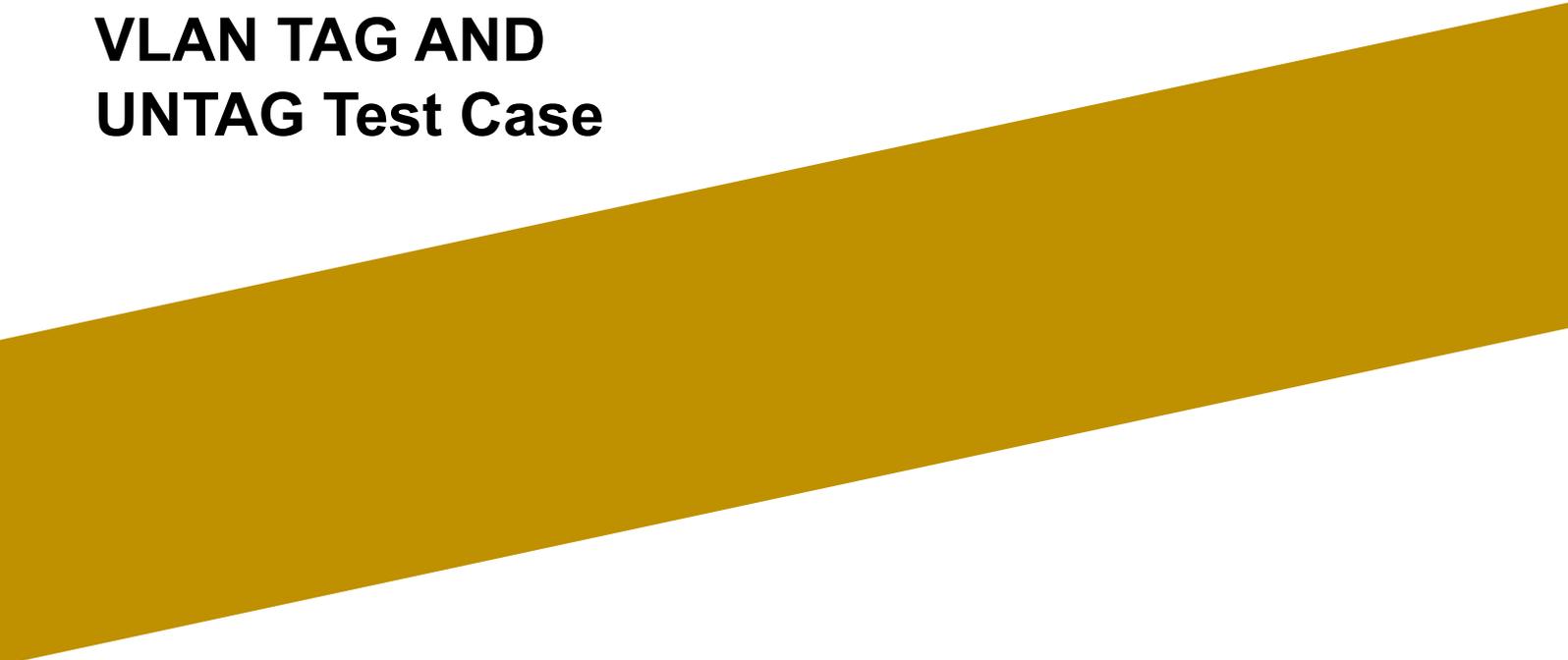
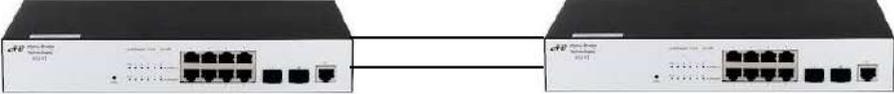
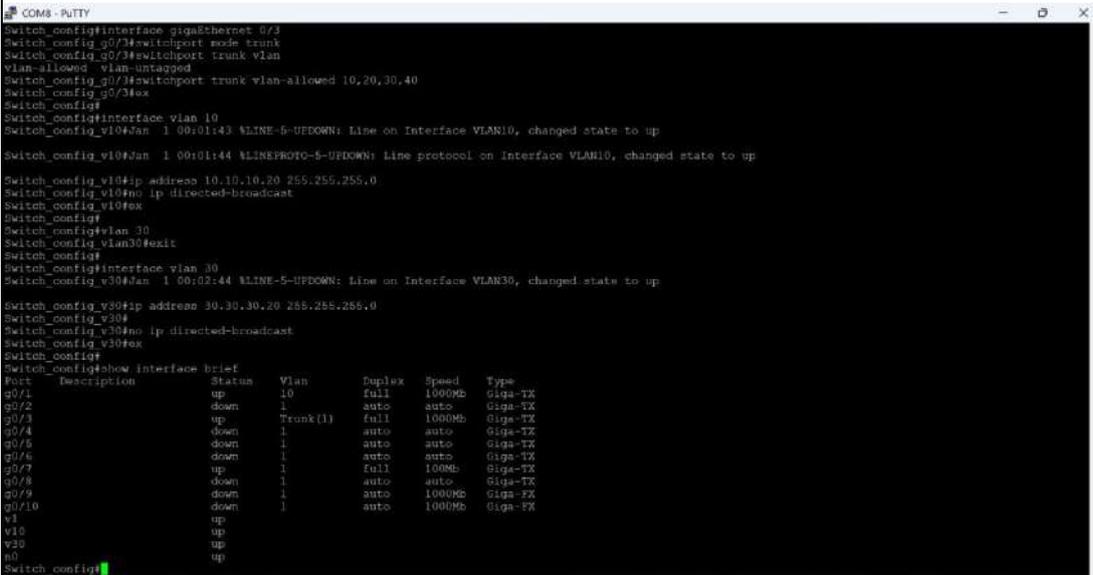


**Alpha Bridge
VLAN TAG AND
UNTAG Test Case**



1. VLAN TAG AND UNTAG

Testcase	VLAN TAG AND UNTAG
Procedure	<ol style="list-style-type: none"> 1. Connect switch 1 with switch 2. Create tag ports(trunk) and untag (Access) ports between two switches and Pass vlans and assign IP address for vlans. 3. Ping the switches via tag port and untag ports <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>G0/1: Access</p>  <p>G0/3: Trunk</p> </div> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p>Switch1:</p> <p>G0/1: vlan 10, Ip:10.10.10.30/24</p> <p>G0/3: vlan,10,20 IP:30.30.30.30/24</p> </div> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p>Switch2:</p> <p>G0/1: vlan 10, Ip:10.10.10.20/24</p> <p>G0/3: vlan,10,20 IP:30.30.30.20/24</p> </div> </div>
Configuration	<p>Switch Configuration:</p> <p>Switch 1:</p> <pre> interface gigaEthernet 0/1 switchport mode access // for access or untag port switchport pvid 10 // add vlan on the port exit interface gigaEthernet 0/3 switchport mode trunk // for trunk or tagged port switchport trunk vlan-allowed 10,30 // adding the vlan tags in the interfaces exit interface VLAN10 ip address 10.10.10.30 255.255.255.0 no ip directed-broadcast exit interface VLAN30 ip address 30.30.30.30 255.255.255.0 no ip directed-broadcast exit </pre>

	<pre> Switch 2: interface gigaEthernet 0/1 switchport mode access // for access or untag port switchport pvid 10 // add vlan on the port exit interface gigaEthernet 0/3 switchport mode trunk // for trunk or tagged port switchport trunk vlan-allowed 10,20,30,40 // add vlan on the port exit interface VLAN10 ip address 10.10.10.20 255.255.255.0 no ip directed-broadcast exit interface VLAN30 ip address 30.30.30.20 255.255.255.0 no ip directed-broadcast exit </pre>
<p>Test result</p>	<p>Show interface brief</p>  <pre> Switch_config#show interface brief Port Description Status Vlan Duplex Speed Type ----- 0/0/1 up 10 full 1000Mb Giga-TX 0/0/2 down 1 auto auto Giga-TX 0/0/3 up Trunk(1) full 1000Mb Giga-TX 0/0/4 down 1 auto auto Giga-TX 0/0/6 down 1 auto auto Giga-TX 0/0/7 up 1 full 100Mb Giga-TX 0/0/8 down 1 auto auto Giga-TX 0/0/9 down 1 auto 1000Mb Giga-FX 0/0/10 down 1 auto 1000Mb Giga-FX v1 up v10 up v30 up n0 up Switch_config# </pre>

	<p>Vlans tags present in on the all the interfaces</p> <pre> Switch_config# Switch_config# Switch_config# Switch_config#show vlan VLAN Status Name Ports ----- 1 Static Default g0/2, g0/4, g0/5, g0/6, g0/7 g0/8, g0/9, g0/10 10 Static VLAN0010 g0/1, g0/3 20 Static VLAN0020 30 Static VLAN0030 g0/3 40 Static VLAN0040 50 Static VLAN0050 100 Static VLAN0100 200 Static VLAN0200 300 Static VLAN0300 Switch_config# </pre> <p>ping between switch-1 and switch-2 via trunk port</p> <pre> Jan 1 00:13:20 %LINEPROTO-5-UPDOWN: Line protocol on Interface GigaBt Switch1_config#ping 10.10.10.20 PING 10.10.10.20 (10.10.10.20): 56 data bytes !!!! --- 10.10.10.20 ping statistics --- 5 packets transmitted, 5 packets received, 0% packet loss round-trip min/avg/max = 0/0/0 ms Switch1_config#ping 30.30.30.20 PING 30.30.30.20 (30.30.30.20): 56 data bytes !!!! --- 30.30.30.20 ping statistics --- 5 packets transmitted, 5 packets received, 0% packet loss round-trip min/avg/max = 0/0/0 ms Switch1_config# Jan 1 00:15:07 %LINEPROTO-5-UPDOWN: Line protocol on Interface GigaBt </pre> <pre> Switch_config#Jan 1 00:07:31 %LINE-5-UPDOWN: Line on Interface GigaBt Jan 1 00:07:31 %LINEPROTO-5-UPDOWN: Line protocol on Interface GigaBt Jan 1 00:07:31 %LINEPROTO-5-UPDOWN: Line protocol on Interface VLAN10 Jan 1 00:07:32 %LINEPROTO-5-UPDOWN: Line protocol on Interface VLANs 10 Switch_config#ping 10.10.10.30 PING 10.10.10.30 (10.10.10.30): 56 data bytes !!!! --- 10.10.10.30 ping statistics --- 5 packets transmitted, 5 packets received, 0% packet loss round-trip min/avg/max = 0/0/0 ms Switch_config# Switch_config#ping 30.30.30.30 PING 30.30.30.30 (30.30.30.30): 56 data bytes !!!! --- 30.30.30.30 ping statistics --- 5 packets transmitted, 5 packets received, 0% packet loss round-trip min/avg/max = 0/0/0 ms Switch_config# </pre> <p>ping between switch-1 and switch-2 via access port</p> <pre> Switch1#enab Switch1#Jan 1 00:15:08 User admin enter privilege mode from console 0, level = 15 Switch1#con Switch1_config#ping 10.10.10.20 PING 10.10.10.20 (10.10.10.20): 56 data bytes !!!! --- 10.10.10.20 ping statistics --- 5 packets transmitted, 5 packets received, 0% packet loss round-trip min/avg/max = 0/0/0 ms Switch1_config#ping 30.30.30.20 PING 30.30.30.20 (30.30.30.20): 56 data bytes --- 30.30.30.20 ping statistics --- 5 packets transmitted, 0 packets received, 100% packet loss Switch1_config# </pre> <pre> Switch2# Switch2# Switch2# Switch2#ping 10.10.10.30 PING 10.10.10.30 (10.10.10.30): 56 data bytes !!!! --- 10.10.10.30 ping statistics --- 5 packets transmitted, 5 packets received, 0% packet loss round-trip min/avg/max = 0/0/0 ms Switch2# Switch2#ping 30.30.30.30 PING 30.30.30.30 (30.30.30.30): 56 data bytes --- 30.30.30.30 ping statistics --- 5 packets transmitted, 0 packets received, 100% packet loss Switch2# </pre>
<p>Remarks</p>	<p>Working</p>