VLSM Address table

Network Address: 192.120.0.0/20

Department	Host	Given
BBA	550	1022
CSE	500	510
EEE	400	510
MNS	120	126
Architecture	50	62
Admin	20	30
CSE to Admin	2	2
BBA to Admin	2	2
MNS to Admin	2	2
EEE to Admin	2	2
Architecture to Admin	2	2
CSE to MNS	2	2

192.120.0.0 /20

192. 120. 0000 00|00 . 00000000

Network   subnet   host
          ID

For BBA,

Network Address = 192. 120. 0.0/ 20

Broadcast Address = 192. 120. 3. 255/22

First Host = 192.120. 0.1/22

Last Host = 192. 120. 3. 254/22

For CSE,

Network Address = 192. 120. 4. 0/23

Broadcast Address = 192.120. 5.255 /23

First Host = 192.120.4.1/23

Last Host = 192. 120 .5. 254 /23

For EEE,

Network Address = 192. 120. 6.0/23

Broadcast Address = 192.120. 7.255 /23

First host = 192. 120. 6.1/23

Last host = 192.120. 7.254/23

For MNS,

    Network Address = 192.120.8.0/25

    Boardcast Address = 192.120.8.127/25

    First Host = 192.120.8.1/25

    Last Host = 192.120.8.126/25

For Architecture,

    Network Address = 192.120.8.128/26

    Board cast Address = 192.120.8.191/26

    First Host = 192.120.8.129/26

    Last Host = 192.120.8.190/26

For Admin,

    Network Address = 192.120.8.192/27

    Board cast Address = 192.120.8.233/27

    First Host = 192.120.8.193/27

    Last Host = 192.120.8.222/27

CSE to Admin,

Network Address = 192.120.8.224/30

Boardcast Address = 192.120.8.227/30

First Host = 192.120.8.255/30

Last Host = 192.120.8.226/30

BBA to Admin,

Network Address = 192.120.8.228/30

Board cast Address = 192.120.8.231/30

First Host = 192.120.8.229/30

Last Host = 192.120.8.230/30

MNS to Admin,

Network Address = 192.120.8.232/30

Boardcast Address = 192.120.8.235/30

First Host = 192.120.8.233/30

Last Host = 192.120.8.234/30

EEE to Admin,

Network Address = 192.120.8.236/30

Board cast Address = 192.120.8.239/30

First Host = 192.120.8.237/30

Last Host = 192.120.8.238/30

Architecture to Admin,

Network Address = 192.120.8.240/30

Board cast Address = 192.120.8.243/30

First Host = 192.120.8.241/30

Last Host = 192.120.8.242/30

CSE to MNS,

Network Address = 192.120.8.244/30

Board cast Address = 192.120.8.247/30

First Host = 192.120.8.245/30

Last Host = 192.120.8.246/30

For switch,

$$172.\ 8.\ 0.0\ /29$$

Host = 6

Given = $2^3 - 2 = 6$

Network Address = 172. 8. 0.0 / 29

Broad cast Address = 172. 8. 0.7 / 29

First Host = 172. 8.0.1 / 29

Last Host = 172. 8.0.6 / 29

IP Addressing Table

Device	Interface	IP Address	Subnet Mask	Default Gateway
Central Administrative Building	Fa 0/0	192.120.8.198	255.255.255.254	N/A
	Fa 0/1	172.8.0.6	255.255.255.248	N/A
	S 1/0	192.120.8.225	255.255.255.252	N/A
	S 1/1	192.120.8.241	255.255.255.252	N/A
	S 1/2	192.120.8.233	255.255.255.252	N/A
	S 1/3	192.120.8.229	255.255.255.252	N/A
	S 1/4	192.120.8.237	255.255.255.252	N/A
BBA	Fa 0/0	192.120.0.1	255.255.255.0	N/A
	Fa 0/1	172.8.0.1	255.255.255.248	N/A
	So/0/0	192.120.8.230	255.255.255.252	N/A
MN5	Fa 0/0	192.120.8.1	255.255.255.128	N/A
	Fa 0/1	172.8.0.2	255.255.255.248	N/A
	So/0/0	192.120.8.246	255.255.255.252	N/A
	So/1/0	192.120.8.234	255.255.255.252	N/A
EEE	Fa 0/0	192.120.6.1	255.155.254.0	N/A
	Fa 0/1	172.8.0.3	255.255.255.248	N/A
	So/0/0	192.120.8.237	255.255.255.252	N/A
CSE	Fa 0/0	192.120.4.1	255.255.254.0	N/A
	Fa 0/1	172.8.0.4	255.255.255.248	N/A
	So/0/0	192.120.8.245	255.255.255.252	N/A
	So/0/1	0.0.0.0	0.0.0.0	N/A
	S 0/1/0	192.120.8.226	255.255.255.252	N/A

Device	interface	IP Address	Subnet Mask	Default Gateway
Architecture	Fa 0/0	192.120.8.129	255.255.255.192	N/A
	Fa 0/1	172.8.0.5	255.255.255.248	N/A
	So/0/0	192.120.8.242	255.255.255.252	N/A
PC 0	Fa 0	192.120.8.130	255.255.255.192	192.120.8.129
PC 1	Fa 0	192.120.8.131	255.255.255.192	192.120.8.129
PC2	Fa 0	192.120.4.2	~~255.255.255.254~~ 255.255.254.0	192.120.4.1
PC3	Fa0	192.140.4.3	255.255.254.0	192.120.4.1
PC4	Fa 0	192.120.6.2	255.255.254.0	192.120.6.1
PC5	Fa0	192.120.6.3	255.255.254.0	192.120.6.1
PC6	Fa 0	192.120.8.2	255.255.255.128	192.120.8.1
PC7	Fa 0	192.120.8.3	255.255.255.128	192.120.8.1
PC8	Fa0	192.120.0.2	255.255.252.0	192.120.0.1
PC9	Fa0	192.120.0.3	255.255.252.0	192.120.0.1
PC 10	Fa0	192.120.8.194	255.255.255.224	192.120.8.193
PC 11	Fa0	192.120.8.195	255.255.255.224	192.120.8.193