

1. Switch mode configured as transparent  
vtp mode transparent  
Switch(config)#vlan 4000  
Switch(config-vlan)#private-vlan primary  
%Private VLANs can only be configured when VTP is in transparent/off modes  
in VTP version 1 or 2 .  
In server/transparent/off modes in VTP version 3  
when pruning is turned off

=====

Secondary vlans

Private vlans

1.community : They can communicate with in their vlan  
e.g pc1 and pc2 in vlan 4001 can communicate but they cannot communicate with other  
communities and isolated vlans.

2.Isolated : They cannot communicate within the same vlan  
e.g vlan 4003 pc5 and Pc6 : Pc5 cannot communicate with Pc6.

3.primary vlan can communicate with every one

Switch mode configured as server vlan (vtp ver 3)

```
/*  
vtp domain abc  
vtp pass cisco  
vtp ver 3  
vtp mode server vlan  
exit  
vtp primary vlan ! to be given in priv mode #  
*/
```

1.

vtp mode transparent

3.Configure Primary and secondary vlans.

```
vlan 4000  
private-vlan primary  
vlan 4001  
private-vlan community  
vlan 4002  
private-vlan community  
vlan 4003  
private-vlan isolated
```

4.Associating Primary vlan with secondary vlans.

```
vlan 4000
private-vlan association add 4001,4002,4003
exit
```

```
do sh vlan
```

Primary	Secondary	Type	Ports
4000	4001	community	
4000	4002	community	
4000	4003	isolated	

```
5.Port configurations.
```

```
! promiscuous port config:
```

```
int g1/2
sw mode private-vlan promiscuous
sw private-vlan mapping 4000 4001,4002,4003
exit
```

```
int range g0/0-1
switchport mode private-vlan host
sw private-vlan host-association 4000 4001
```

```
int range g0/2-3
switchport mode private-vlan host
sw private-vlan host-association 4000 4002
```

```
int range g1/0-1
switchport mode private-vlan host
sw private-vlan host-association 4000 4003
```

```
=====
R7:gateway router
primary vlan promiscuous mode can communicate with every one
conf t
int e0/0
ip add 1.1.1.100 255.0.0.0
no sh
int lo 0
ip add 8.8.8.8 255.0.0.0
exit
```

```
=====
do show vlan private-vlan
```

```
vtp 1/vtp 2
Revision number issue
Normal vlans 2-1001
vlan database
vtp password was in clear text
Modes
```

Server	CIA (Cr local E)
client	IA (Cr local E)
Transparent	A (cr local N/E)
off mode	Will not take part in vtp

vtp 3

Revision number is fixed

Normal/Extended

vlan database

MST database

private vlans (Pruning off)

vtp password supports md5

Modes

Server

Primary server CIA

Secondary server IA ( Any time can take over as primary server)

Client IA

Transparent A (cr local)

Off modes Will not take part in vtp

SW1:

----

en

conf t

ho SW1

int g0/0

sw trunk encap dot1q

sw mode trunk

exit

vtp domain abc

vtp ver 3

vtp password cisco hidden

vtp mode server vlan

vtp mode server mst

exit

spanning mode mst

SW2:

----

en

conf t

ho SW2

int range g0/0-1

sw trunk encap dot1q

sw mode trunk

exit

vtp domain abc

vtp ver 3

```
vtp password cisco hidden
vtp mode transparent vlan
vtp mode transparent mst
exit
```

```
spanning mode mst
```

```
SW3:
```

```
----
```

```
en
conf t
ho SW3
int range g0/0-1
sw trunk encap dot1q
sw mode trunk
exit
```

```
vtp domain abc
vtp ver 3
vtp password cisco hidden
vtp mode client vlan
vtp mode client mst
exit
```

```
spanning mode mst
```

```
SW4:
```

```
----
```

```
en
conf t
ho SW4
int range g0/0-1
sw trunk encap dot1q
sw mode trunk
exit
```

```
vtp domain abc
vtp ver 3
vtp password cisco hidden
vtp mode server vlan
vtp mode server mst
exit
```

```
spanning mode mst
```

```
SW1:
```

```
# vtp primary vlan
password :cisco
# vtp primary mst
password : cisco
```

SW4  
#vtp primary vlan force