

Ip Addressing

Base Network: 172.16.1.0

First Floor

Department	Network Address	Subnet mask	Host Address Range	Broadcast Address
HR	172.16.1.0/25	255.255.255.128	172.16.1.1 to 172.16.1.126	172.16.1.127
Admin & server	172.16.1.128/28	255.255.255.240	172.16.1.129 to 172.16.1.142	172.16.1.143

Second floor

Department	Network Address	Subnet mask	Host Address Range	Broadcast Address
Dev	172.16.2.0/25	255.255.255.128	172.16.2.1 to 172.16.2.126	172.16.2.127
Testing	172.16.2.128/25	255.255.255.128	172.16.2.129 to 172.16.2.254	172.16.2.255

Third Floor

Department	Network Address	Subnet mask	Host Address Range	Broadcast Address
Sales	172.16.3.0/25	255.255.255.128	172.16.3.1 to 172.16.3.126	172.16.3.127
Finance	172.16.3.128/25	255.255.255.128	172.16.3.129 to 172.16.3.254	172.16.3.255

Between the Router and Layer-3 Switches

No.	Network Address	Subnet mask	Host Address Range	Broadcast Address
R1-MltSw1	172.16.1.144/30	255.255.255.252	172.16.1.145 to 172.16.1.146	172.16.1.147
R1-MltSw2	172.16.1.148/30	255.255.255.252	172.16.1.149 to 172.16.1.150	172.16.1.151
R1-MltSw3	172.16.1.152/30	255.255.255.252	172.16.1.153 to 172.16.1.154	172.16.1.155
R1-MltSw4	172.16.1.156/30	255.255.255.252	172.16.1.157 to 172.16.1.158	172.16.1.159

Between the Router and layer-3 Switches

Public Ip Address: 192.136.17.0/30, 192.136.17.4/30, 192.136.17.8/30 and 192.136.17.12/30