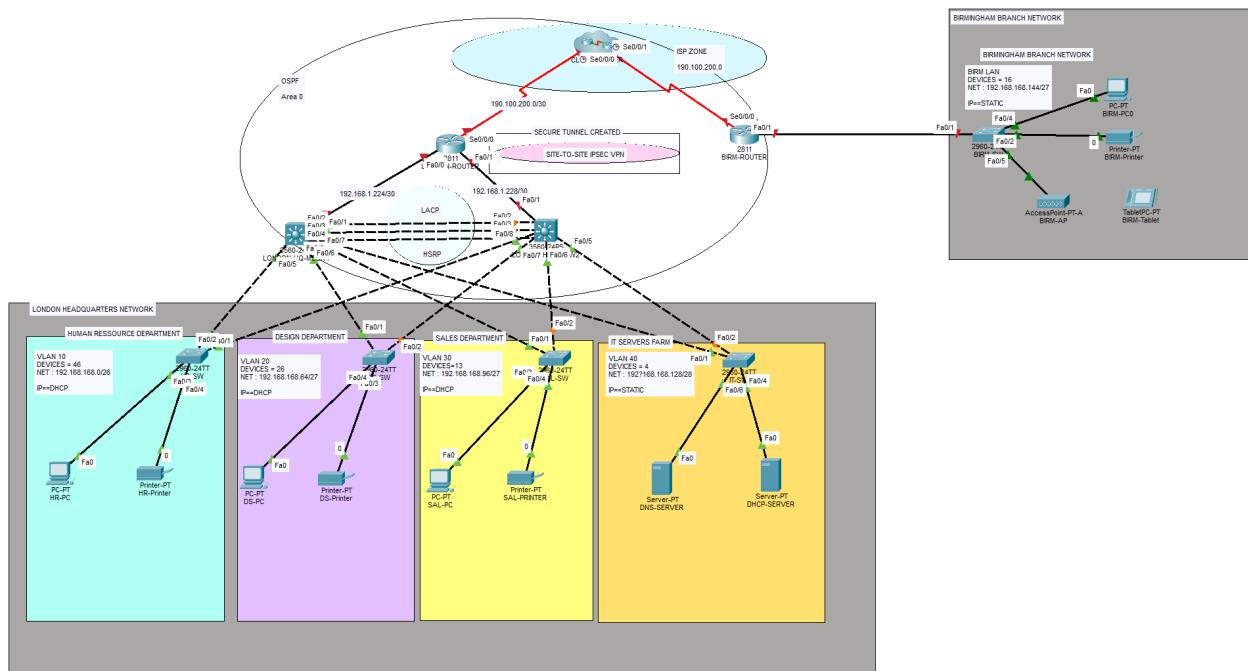


Lab 02: IT CORPORATE NETWORK

Author : Souaibou BARRY (<https://github.com/dineproject>)

Topology



1. Set hostnames on all devices.
2. Create VLANs 10, 20, 30, 40 on all switches manually (no VTP).
3. Configure Rapid PVST+. Set LONDON-MLSW1 as root bridge.
4. Configure trunk ports. Disable DTP.
5. Configure EtherChannel between L3 and access switches.
6. Enable on access ports for security and fast convergence.
7. Assign access ports to VLANs on each switch.
8. Configure gateway redundancy on ML switches.
9. Configure all IP addresses per topology.
10. Configure OSPF process 1, area 0 on all routers and L3 switches.
11. Configure DHCP server (GUI) for VLANs 10, 20, 30.
12. Configure `ip helper-address` on VLAN interfaces.
13. Configure DHCP pool on BIRM-ROUTER.

14. Configure DNS server (GUI) with static IP.
 15. Create tunnel between LONDON-ROUTER and BIRM-ROUTER.
 16. Secure GRE tunnel with IPsec (AES-256, SHA-256, DH14).
 17. Configure autonomous AP at Birmingham.
 18. Block Sales (VLAN 30) from IT Servers (VLAN 40).
 19. Protect DHCP server (allow only DHCP + ICMP).
 20. Check root bridge, PortFast, BPDU Guard.
 21. Confirm DTP disabled on all trunks.
 22. Test connectivity, DHCP, VPN, ACLs, wireless.
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Key Verification Commands:

```
show vlan brief  
show spanning-tree  
show interfaces trunk  
show etherchannel summary  
show standby brief  
show ip ospf neighbor  
show crypto isakmp sa  
show crypto ipsec sa
```