IEEE 802.1Q and Layer 2 Protocol Tunneling (Q-in-Q)

Where service provider handoff is a layer 2 tagged VLAN

Customer ━━━━━━▶◀━━━━━━ Service-Provider ━━━━━━▶◀━━━━━━ Customer

```
interface GigabitEthernet1/0/x
switchport trunk encapsulation dot1q
switchport trunk allowed vlan (many)
switchport mode trunk
```

```
interface GigabitEthernet1/0/2
switchport trunk encapsulation dot1q
switchport trunk allowed vlan 2050
switchport mode trunk
```

```
interface GigabitEthernet1/0/2
switchport trunk encapsulation dot1q
switchport trunk allowed vlan 2050
switchport mode trunk
```

```
interface GigabitEthernet1/0/x
switchport trunk encapsulation dot1q
switchport trunk allowed vlan (many)
switchport mode trunk
```

Customer
4506

Customer
3750G

Media Converter
1Gb Ethernet

VLAN2050

Service-Provider
Network

Media Converter
1Gb Ethernet

Customer
3750G

Customer
4506

```
interface GigabitEthernet1/0/1
switchport access vlan 2050
switchport mode dot1q-tunnel
duplex full
speed 1000
no mdix auto
l2protocol-tunnel cdp
l2protocol-tunnel stp
l2protocol-tunnel vtp
```

```
interface GigabitEthernet1/0/1
switchport access vlan 2050
switchport mode dot1q-tunnel
duplex full
speed 1000
no mdix auto
l2protocol-tunnel cdp
l2protocol-tunnel stp
l2protocol-tunnel vtp
```