### 

**Subnet Table (everything I tried pinged, you checked this lab in class)**

| **Subnet Description** | **Number of Hosts Needed** | **Network Address/CIDR** | **First Usable Host Address** | **Last Usable Host Address** | **Broadcast Address** |
| --- | --- | --- | --- | --- | --- |
| HQ-1 LAN | 19 | 172.19.67.0/27 | 172.19.67.1 | 172.19.67.30 | 172.19.67.31 |
| HQ-2 LAN | 23 | 172.19.67.32/27 | 172.19.67.33 | 172.19.67.62 | 172.19.67.63 |
| Remote-1 LAN | 11 | 172.19.67.64/28 | 172.19.67.65 | 172.19.67.78 | 172.19.67.79 |
| Remote-2 LAN | 7 | 172.19.67.80/28 | 172.19.67.81 | 172.19.67.94 | 172.19.67.95 |
| WAN Link | 2 | 172.19.67.96/30 | 172.19.67.97 | 172.19.67.98 | 172.19.67.99 |

**Device Addressing Table**

| **Device** | **Interface** | **Address** | **Subnet Mask** | **Default Gateway** |
| --- | --- | --- | --- | --- |
|  | G0/0 | 172.19.67.1 | 255.255.255.224 | N/A |
| HQ | G0/1 | 172.19.67.33 | 255.255.255.224 | N/A |
|  | S0/0/0 | 172.19.67.97 | 255.255.255.252 | N/A |
|  | G0/0 | 172.19.67.65 | 255.255.255.240 | N/A |
| Remote | G0/1 | 172.19.67.81 | 255.255.255.240 | N/A |
|  | S0/0/0 | 172.19.67.98 | 255.255.255.252 | N/A |
| HQ-1 | VLAN 1 | 172.19.67.2 | 255.255.255.224 | 172.19.67.1 |
| HQ-2 | VLAN 1 | 172.19.67.34 | 255.255.255.224 | 172.19.67.33 |
| Remote-1 | VLAN 1 | 172.19.67.66 | 255.255.255.240 | 172.19.67.65 |
| Remote-2 | VLAN 1 | 172.19.67.82 | 255.255.255.240 | 172.19.67.81 |
| WS116 | NIC | 172.19.67.30 | 255.255.255.224 | 172.19.67.1 |
| WS145 | NIC | 172.19.67.62 | 255.255.255.224 | 172.19.67.33 |
| WS203 | NIC | 172.19.67.78 | 255.255.255.240 | 172.19.67.65 |
| WS234 | NIC | 172.19.67.94 | 255.255.255.240 | 172.19.67.81 |

**HQ**

en

conf t

int g0/0

ip add 172.19.67.1 255.255.255.224

no shut

int g0/1

ip add 172.19.67.33 255.255.255.224

no shut

int s0/0/0

ip add 172.19.67.97 255.255.255.252

no shut

**Remote**

en

conf t

int g0/0

ip add 172.19.67.65 255.255.255.240

no shut

int g0/1

ip add 172.19.67.81 255.255.255.240

no shut

int s0/0/0

ip add 172.19.67.98 255.255.255.252

no shut

**HQ-1**

en

conf t

int vlan 1

ip add 172.19.67.2 255.255.255.224

no shut

ip def 172.19.67.1

**HQ-2**

en

conf t

int vlan 1

ip add 172.19.67.34 255.255.255.224

no shut

ip def 172.19.67.33

**Remote-1**

en

conf t

int vlan 1

ip add 172.19.67.66 255.255.255.240

no shut

ip def 172.19.67.65

**Remote-2**

en

conf t

int vlan 1

ip add 172.19.67.82 255.255.255.240

no shut

ip def 172.19.67.81