| **Device** | **Interface** | **IP Address / Prefix** | **Default Gateway** |
| --- | --- | --- | --- |
| R1 | G0/0 |  | N/A |
| R1 | G0/0 | 2001:db8:acad::1/64 | N/A |
| R1 | G0/0 | fe80::1 | N/A |
| R1 | G0/1 |  | N/A |
| R1 | G0/1 | 2001:db8:acad:1::1/64 | N/A |
| R1 | G0/1 | fe80::1 | N/A |
| R1 | G0/2 |  | N/A |
| R1 | G0/2 | 2001:db8:acad:2::1/64 | N/A |
| R1 | G0/2 | fe80::1 | N/A |
| R1 | S0/0/1 | 172.16.1.2 /30 | N/A |
| R1 | S0/0/1 | 2001:db8:2::1/64 | N/A |
| R1 | S0/0/1 | fe80::1 | N/A |
| Central | S0/0/0 | 209.165.200.226 /30 | N/A |
| Central | S0/0/0 | 2001:db8:1::1/64 | N/A |
| Central | S0/0/0 | fe80::2 | N/A |
| Central | S0/0/1 | 172.16.1.1 /30 | N/A |
| Central | S0/0/1 | 2001:db8:2::2/64 | N/A |
| Central | S0/0/1 | fe80::2 | N/A |
| S1 | VLAN 1 |  |  |
| S2 | VLAN 1 |  |  |
| S3 | VLAN 1 |  |  |
| Staff | NIC |  |  |
| Staff | NIC | 2001:db8:acad::2/64 | fe80::1 |
| Staff | NIC | fe80::2 | fe80::1 |
| Sales | NIC |  |  |
| Sales | NIC | 2001:db8:acad:1::2/64 | fe80::1 |
| Sales | NIC | fe80::2 | fe80::1 |
| IT | NIC |  |  |
| IT | NIC | 2001:db8:acad:2::2/64 | fe80::1 |
| IT | NIC | fe80::2 | fe80::1 |
| Web | NIC | 64.100.0.3 /29 | 64.100.0.1 |
| Web | NIC | 2001:db8:cafe::3/64 | fe80::1 |
| Web | NIC | fe80::3 | fe80::1 |
| DNS Server | NIC | 64.100.0.2 /29 | 64.100.0.1 |
| DNS Server | NIC | 2001:db8:cafe::2/64 | fe80::1 |

Use 192.168.0.0/24 to create subnets that meet the host requirements.

**Staff: 100 hosts**

N= 100 => 7 => m = 1 => 192.168.0.0 / 25 255.255.255.128

***defaut : 192.168.0.1***

**Sales: 50 hosts**

192.168.0.128 /25 255.255.255.128

N= 50 => 6 => m = 1 => 192.168.0.128 /26 255.255.255.192

***Defaut: 192.168.0.129***

**IT: 25 hosts**

192.168.0.192 /26 255.255.255.192

N=25 => 5 => m=1 => 192.168.0.192 /27 255.255.255.224

***Defaut : 192.168.0.193***

**Guest: 25**

192.168.0.224 / 27 255.255.255.224

**Defaut : 192.168.0.225**