

TASK:

Major Network: 192.168.10.0/24

We need 8 Subnets

1. Configure Basic Configurations on SW1,SW4,SW6,Edge-Router-B1,SW7,SW10,,SW12,Edge-Router-B2 such as :

- Name, Console Password, Privilege Password, Encryption Mechanisms, Username and password (Use hidden Password)

2. Configure Port-Security on all end-device ports on Branch-1 Light Green section, Branch-1 Pink section and Branch-2

- In Branch-1 Light Green section switches you should configure maximum 2 MAC on each port.

- Violation Must be set to Restrict

- Port Security MAC learning must be set to Sticky

- In Branch-1 Pink section switches you should configure maximum 2 MAC on each port.

- Violation Must be set to Shutdown

- Port Security MAC learning must be set to Sticky

3. On each Access-layer switch you should configure Etherchannel on every 2 ports.

- In Branch-1 Light Green section you should configure Etherchannel with PAgP Protocol.

4. Configure Telnet on All switches and SSH on All routers.

5. Configure Inter-VLAN Routing with SVI on Branch-1 Light Green section

6. Configure Inter-VLAN Routing with SVI on Branch-1 Pink section

7. Configure Inter-VLAN Routing with ROAS on Branch-2

8. Configure DHCP Server on SW6, SW12, Edge-Router-B2 so all clients must get IP address from own DHCP Servers.

9. Configure STP on Branch-1 Light section (SW6 should be Root Bridge for all vlans)

10. Configure STP on Branch-1 Pink section (SW12 should be Root Bridge for all vlans)
11. Configure right ip addresses between SW6, Edge-Router-B1 and SW12 based on scenario
12. Configure static routing between Branch-1 Light Green and Branch-1 Pink section so all clients on Branch-1 must have connectivity with each other.
13. Configure Static Default route on Edge-Router-B1 and Edge-Router-B2 and R5
14. Configure Right static routes On Internet Router for communicating Branch-1 and Branch-2 with Each Other.
15. Configure Right ip address on Branch-3 devices
16. Configure Static Routing with Backup routes on Branch-3 Routers.
17. Configure Dynamic PAT on R5 for internet access.
18. Filter Telnet, FTP, WEB and DNS on R5 from internet.
19. Filter Ping access from internet on Edge-Router-B1
20. Filter SSH, TFTP, SMTP access from internet on Edge-Router-B2

Good Luck

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