

Vlan creation:

-----

```
vlan 10
name sales
exit
```

```
vlan 11
exit
```

```
vlan 100-105
exit
```

```
vlan 11
name Mark
exit
```

```
Interface fa0/1
Sw access vlan 200
exit
```

```
int range fa0/2-4 ,fa0/7,fa0/9-11
Sw access vlan 300
exit
```

```
#vlan database
vlan 3000 name HR
exit
```

PC1	vlan	PC2	vlan	Communication	Reason
1.1.1.1	1	1.1.1.2	1	yes	Same Subnet/Same vlan
1.1.1.1	2	1.1.1.2	1	NO	Same Subnet/Diff vlan
2.2.2.2	1	1.1.1.2	1	NO	Diff Subnet/Same vlan
2.2.2.2	2	1.1.1.2	1	NO	Diff Subnet/Diff Vlan

Administrative mode/Operational mode

- 1.Static Access
- 2.Dynamic Auto
- 3.Dynamic Desirable
- 4.Trunk

```
Int g0/0
Sw mode access
exit
```

```
int g0/0
Sw mode dynamic auto
exit
```

```
int g0/0
Sw mode dynamic desirable
```

exit

```
int g0/0
Sw mode trunk
exit
```

```
SW1-----SW2
SA -----SA,DA,DD ----> Access link
DA-----DA          ----> Access link
SA-----TRunk      ---> Not supported
DA-----DA,DD,Trunk --->Trunk
DD-----DD,DA,Tr   ---->Trunk
TR-----DA,DD,TR   ---->TRunk
```

Encap methods

- 1.ISL
- 2.Dot1q
- 3.Nego

SW1-----	Sw2	Encapsulation
Dot1q	Dot1q	Dot1q
Dot1q	Nego	N-dot1q
ISL	ISL	ISL
ISL	nego	n-ISL
nego	nego	n-ISL
ISL	dot1q	Not supported

Sw1/Sw2

```
conf t
vlan 999
name Unused-Vlan
exit
```

int g0/0

Sw trunk encap dot1q	! Define encap method
Sw mode Trunk/Dynamic desirable	! To configure trunk link
Sw trunk native vlan 999	! Changes the native vlan from def 1 to 999
sw trunk allowed vlan 1,10,200	! Creates a list allowed vlans on the trunk link
sw trunk allowed vlan 1,100,4000	! Second list overwrites previous list
sw trunk allowed vlan add 10,20	! Adds the vlans to the current list
sw trunk allowed vlan all	! Allows all vlans (Default)
sw trunk allowed vlan except 10,100-102	! Does not allow vlans mentioned
Sw trunk allowed vlan none	! No vlan is allowed
sw trunk allowed vlan 1,10,20,100-102,200	! Creates a new list of allowed vlans
Sw trunk allowed vlan remove 20	! Removes vlan 20 from the current list

