**Addressing Table**

|  |  |  |
| --- | --- | --- |
| Device | Interface | IP Address / Prefix |
| Layer 3 Switch InterVLAN Routing | | |
| MLS | VLAN 10 | 172.22.10.254 /24 |
| VLAN 11 | 172.22.11.254 /24 |
| VLAN 12 | 172.22.12.254 /24 |
| VLAN 13 | 172.22.13.254 /24 |
| VLAN 20 | 172.22.20.254 /24 |
| VLAN 21 | 172.22.21.254 /24 |
| VLAN 22 | 172.22.22.254 /24 |
| VLAN 99 | 172.22.99.254 /24 |
| G0/2 | 9.92.6.17 /30 |
| SW-1 | VLAN 99 | 172.22.99.1 |
| SW-2 | VLAN 99 | 172.22.99.2 |
| SW-3 | VLAN 99 | 172.22.99.3 |
| PC-1 |  | 172.22.10.10 |
| PC-2 |  | 172.22.11.10 |
| PC-3 |  | 172.22.12.10 |
| PC-4 |  | 172.22.20.10 |
| PC-5 |  | 172.22.21.10 |
| PC-6 |  | 172.22.22.10 |
| Lappy-1 |  | 172.22.10.20 |
| Lappy-2 |  | 172.22.20.20 |
| Router on a Stick InterVLAN Routing | | |
| RTR-1 | G0/0/1 | 222.42.13.1 /30 |
| G0/0/2.7 | 192.168.7.1 /24 |
| G0/0/2.8 | 192.168.8.1 /24 |
| G0/0/2.99 | 192.168.99.1 /24 |
| SW-4 | VLAN 99 | 192.168.99.2 /24 |
| PC-7 |  | 192.168.7.100 |
| PC-8 |  | 192.168.8.100 |
| Internet | | |
| Web Server |  | 64.13.111.10 |

**VLAN and Port Assignments MLS**

|  |  |  |
| --- | --- | --- |
| VLAN | Name | Device |
| 10 | Staff | MLS, SW-1, SW-2 |
| 11 | Administration | MLS, SW-1, SW-2 |
| 12 | Guest | MLS, SW-1, SW-2 |
| 13 | ParkingLot | SW-2, SW-3 |
| 20 | Finance | MLS, SW-1, SW-3 |
| 21 | Marketing | MLS, SW-1, SW-3 |
| 22 | IT | MLS, SW-1, SW-3 |
| 42 | Voice | SW-2, SW-3 |
| 99 | Management | MLS, SW-1, SW-2, SW-3 |

**VLAN and Port Assignments RoaSt**

|  |  |  |
| --- | --- | --- |
| VLAN | Name | Interface |
| 7 | RedTeam | F0/1 – 12 |
| 8 | BlueTeam | F0/13 - 24 |

**Router on a Stick Configuration**

* Create VLANs on SW-4.
* Assign VLANs to ports (use the table above for the port assignments).
* Configure subinterfaces.
* Enable trunking.
* Test connectivity.

**Multi-Layer Switch Configuration**

* Configure layer 3 switching.
* Add VLANs (use the table above for reference).
* Configure SVI on MLS.
* Configure trunking.
* Enable routing.
* Verify connectivity.