

## Supernetting?

Rule#1: Contiguous Networks

Rule#2: Number of networks order of 2

Rule#3: Value of non-common octet in first IP block is zero or a multiple of the number of networks to be aggregated

### *List#1*

190.168.0.0/24

190.168.1.0/24      **YYY**

### *List#2*

190.168.1.0/24

190.168.2.0/24      **YYN**

### *List#3*

190.168.0.0/24

190.168.1.0/24

190.168.3.0/24      **NNY**

### *List#4*

190.168.0.0/24

190.168.1.0/24

190.168.2.0/24

190.168.4.0/24      **NYN**

### *List#5*

190.168.0.0/24

190.168.1.0/24

190.168.2.0/24

190.168.3.0/24      **YYY**

### ***List#1***

The networks in *List#1* above are: 190.168.0.0/24 and 190.168.1.0/24

190.168.0.0    10111110 10101000 00000000 00000000

190.168.1.0    10111110 10101000 00000001 00000000

Supernet IP Address: 10111110 10101000 00000000 00000000    190.168.0.0

Supernet Mask: 11111111 11111111 11111110 00000000    255.255.254.0 or /23

Supernet IP Block: 190.168.0.0/23

### ***List#5***

The networks in *List#5* above are: 190.168.0.0/24, 190.168.0.0/24, 190.168.2.0/24 and 190.168.3.0/24

190.168.0.0    10111110 10101000 00000000 00000000

190.168.1.0    10111110 10101000 00000001 00000000

190.168.2.0    10111110 10101000 00000010 00000000

190.168.3.0    10111110 10101000 00000011 00000000

Supernet IP Address: 10111110 10101000 00000000 00000000    190.168.0.0

Supernet Mask: 11111111 11111111 11111100 00000000    255.255.252.0 or /22

Supernet IP Block: 190.168.0.0/22

***Finally, the supernet will be the first IP block in the list with the new supernet mask.***