-vlan)# vlan 999
    ```
  - ```
    (conf-vlan)# name ParkingLot
    ```
  - ```
    (conf-vlan)# int ra fa0/15-19
    ```
  - ```
    (conf-if)# sw mod acc
    ```
  - ```
    (conf-if)# sw acc vla 999
    ```

Fa0/1

Fa0/2

Fa0/5
Fa0/6

Fa0/5
Fa0/6

Fa0/3
Fa0/4

Fa0/3
Fa0/4

Fa0/1

Fa0/2
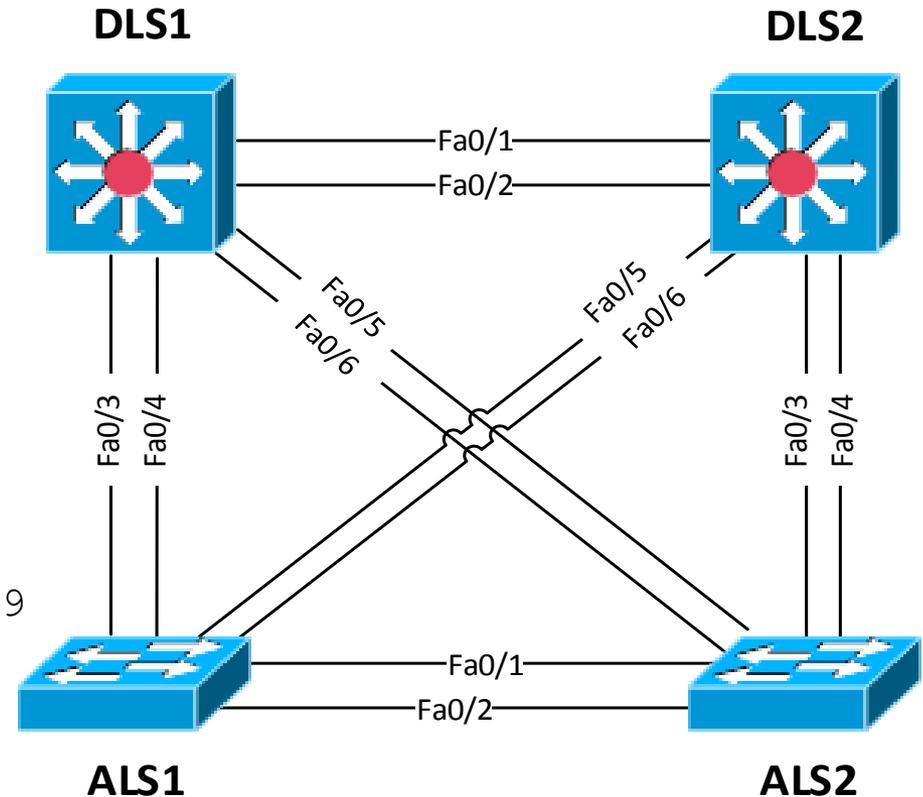
ALS1

ALS2

Lab 2.2: Suspend Parking VLAN

- ALS1 and ALS1:
  - (conf)# vlan 999
  - (conf-vlan)# shutdown
  - show vlan

Lab 2.3: Creating Trunks
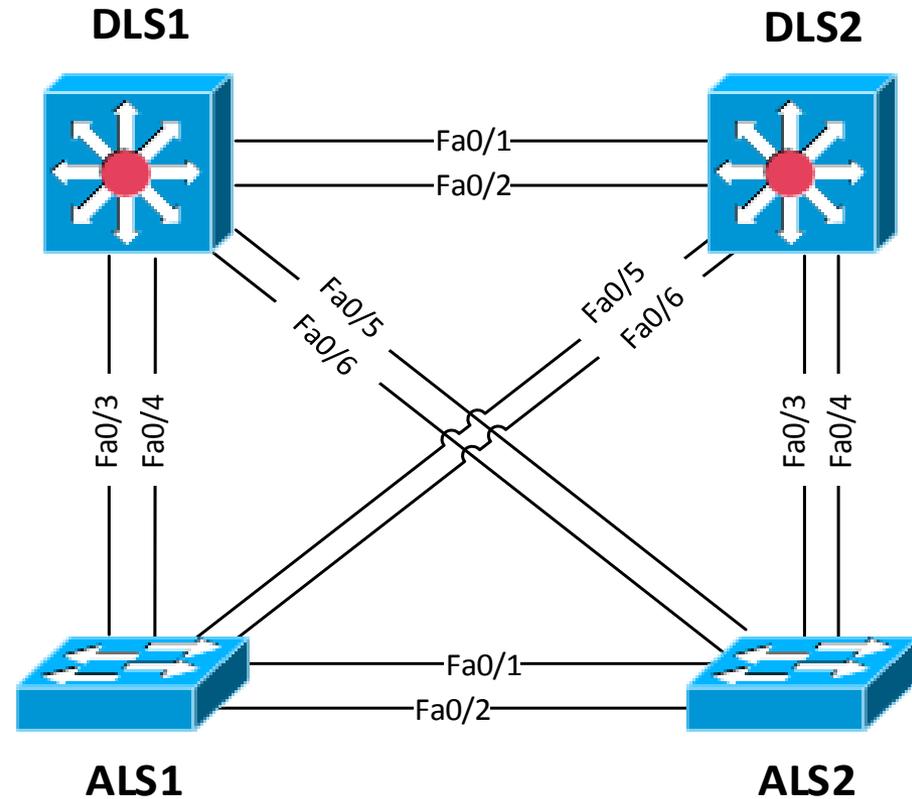
- *LS*:
  - (conf)# interface Fa0/*
  - (conf-if)# switchport trunk encapsulation dot1q
  - (conf-if)# switchport mode trunk
  - show interface trunk

Lab 2.4: DLS as Authoritative VTP Servers

VTP server

VTP server

DLS1

DLS2

- *LS*:
  - (conf)# vtp domain FIT
  - (conf)# vtp password HESLO
- DLS*:
  - (conf)# vtp mode server
- ALS*:
  - (conf)# vtp mode client

Fa0/1
Fa0/2

Fa0/5
Fa0/6

Fa0/5
Fa0/6

Fa0/3
Fa0/4

Fa0/3
Fa0/4

Fa0/1
Fa0/2

ALS1

ALS2

VTP client

VTP client
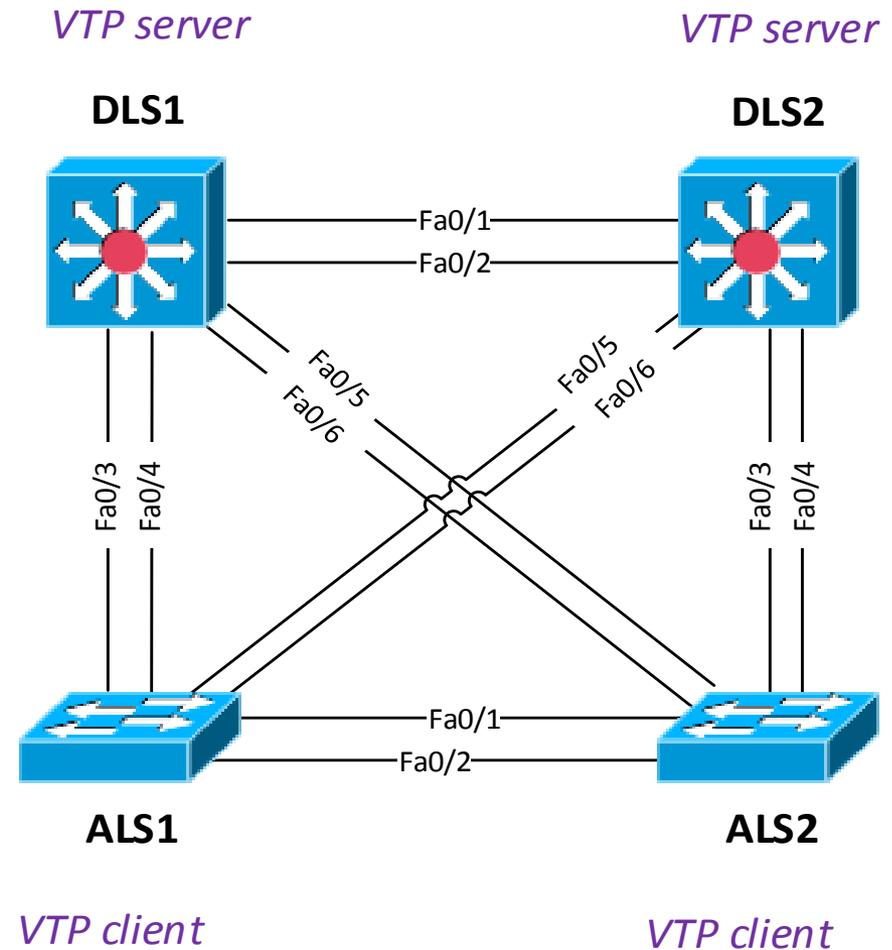
Lab 2.4: Create New VLANs

- DLS1:
  - (conf)# vlan 10
  - (conf-vlan)# name UIFS
  - (conf)# vlan 20
  - (conf-vlan)# name UPSY
  - (conf)# vlan 30
  - (conf-vlan)# name UPGM
  - (conf)# vlan 40
  - (conf-vlan)# name UITS
  - (conf)# vlan 50
  - (conf-vlan)# name CVT
  - (conf)# vlan 9
  - (conf-vlan)# name Native
  - (conf)# vlan 99
  - (conf-vlan)# name Management
  - (conf-vlan)# vlan 999
  - (conf-vlan)# name ParkingLot
  - (conf-vlan)# state suspend

VTP server   *VTP server*

DLS1   **DLS2**

Fa0/1
Fa0/2

Fa0/5
Fa0/6

Fa0/5
Fa0/6

Fa0/3
Fa0/4

Fa0/3
Fa0/4

Fa0/1
Fa0/2

ALS1   **ALS2**

VTP client   *VTP client*
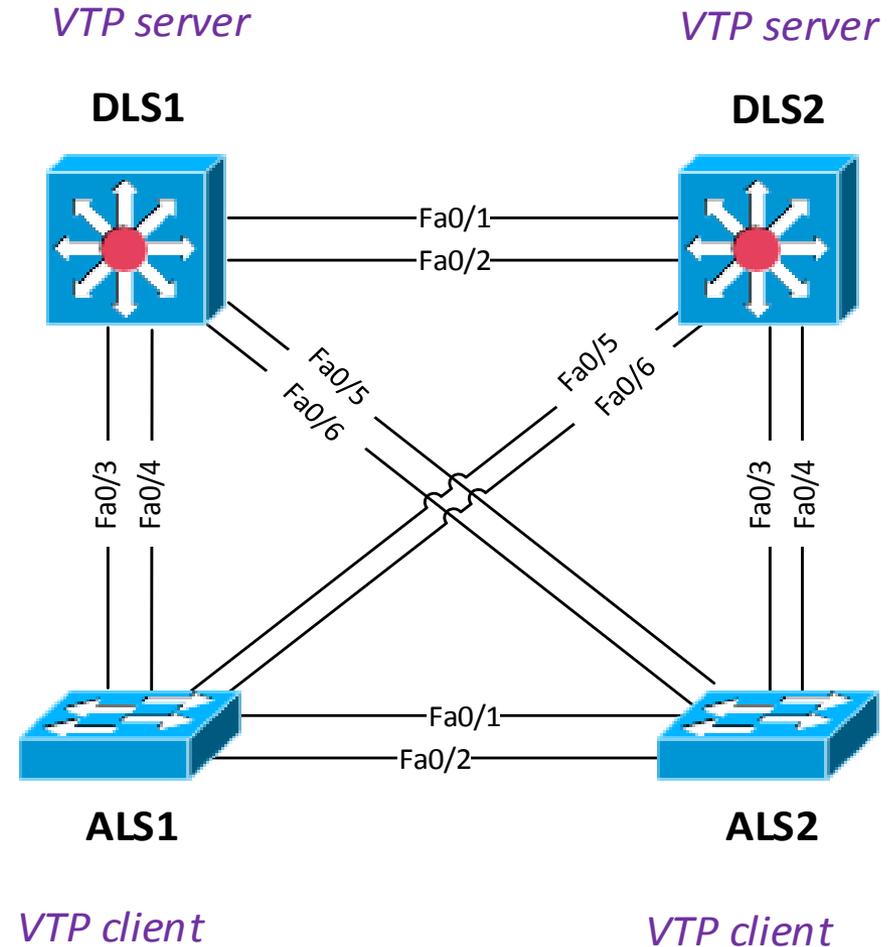
Lab 2.5: Change Native VLAN, Disable Negotiation and Allow Only Existing VLAN

VTP server

VTP server

DLS1

DLS2

Fa0/1

Fa0/2

Fa0/5

Fa0/6

Fa0/5

Fa0/6

Fa0/3

Fa0/4

Fa0/3

Fa0/4

- *LS*:
  - (conf) int ra fa0/1-6
  - (conf-if)# sw nonegotiate
  - (conf-if)# sw trunk allow vlan …
  - (conf-if)# sw tru nat vla 9
  - # show int trunk

Fa0/1

Fa0/2

ALS1

ALS2

VTP client

VTP client

Lab 2.6: Migrate to VTPv3

VTP server primary   VTP server

DLS2
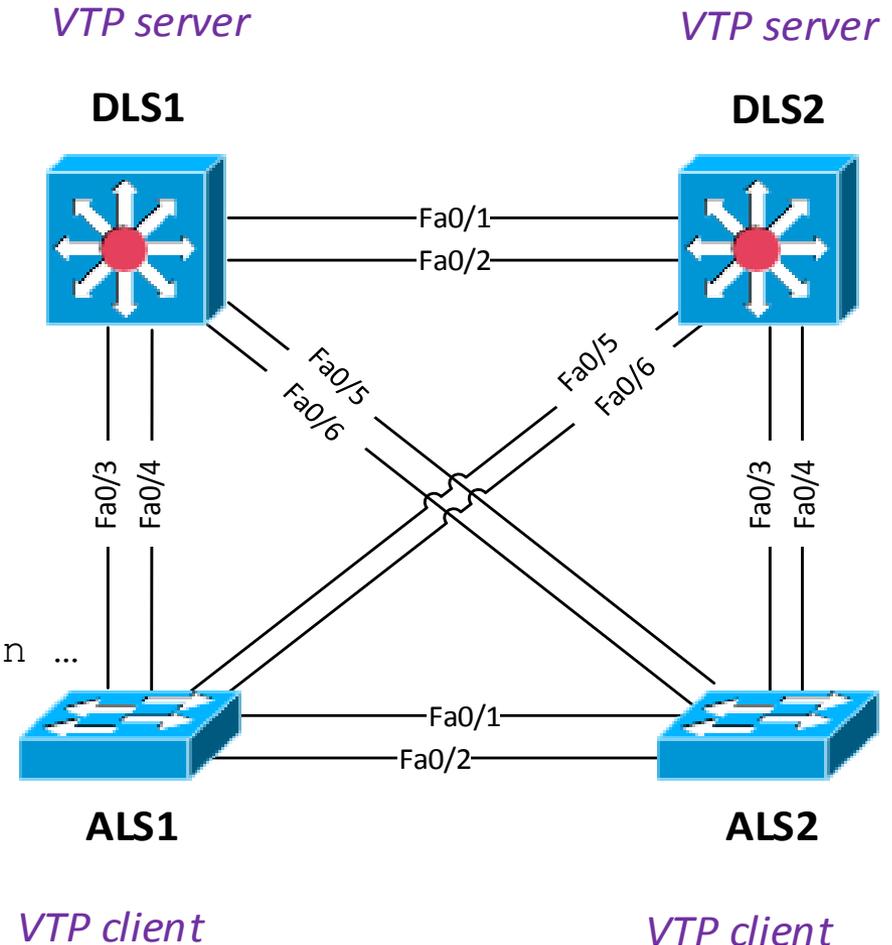
- DLS*:
  - (conf)# vtp version 3
  - (conf)# vtp mode server vlan
- ALS*:
  - (conf)# vtp version 3
  - (conf)# vtp mode client vlan
- DLS1:
  - # vtp primary vlan

- # show vtp status

Fa0/1

Fa0/2

Fa0/5
Fa0/6

Fa0/5
Fa0/6

Fa0/3
Fa0/4

Fa0/3
Fa0/4

Fa0/1

Fa0/2

ALS1   **ALS2**

VTP client   VTP client
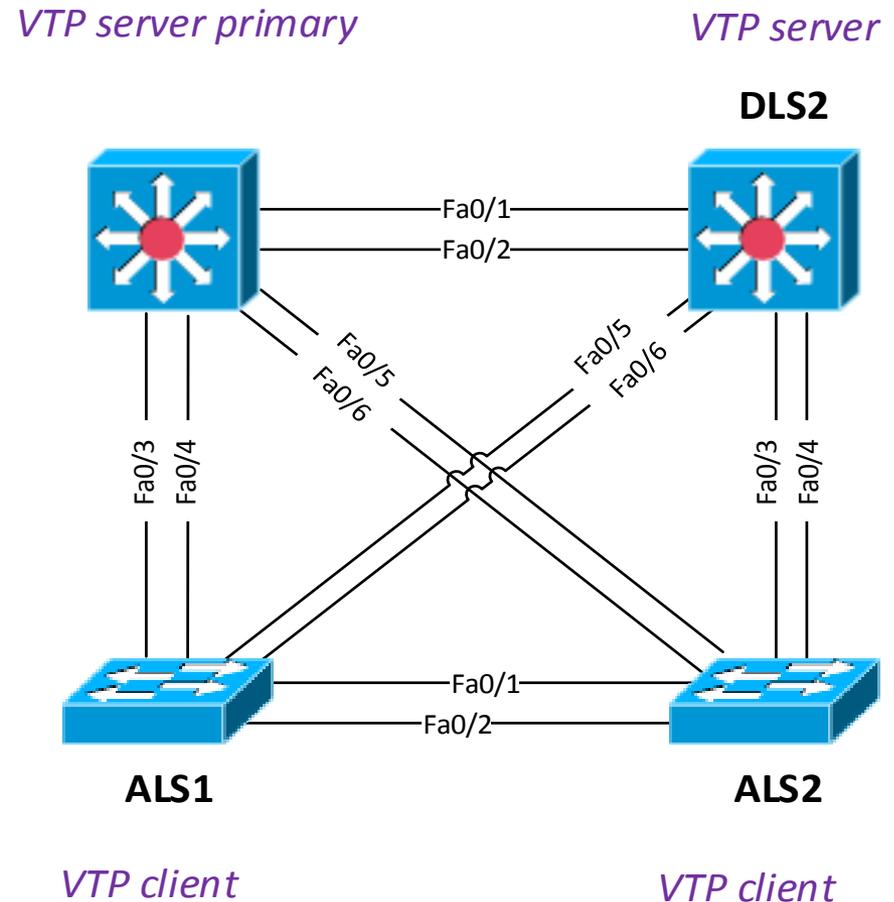
Lab 2.7: Limit Communication on UIFS

- *LS1:
  - (conf-if)# sw acc vlan 10
  - ping

  - (conf-if)# switchport protected
  - # show vlan
  - ping
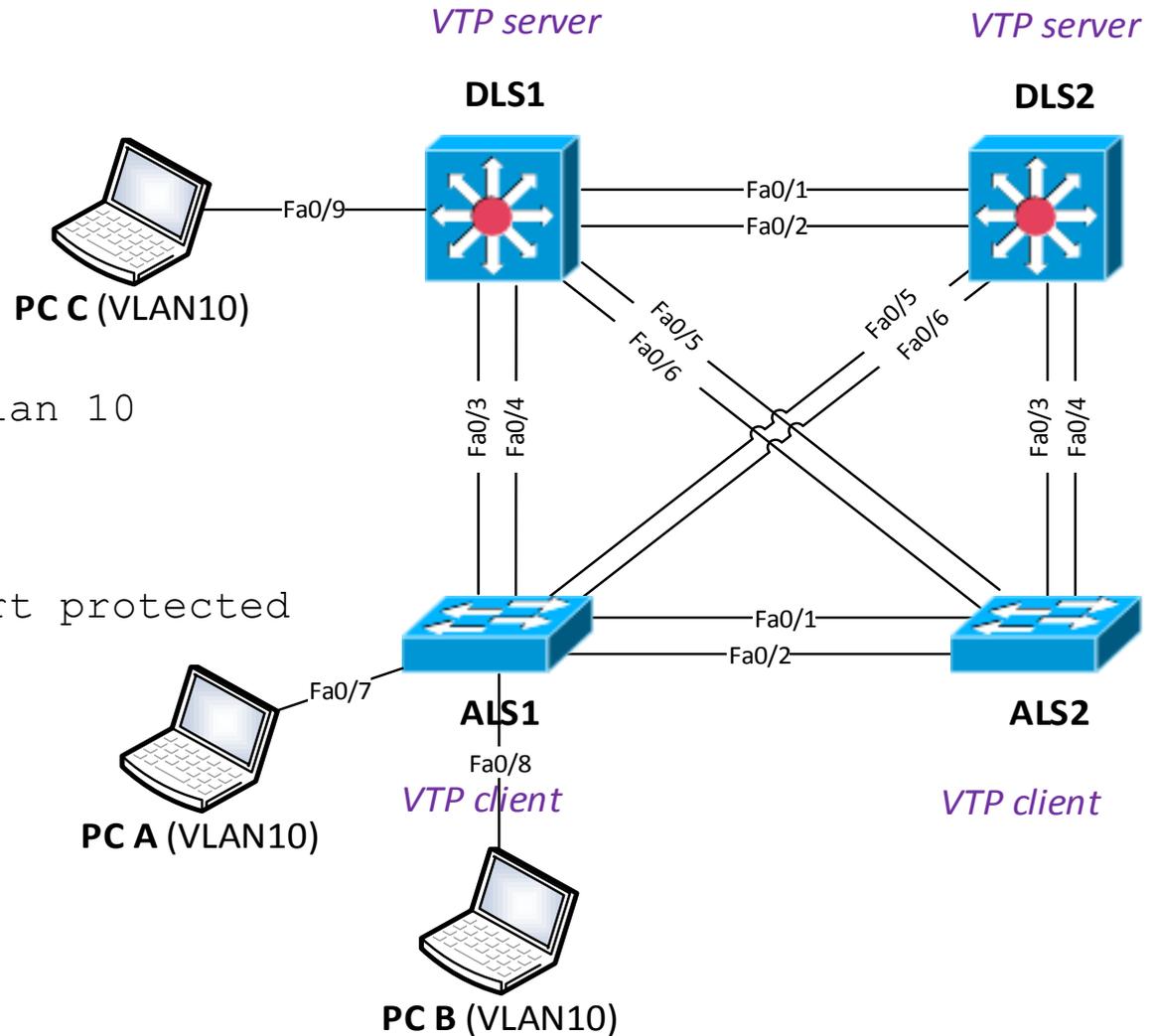
Lab 2.8: Limit Communication with PVLAN
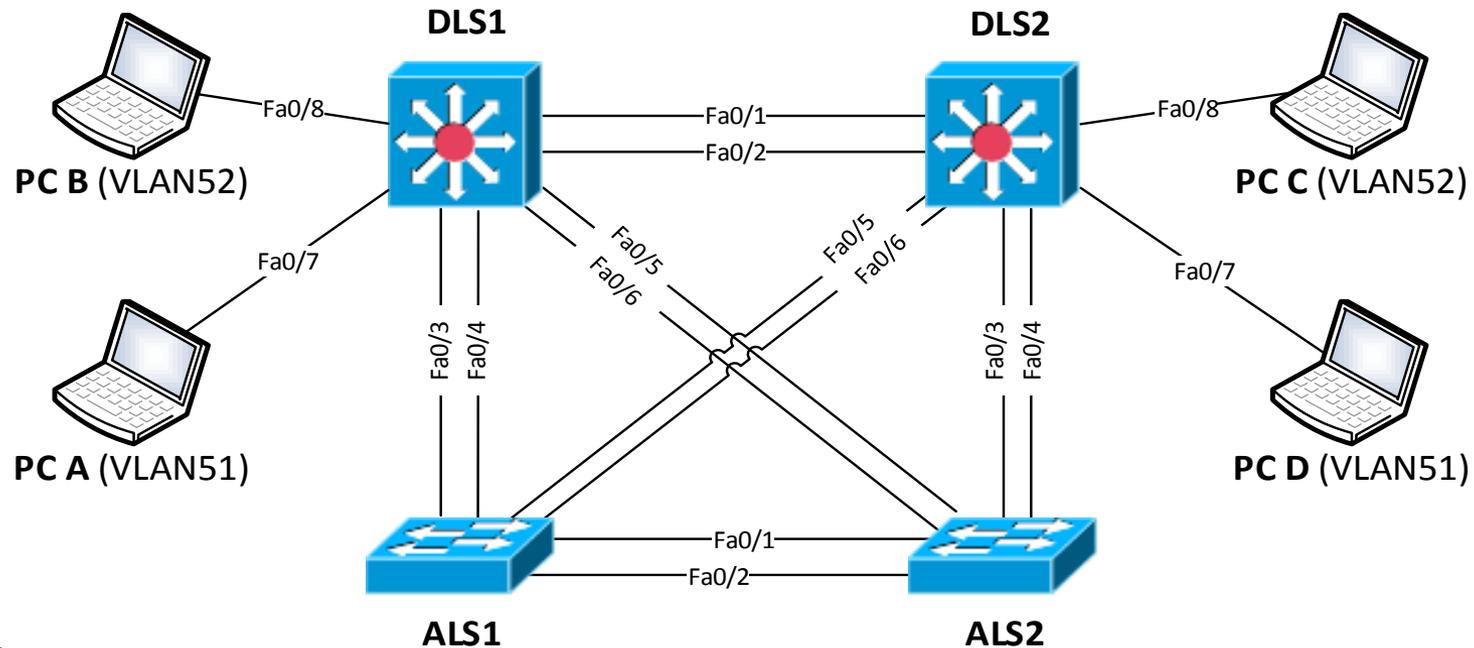
- DLS1:
  - (conf)# vlan 51
  - (conf)# private-vlan isolated
  - (conf)# vlan 52
  - (conf)# private-vlan community
  - (conf)# vlan 50
  - (conf)# private-vlan primary
  - (conf)# private-vlan association 51,52

- DLS*:
  - (conf-if)#
    sw mod private-vlan host
    sw private-vlan host-ass 50 51/52
  - # show vlan
  - ping
  - *Do not forget to allow primary and secondary VLANs on trunks!*

Lab 2.9: Convert Trunks to Etherchannel

- Between ALS1-ALS2
  - (conf)# interface range Fa0/*
  - (conf-if)# channel X mode active

- Between DLS1-DLS2
  - (conf)# interface range Fa0/*
  - (conf-if)# channel X mode active

- Between ALS*-DLS*
  - (conf)# interface range Fa0/*
  - (conf-if)# channel X mode desirable

- show etherchannel summary

- show int trunk
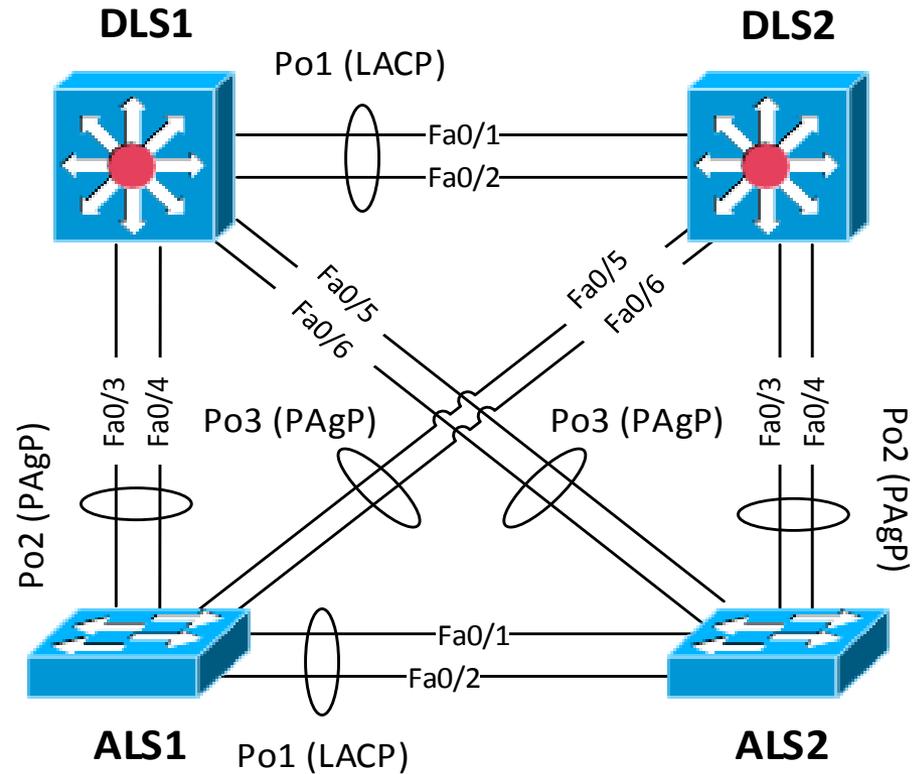
Labs created by Vladimír Veselý for C2P practice.

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