Table 1: Network address for group 2: **22.22.22.0/24**

|  |  |
| --- | --- |
| Branch office name | Network Address |
| Site -1 | 22.22.22.0/26 |
| Site - 2 | 22.22.22.64/26 |
| **Site - 3** | **22.22.22.128/26** |
| Site - 4 | 22.22.22.192/26 |

Table 2: Interfaces used and IP Addresses

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Router | Interface | Description | Network Address (CIDR format) | IP address |
| R1 | Serial 0/0/0 | Site to site connection with ISP router | 22.22.22.176/30 | 22.22.22.177 |
|  | Gigabit Ethernet 0/1 | R1 connection with SW-1 | 22.22.22.180/30 | 22.22.22.181 |
|  | Gigabit Ethernet 0/2 | R1 connection with SW-2 | 22.22.22.184/30 | 22.22.22.185 |
|  | Router ID / Loopback | For OSPF | 1.1.1.1 |  |
|  | | | | |
| SW-1 | Gigabit Ethernet 1/0/24 | SW1 connection with R1 | 22.22.22.180/30 | 22.22.22.182 |
|  | Ethernet Channel 1 | Ethernet channel between SW-1 and SW-2 | 22.22.22.188/30 | 22.22.22.189 |
|  | Ethernet Channel 2 | Ethernet channel between SW-1 and SW-3 | 22.22.22.160/28 | 22.22.22.163 |
|  | Router ID / Loopback 0 |  | 2.2.2.2 |  |
|  | VLAN 100 |  | 22.22.22.160/28 | 22.22.22.162 |
|  | VLAN 100 | VLAN 100 HSRP Virtual gateway | 22.22.22.160/28 | 22.22.22.161 |
|  | VLAN 200 |  | 22.22.22.128/27 | 22.22.22.132 |
|  | | | | |
| SW-2 | Gigabit Ethernet 1/0/24 | SW2 connection with R1 | 22.22.22.184/30 | 22.22.22.186 |
|  | Etherchannel 1 | Etherchannel between SW-2 and SW-1 | 22.22.22.188/30 | 22.22.22.190 |
|  | Etherchannel 3 | Etherchannel between SW-2 and SW-3 | 22.22.22.128/27 | 22.22.22.131 |
|  | Router ID / Loopback 0 | For OSPF | 3.3.3.3 |  |
|  | VLAN 100 |  | 22.22.22.160/28 | 22.22.22.164 |
|  | VLAN 200 |  | 22.22.22.128/27 | 22.22.22.130 |
|  | VLAN 200 | VLAN 200 HSRP Virtual Gateway | 22.22.22.128/27 | 22.22.22.129 |
|  | | | | |
| SW3 | Fast Ethernet 0/6 | NA | NA | NA |
|  | Fast Ethernet 0/12 | NA | NA | NA |
|  | Etherchannel 2 | NA | NA | NA |
|  | Etherchannel 3 | NA | NA | NA |
|  | | | | |
| LAN 1 - PC | Fast Ethernet 0 |  | 22.22.22.160/28 | 22.22.22.174 |
| LAN 2 - PC | Fast Ethernet 0 |  | 22.22.22.128/27 | 22.22.22.158 |

Table 3: LAN IP address Range

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| LAN name | VLAN ID | Required Hosts | Network Address / CIDR | Start of IP address range | End of IP address Range |
| VLAN 100 | VLAN 100 | 14 | 22.22.22.160/28 | 22.22.22.161 | 22.22.22.174 |
| VLAN 200 | VLAN 200 | 30 | 22.22.22.128/27 | 22.22.22.129 | 22.22.22.158 |
|  |  |  |  |  |  |