

Base 2

Binário

0 1

Base 10

Decimal

0 1 2 3 4 5 6 7 8 9

Converte Dec \rightarrow Bin

~~10~~_{b10}

2_{b2}

~~0~~

5 2

1 2 2

~~0~~

1

1 ~~0~~ 1 ~~0~~_{b2}



Converte Binário para Decimal

$$B_1 = 1000 \longrightarrow B_2 = 1010$$

8	4	2	1 = Impar
2^3	2^2	2^1	2^0
1	0	1	0 = 4 Bits

10₁₀

IPv4 = Bits 32 bits

IPv4 = Octets = 4

↳ 8 bits
↳ . Ponto

TP4 $2^{32} = 4.3B.$

8 8 8 8

192 168 1.53

Binário

[illegible]

IPv4 Privado	IPv4 Público
Classes	Classes CIDR
<p>A = 10.0.0.0 255.0.0.0</p> <p>B = 172.16.0.0 255.255.0.0</p> <p>C = 192.168.0.0 255.255.255.0</p>	<p>/8</p> <p>/16</p> <p>/24</p>

IP _____ ~~0~~ Mask

IP4: 192.168. ~~0~~ . 1

Mask: 255.255.255. ~~0~~

Networks

Hosts

~~0~~EP: ~~0~~8490-~~0~~

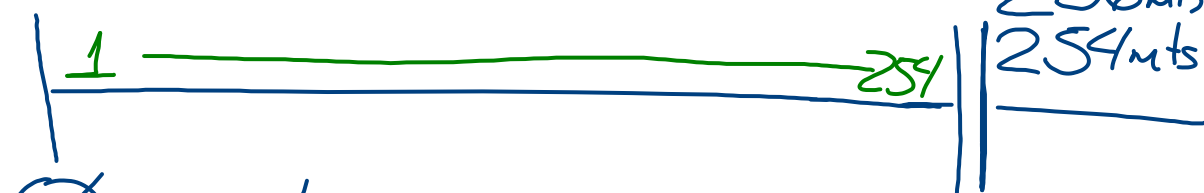
(345)

$$\text{Network} = 2^{24} = > 16M$$

$$\text{Hosts} = 2^8 = 256 - 2 = 254$$

VLAN1

2^8
256mts
254mts



~~0~~ = IDR 2^{25} Reade

1 = PIV 2^{254}

254 = UIV

255 = Broadcast

ID Rede: Par 2^0
Broadcast: Impare $\textcircled{1}$

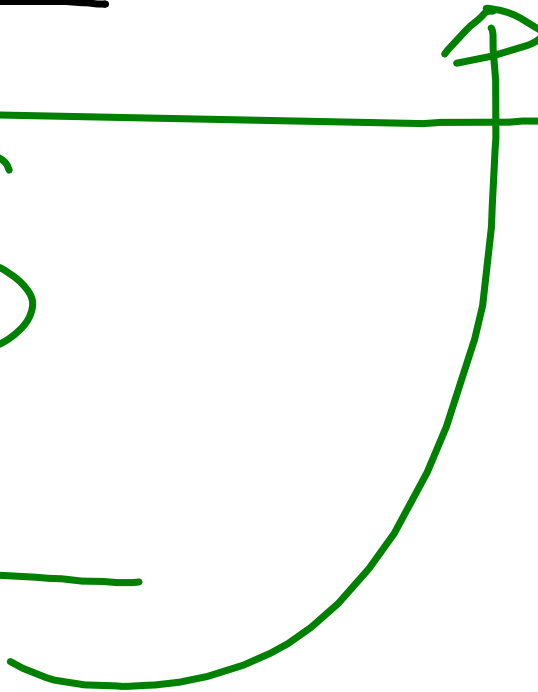
IPv4: 172.16.0.30

Mask: 255.255.255.224

7	6	5	4	3	2	1	0
2	2	2	2	2	2	2	2
128	64	32	16	8	4	2	1
1	1	1	0	0	0	0	0

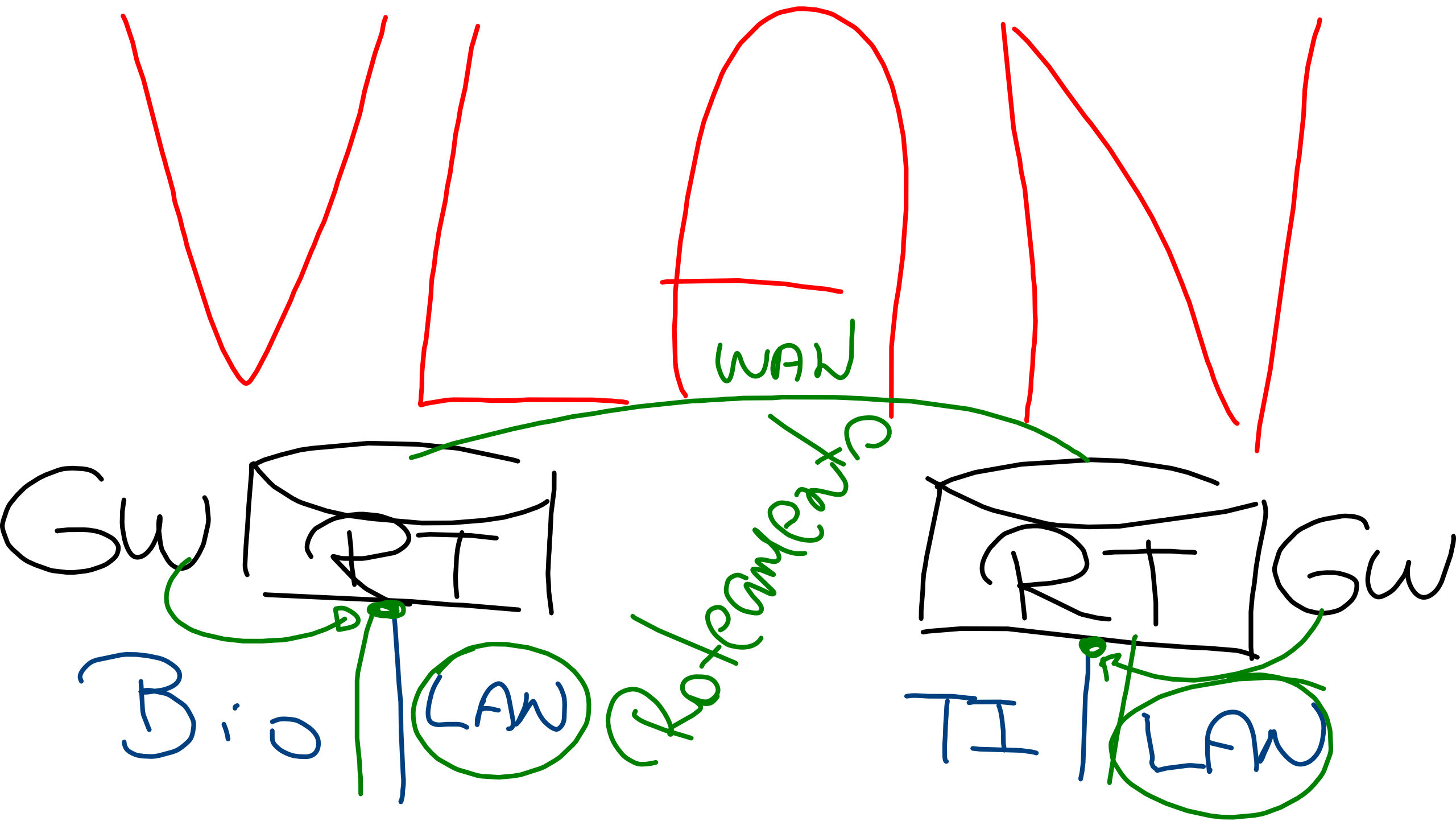
$$\text{Bits Network} = 2^{27} = 134,217,728$$
$$\text{Bits Hosts} = 2^5 - 2 = 30$$

$$\text{Network} = 2^8 = 256$$
$$\text{Sub-Network} = 2^5 = 32$$

$$\begin{array}{r} 256 \\ - 224 \\ \hline 032 \end{array}$$


$$256 / 32 = 8$$
$$2^3 = 8$$

1	0 → 1	Router	30 ← 31
2	32 → 33	Server	62 ← 63
3	64 → 65	WiFi	94 ← 95
4	96 → 97	SVI	126 ← 127
5	128 → 129	VLAN 10	158 ← 159
6	160 → 161	20	190 ← 191
7	192 → 193	30	222 ← 223
8	224 → 225	40	→ 254 + 255



VLAN → 3 < Dados
Wi-Fi
CF TV

1 — 1023

10 = Dados: 192.168.0.0/24

20 = Wi-Fi: 192.168.1.0/24

30 = CF TV: 192.168.2.0/24

