**Subnet Table**

| **Subnet Description** | **Number of Hosts Needed** | **Network Address/CIDR** | **First Usable Host Address** | **Last Usable Host Address** | **Broadcast Address** |
| --- | --- | --- | --- | --- | --- |
| PC-D LAN | 60 | 10.11.48.0/26 | 10.11.48.1 | 10.11.48.62 | 10.11.48.63 |
| PC-B LAN | 30 | 10.11.48.64/27 | 10.11.48.65 | 10.11.48.94 | 10.11.48.95 |
| PC-A LAN | 14 | 10.11.48.96/28 | 10.11.48.97 | 10.11.48.110 | 10.11.48.111 |
| PC-C LAN | 6 | 10.11.48.112/29 | 10.11.48.113 | 10.11.48.118 | 10.11.48.119 |
| WAN Link | 2 | 10.11.48.120/30 | 10.11.48.121 | 10.11.48.122 | 10.11.48.123 |

| **Device** | **Interface** | **Address** | **Subnet Mask** | **Default Gateway** |
| --- | --- | --- | --- | --- |
|  | G0/0 | 10.11.48.97 | 255.255.255.240 | N/A |
| Branch1 | G0/1 | 10.11.48.65 | 255.255.255.224 | N/A |
|  | S0/0/0 | 10.11.48.121 | 255.255.255.252 | N/A |
|  | G0/0 | 10.11.48.113 | 255.255.255.248 | N/A |
| Branch2 | G0/1 | 10.11.48.1 | 255.255.255.192 | N/A |
|  | S0/0/0 | 10.11.48.122 | 255.255.255.252 | N/A |
| Room-114 | VLAN 1 | 10.11.48.98 | 255.255.255.240 | 10.11.48.97 |
| Room-279 | VLAN 1 | 10.11.48.66 | 255.255.255.224 | 10.11.48.65 |
| Room-312 | VLAN 1 | 10.11.48.114 | 255.255.255.248 | 10.11.48.113 |
| Room-407 | VLAN 1 | 10.11.48.2 | 255.255.255.192 | 10.11.48.1 |
| PC-A | NIC | 10.11.48.110 | 255.255.255.240 | 10.11.48.97 |
| PC-B | NIC | 10.11.48.94 | 255.255.255.224 | 10.11.48.65 |
| PC-C | NIC | 10.11.48.118 | 255.255.255.248 | 10.11.48.113 |
| PC-D | NIC | 10.11.48.62 | 255.255.255.192 | 10.11.48.1 |