

PROJECT SUBNETING EXPLANATION

Base Network: 192.168.1.0

Number of Subnets= 3

Number of Subnets = 2^n

So:

- $2^n = 3 \rightarrow n = 2$
- Class C= 255.255.255.0 \rightarrow 11111111. 11111111. 11111111.00000000
- After borrowing 2 bits
- New binary= 11111111. 11111111. 11111111.11000000
- New Subnet mask= 255.255.255.192

Block Size= 64

1st Subnet:

- Network ID: 192.168.1.0
- Broadcast ID: 192.168.1.63
- Host range: 192.168.1.1 - 192.168.1.62

2nd Subnet:

- Network ID: 192.168.1.64
- Broadcast ID: 192.168.1.127
- Host range: 192.168.1.65 - 192.168.1.126

3rd Subnet:

- Network ID: 192.168.1.128
- Broadcast ID: 192.168.1.191
- Host range: 192.168.1.129 - 192.168.1.190