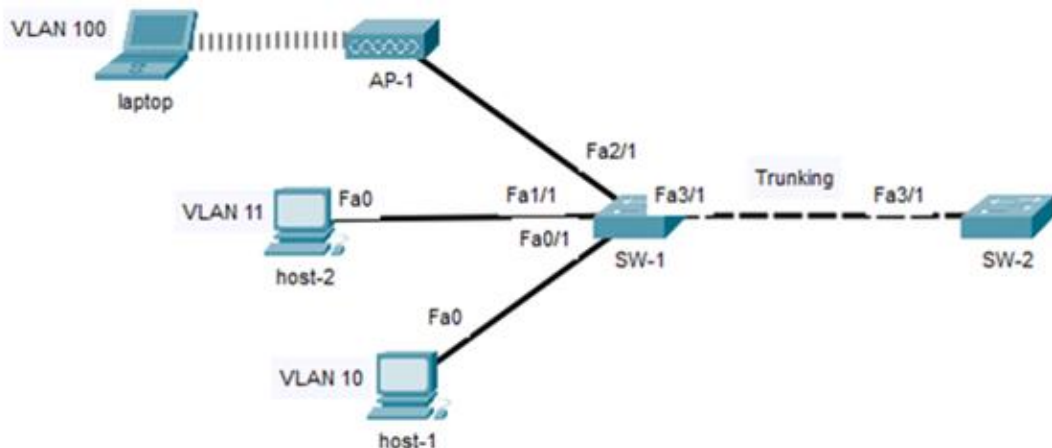


Nondefault Native VLAN

Lab Summary

Change the native VLAN on a trunk interface from the default 1 to 999 and allow VLAN 10, 11 and 100.

Figure 1 Lab Topology



Lab Configuration

Start Packet Tracer File: **nondefault native vlan.pkt**

Click on *SW-1* icon and select *CLI* folder.

Step 1: Enter global configuration mode.

```
SW-1> enable
SW-1# configure terminal
```

Step 2: Enable static trunking on SW-1 interface Fa3/1 and turn off DTP frames.

```
SW-1(config)# interface fastethernet3/1
SW-1(config-if)# switchport mode trunk
SW-1(config-if)# switchport nonegotiate
```

Step 3: Change the default native VLAN 1 to nondefault native VLAN 999.

```
SW-1(config-if)# switchport trunk native vlan 999
```

Step 4: Allow only VLAN 10, VLAN 11 and VLAN 100 across the trunk interface.

```
SW-1(config-if)# switchport trunk allowed vlan 10-11,100
SW-1(config-if)# end
SW-1# copy running-config startup-config
```

Click on SW-2 icon and select *CL/* folder.

Step 5: Enter global configuration mode.

```
SW-2> enable
```

```
SW-2# configure terminal
```

%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on FastEthernet3/1 (1), with SW-1 FastEthernet3/1 (999).

SPANTREE-2-BLOCK_PVID_LOCAL: Blocking FastEthernet3/1 on VLAN0001. Inconsistent port type.

Note: Hit <enter> For Error Messages

Step 6: Enable static trunking on SW-2 interface Fa3/1 and turn off DTP frames.

```
SW-2(config)# interface fastethernet3/1
```

```
SW-2(config-if)# switchport mode trunk
```

```
SW-2(config-if)# switchport nonegotiate
```

Step 7: Change the default native VLAN 1 to nondefault native VLAN 999.

```
SW-2(config-if)# switchport trunk native vlan 999
```

Step 8: Allow only VLAN 10, VLAN 11 and VLAN 100 across the trunk interface.

```
SW-2(config-if)# switchport trunk allowed vlan 10-11,100
```

```
SW-2(config-if)# end
```

```
SW-2# copy running-config startup-config
```

Step 9: Verify Lab

Verify the trunk is operational, native VLAN is 999 and only VLAN 10,11,100 are allowed across the trunk.

```
SW-1# show interfaces trunk
```

Port	Mode	Encapsulation	Status	Native vlan
Fa3/1	on	802.1q	trunking	999

```
Port Vlans allowed on trunk
```

```
Fa3/1 10-11,100
```

```
Port Vlans allowed and active in management domain
```

```
Fa3/1 10,11,100
```

```
Port Vlans in spanning tree forwarding state and not pruned
```

```
Fa3/1 10,11,100
```

SW-2# **show interfaces trunk**

Port	Mode	Encapsulation	Status	Native vlan
Fa3/1	on	802.1q	trunking	999

Port	Vlans allowed on trunk
Fa3/1	10-11,100

Port	Vlans allowed and active in management domain
Fa3/1	10,11,100

Port	Vlans in spanning tree forwarding state and not pruned
Fa3/1	10,11,100

Lab Notes

The native VLAN is assigned to the default VLAN 1 by default. Cisco recommends you assign the native VLAN to any other available VLAN for security purposes. The native VLAN number must match between neighbor switch interfaces to prevent VLAN hopping.