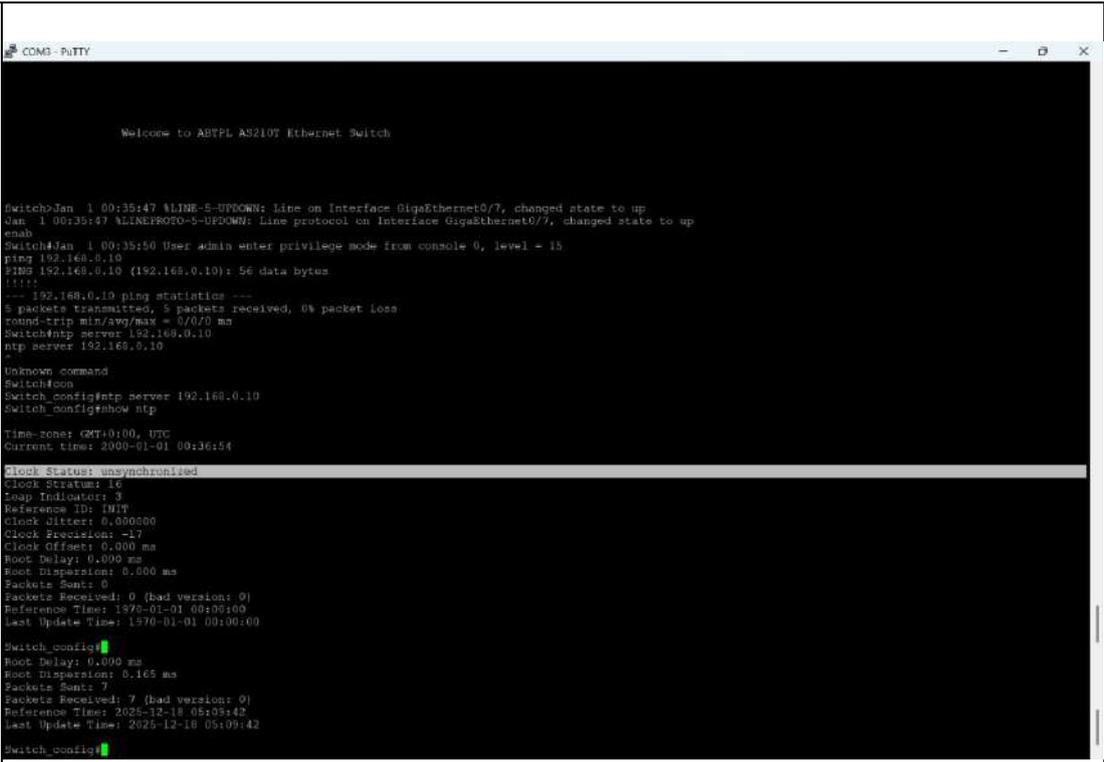


Alpha Bridge NTP Test Case

1. Network Time Protocol

Testcase	Network Time Protocol
Procedure	<ol style="list-style-type: none"> 1. Configure a management IP address on Switch-1 and set it as the NTP master server with correct date and time. 2. Verify network connectivity between Switch-2 and Switch-1 using ping. 3. Configure Switch-2 with the NTP server IP address and enable NTP client synchronization. 4. Verify that date and time are automatically synchronized on the client switch. <div style="text-align: center; margin: 10px 0;">  </div>
Configuration	<p>Switch Configuration:</p> <p>SWITCH 1(Server)</p> <pre>interface vlan 1 ip address 192.168.0.10 255.255.255.0 // Assigns IP address 192.168.0.10 to VLAN 1. ntp master primary // Configure the switch as the primary NTP master. date // Manually update the current date and time. show ntp // Displays the correct date and time.</pre> <p>SWITCH 2(Client)</p> <pre>ping 192.168.0.10 // Verifies reachability between client and NTP server. ntp server 192.168.0.10 // Configures 192.168.0.10 as the NTP server. show ntp // Status showing unsynchronized state initially. ntp client enable // Enables NTP client to synchronize time with the server. show ntp // Confirms date and time are synchronized automatically with the NTP server.</pre>
Test result	<p>Client:</p> <p>After configuring the NTP server on the switch, NTP status shows “unsynchronized” because the client has not yet received valid time information from the server.</p>

	 <pre> COM3 - PuTTY Welcome to ABTPL AS210T Ethernet Switch Switch>Jan 1 00:35:47 ALINE-5-UPDOWN: Line on Interface GigaEthernet0/7, changed state to up Jan 1 00:35:47 ALINEPROT0-5-UPDOWN: Line protocol on Interface GigaEthernet0/7, changed state to up snab Switch#Jan 1 00:35:50 User admin enter privilege mode from console 0, level = 15 # ping 192.168.0.10 PING: 192.168.0.10 (192.168.0.10): 56 data bytes !!!! --- 192.168.0.10 ping statistics --- 5 packets transmitted, 5 packets received, 0% packet loss round-trip min/avg/max = 0/0/0 ms Switch#ntp server 192.168.0.10 ntp server 192.168.0.10 # Unknown command Switch#conf Switch#conf Switch_config#ntp server 192.168.0.10 Switch_config#show ntp Time zone: GMT+0100, UTC Current time: 2020-01-01 00:36:54 Clock Status: unsynchronized Clock Stratum: 16 Leap Indicator: 3 Reference ID: NUT Clock jitter: 0.000000 Clock Precision: -17 Clock Offset: 0.000 ms Root Delay: 0.000 ms Root Dispersion: 0.000 ms Packets Sent: 0 Packets Received: 0 (bad version: 0) Reference Time: 1970-01-01 00:00:00 Last Update Time: 1970-01-01 00:00:00 Switch_config# Root Delay: 0.000 ms Root Dispersion: 0.165 ms Packets Sent: 7 Packets Received: 7 (bad version: 0) Reference Time: 2025-12-18 05:05:42 Last Update Time: 2025-12-18 05:09:42 Switch_config# </pre> <p>The switch automatically updates its date and time, and the NTP status changes to “synchronized”.</p>
Remarks	Working