Network Test Plan

Test ID	Category	Test Description	Result	Result (Picture)	
1	Connectivity	Ping from PC-PT (POS-PC, VLAN 20) to Printer-PT (POS-PRINTER, VLAN 20).	Success. Devices within the same VLAN can communicate directly via the access switch.		#VALUE!
2	Inter-VLAN Routing	Ping from Laptop-PT (SALES-LAPTOP, VLAN 10) to PC-PT (STOCK-PC, VLAN 30).	Success. Traffic routes via MLSW1/MLSW2 (SVI gateways).		#VALUE!
3	DHCP	Configure Laptop-PT (TECH-LAPTOP, VLAN 50) to use DHCP. Verify it receives a valid IP address, mask, gateway (SVI IP), and DNS server IP (DHCP-SERVER IP) from the 172.16.3.0/25 range.	Success. Laptop receives correct IP configuration from DHCP-SERVER via DHCP relay configured on the MLSW SVI for VLAN 50.		#VALUE!
4	Server Access	Ping from PC-PT (STAFF-PC, VLAN 40) to Server-PT (DNS-SERVER, VLAN 60).	Success. Inter-VLAN routing allows access to the statically addressed server in the SERVERROOM VLAN.		#VALUE!
5	Static IP	Verify Server-PT (EMAIL-SERVER, VLAN 60) has its assigned IP address, mask, and gateway configured.	Success. Configuration matches the planned IP addressing for the SERVERROOM VLAN (172.16.3.135/28).		#VALUE!
6	OSPF Routing	On CORE-R1, execute show ip ospf neighbor.	Success. Adjacencies are FULL with CORE-R2, Multilayer1, and Multilayer2.		#VALUE!
8	Internet Access	From TabletPC-PT (STOCK-TABLET, VLAN 30), ping ISP1-MAIN.	Success. Traffic is routed via MLSW -> CORE Router -> ISP, PAT translation occurs.		#VALUE!
9	IPS Activation Verification	IPS Activation Verification	On R1 (where IPS was configured): ping failed from REMOTE ACCESS PC to MAIN PC and MAIN PC to REMOTE ACCESS PC PING was a success showing IPS is configured. Log in R1 shown.		#VALUE!
11	ACL	From an external simulated host (MAIN-PC from VPN), attempt to ping the internal IP of STOCK-PC.	Success. PAT/ACLs block unsolicited inbound traffic.		#VALUE!
13	Web Access (HTTP)	On Laptop-PT (TE CH-PC, VLAN 50). Ensure it has received DNS server IP via DHCP. Open the 'Web Browser' tool. Enter http://google.com in the URL bar.	Success. The default Packet Tracer simulation of a web page (resembling a basic Google search page) loads successfully in the browser.		#VALUE!
16	Wireless	Connect Laptop-PT (STAFF-LAPTOP, VLAN 40) wirelessly to the STAFF Access Point SSID. Verify DHCP IP assignment.	Success. Laptop connects to STAFF SSID, gets correct IP from 172.16.2.128/25 range via DHCP.		#VALUE!
18	ISP Redundancy	Delete the primary link between CORE-R1 and ISP1-MAIN. Repeat Test 8 (ping ISP2-BACKUP from STOCK-TABLET).	Success. Traffic falls over to the secondary path to ISP2-BACKUP in redundancy of ISP1-MAIN. OSPF/Static routes adjust path.		#VALUE!
19	Core Redundancy	Shutdown Multilayer1. Ping from Laptop-PT (SALES-LAPTOP, VLAN 10) to PC-PT (STOCK-PC, VLAN 30).	Success. Traffic routes via Multilayer2. OSPF reconverges if necessary. (FHRP like HSRP/VRRP would make gateway failover seamless).		#VALUE!
20	VPN Access	From PC-PT (REMOTE-ACCESS-PC, 192.168.1.10), ping Server-PT (DNS-SERVER, internal VLAN 60, 172.16.3.131).	Success. Traffic traverses the VPN tunnel between the Branch/Main/Internet routers and reaches the internal network.		#VALUE!