IPv4 Private

x1 = 4	x2 = 1	x3 = 3
x4 = 4	x5 = 3	x6 = 5
x7 = 1	x8 = 4	x9 = 1
	x0 = 8	

GR8 Inc.

Will use 10.114.36.0/23 as base (mask = 255.255.11111110.0)

256/2^7 = 256/128 = 2 → step 2 in 2

/24 = 255.255.255.0

Will NOT have gateways

- 10.114.36.0/24 (GR8 Office)
- 10.114.37.0/24 (GR8 Wifi)

AMAZING Inc.

this won't change!

Will use 10.54.64.0/20 as base (mask = 255.255.11110000.0)

256/2^4 = 256/16 = 16 → step 16 in 16

1100 < Factory < 2000

600 < WiFi < 1000

Offices < 500

- ..64.0/21 (Amazing Factory)
- ..72.0/21 (8)
  - ..72.0/22 (Amazing WiFi)
  - ..76.0/22 (4)
    - ...76.0/23 (Amazing Offices)
    - ...78.0/23 (2) ⊗

LAT = Last Available Terminal

For each sub network, we have:

Factory

Network = 10.54.64.0/21

LAT = 10.54.71.254

WiFi

Network = 10.54.72.0/22

LAT = 10.54.75.254

Offices

Network = 10.54.76.0/23

LAT = 10.54.77.254

For the switches, we have:

Amaz L3 SW1 → 10.54.78.0/30

Amaz L3 SW2 → 10.54.78.4/30

→ results in 2 gateways for the Amazing network

we can populate from ⊗ to 10.54.79.0