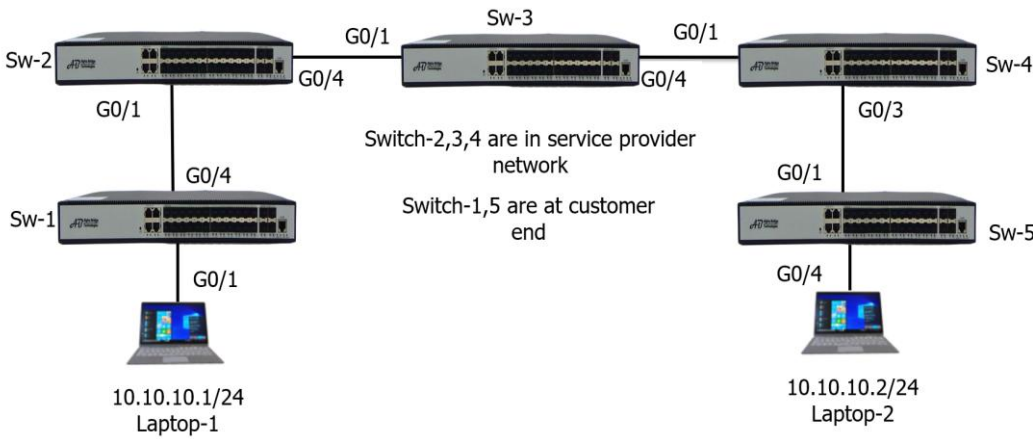


1. Q-in-Q

Test Case	Q-in-Q (IEEE 802.1Q Tunneling)
Test Procedure	<ol style="list-style-type: none"> 1. Access the Switch command line. 2. Connect the setup as show below. 3. Configure all the switches using below commands. <ul style="list-style-type: none"> • Customer tag = vlan 10 • Service tag = vlan 20 
Configuration	<p>Configuration:</p> <p>Switch-1:</p> <pre>[Switch_1] display current-config enable system-view !!!VLAN vlan 10 quit interface ethernet 0/0/1 port mode access port default vlan 10 quit interface ethernet 0/0/4 port mode trunk port trunk allowed vlan 10 quit !!!OAM sysname Switch_1 http enable !!!IF interface vlan-interface 10 ip address 10.10.10.10 255.255.255.0 quit</pre>

Switch-2:

```
[Switch_2] display current-config
enable
system-view
!!!VLAN
vlan 10,20
quit
interface ethernet 0/0/1
port mode access
port default vlan 20
qinq
quit
interface ethernet 0/0/4
port mode trunk
port trunk allowed vlan 20
quit
!!!OAM
sysname Switch_2
http enable
!!!IF
interface vlan-interface 20
ip address 20.20.20.1 255.255.255.0
quit
!!!SYSLOG
debug vlan
```

Switch-3:

```
<Switch_3>display current-config
enable
system-view
!!!VLAN
vlan 10,20
quit
interface ethernet 0/0/1
port mode trunk
port trunk allowed vlan 20
quit
interface ethernet 0/0/4
port mode trunk
port trunk allowed vlan 20
quit
!!!OAM
sysname Switch_3
http enable
!!!IF
interface vlan-interface 20
ip address 20.20.20.2 255.255.255.0
quit
```

	<p>Switch-4:</p> <pre><Switch_4> <Switch_4>display current-config enable system-view !!!VLAN vlan 20 quit interface ethernet 0/0/1 port mode trunk port trunk allowed vlan 20 quit interface ethernet 0/0/3 port mode access port default vlan 20 qing quit !!!OAM sysname Switch_4 http enable !!!IF interface vlan-interface 20 ip address 20.20.20.3 255.255.255.0 quit</pre> <p>Switch-5:</p> <pre>[Switch_5]display current-config enable system-view !!!VLAN vlan 10 quit interface ethernet 0/0/1 port mode trunk port trunk allowed vlan 10 quit interface ethernet 0/0/4 port mode access port default vlan 10 quit !!!OAM sysname Switch_5 http enable !!!IF interface vlan-interface 10 ip address 10.10.10.20 255.255.255.0 quit</pre>
Test result	

Switch-1:

```
[Switch_1]display mac-address-table
=====Mac Address Table=====
[No.]      [MAC]                [VID]      [PortNo.][Type]
1          c8:6b:bc:a0:48:13    1          0/0/4    Dynamic
2          88:88:88:88:87:88    10         0/0/4    Dynamic
3          c8:4b:d6:14:76:ba    10         0/0/1    Dynamic
4          c8:6b:bc:a0:11:15    10         cpu      Static
Total entries: 4 .
```

Switch-2:

```
[Switch_2]
[Switch_2]display mac-address-table
=====Mac Address Table=====
[No.]      [MAC]                [VID]      [PortNo.][Type]
1          88:88:88:88:87:88    20         0/0/4    Dynamic
2          c8:4b:d6:14:76:ba    20         0/0/1    Dynamic
3          c8:6b:bc:a0:11:15    20         0/0/1    Dynamic
4          c8:6b:bc:a0:11:16    20         cpu      Static
5          c8:6b:bc:a0:48:13    20         0/0/4    Dynamic
Total entries: 5 .
```

Switch-3:

```
<Switch_3>
<Switch_3>display mac-address-table
=====Mac Address Table=====
[No.]      [MAC]                [VID]      [PortNo.][Type]
1          88:88:88:88:87:88    20         0/0/4    Dynamic
2          c8:4b:d6:14:76:ba    20         0/0/1    Dynamic
3          c8:6b:bc:a0:11:15    20         0/0/1    Dynamic
4          c8:6b:bc:a0:11:18    20         cpu      Static
5          c8:6b:bc:a0:48:13    20         0/0/4    Dynamic
Total entries: 5 .
```

Switch-4:

	<pre> <Switch_4> <Switch_4>display mac-address-table =====Mac Address Table===== [No.] [MAC] [VID] [PortNo.][Type] 1 88:88:88:88:87:88 20 0/0/3 Dynamic 2 c8:4b:d6:14:76:ba 20 0/0/1 Dynamic 3 c8:6b:bc:a0:11:0b 20 cpu Static 4 c8:6b:bc:a0:11:15 20 0/0/1 Dynamic 5 c8:6b:bc:a0:48:13 20 0/0/3 Dynamic Total entries: 5 . Switch-5: [Switch_5] [Switch_5]display mac-address-table =====Mac Address Table===== [No.] [MAC] [VID] [PortNo.][Type] 1 c8:6b:bc:a0:48:13 1 0/0/4 Dynamic 2 88:88:88:88:87:88 10 0/0/4 Dynamic 3 c8:4b:d6:14:76:ba 10 0/0/1 Dynamic From PC-1 at switch 1 we can able to ping the PC-2 connected at switch-5. [Switch_1]ping 10.10.10.2 PING 10.10.10.2 (10.10.10.2) 56(84) bytes of data. 64 bytes from 10.10.10.2: icmp_seq=1 ttl=128 time=3.90 ms 64 bytes from 10.10.10.2: icmp_seq=2 ttl=128 time=0.000 ms 64 bytes from 10.10.10.2: icmp_seq=3 ttl=128 time=0.000 ms 64 bytes from 10.10.10.2: icmp_seq=4 ttl=128 time=0.000 ms 64 bytes from 10.10.10.2: icmp_seq=5 ttl=128 time=0.000 ms --- 10.10.10.2 ping statistics --- 5 packets transmitted, 5 received, 0% packet loss, time 4003ms rtt min/avg/max/mdev = 0.000/0.781/3.906/1.562 ms </pre>
Remarks	Working