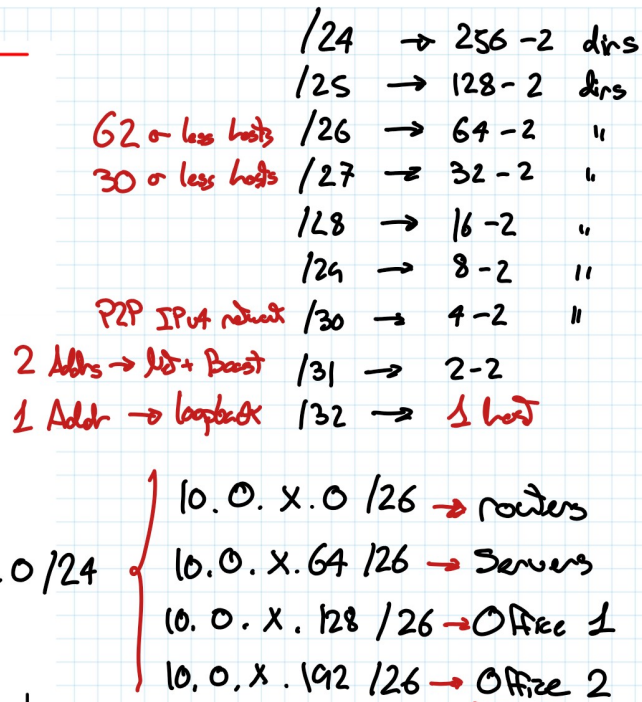


($x=6$ anywhere)



$\omega \sim 1/27$
 it will be enough

R4 10.0.X. 1/30
R3 10.0.X. 2/30

R3 10.0.X.5/30
R1 10.0.X.6/30

R3 10.0. X. 9 / 30
R2 10.0. X. 10 / 30

R1 10.0.x.13 /30
R2 10.0.x.14 /30

R1 10.0.X.21/32
R2 10.0.X.22/32
R3 10.0.X.23/32
R4 10.0.X.24/32

Servers - 60 machines \rightarrow /26 (64 addrs - 62 hosts) is the largest subnet possible

Network address 10.0.X.64/26 (broadcast 10.0.X.127/26)

R3 10.0.X.65/26

Office 1 - 40 machines \rightarrow /26

Network address 10.0.X.128/26 (broadcast 10.0.X.191/26)

R1 10.0.X.129/26

Office 2 - 20 machines \rightarrow /27

Network address 10.0.X.192/27 (broadcast 10.0.X.223/27)

R2 10.0.X.193/27

$$\begin{array}{r} 192 \\ + 32 \\ \hline 224 \end{array}$$
 broadcast is 223

10.0.X.224/27 is FREE

10.0.X.32/27 is FREE

some other smaller subnets "below" 32/27 are free