

Projeto Redes de Comunicações I

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Nº mec 1: 120284

Nº mec 2: 104119

Calendar inc:

IPv4 público: 203.182.102.128 /25

IPv4 privado: 172.24.22.0/23

Global IPv6 : 2002:A202: BC84:: /48

Horoscope Inc:

Ipv4 público: 203.4.11.0/25

Ipv4 privado: 172.24.92.0/23

Global Ipv6: 2002:A041:BC19::/ 48

CALENDAR inc:

Públicas

203.182.102.128 /25

255.255.255.10000000

1 bit - 2 redes $256/2$ = redes 128 em 128

203.182.102.128- 203.182.102.128 a 203.182.102.254

VLAN6 50 -> 2^6

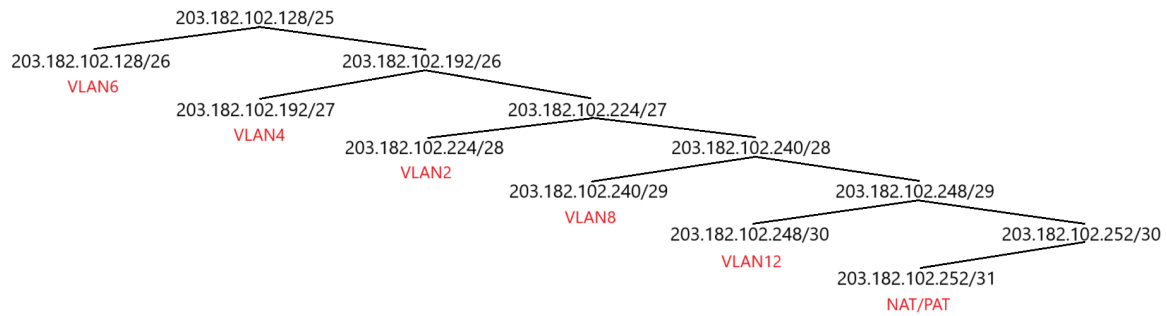
VLAN4 20 -> 2^5

VLAN2 12 -> 2^4

VLAN8 5 -> 2^3

VLAN12 1 -> 2^2

NAT/PAT 2 -> 2^1



Public IPv4

Department	Network Address	Mask (n. of bits)	Broadcast Address	Available addresses for hosts and routers(first-last)	Used addresses for hosts	Gateway1 address	Gateway2 address
VLAN6	203.182.102.128	26	203.182.102.191	203.182.102.129 - 203.182.102.190	203.182.102.130 - 203.182.102.179	203.182.102.129	-
VLAN4	203.182.102.192	27	203.182.102.223	203.182.102.193 - 203.182.102.222	203.182.102.195 - 203.182.102.214	203.182.102.193	203.182.102.194
VLAN2	203.182.102.224	28	203.182.102.239	203.182.102.225 - 203.182.102.238	203.182.102.227 - 203.182.102.238	203.182.102.225	203.182.102.226
VLAN8	203.182.102.240	29	203.182.102.247	203.182.102.241 - 203.182.102.246	203.182.102.242 - 203.182.102.246	203.182.102.241	-
VLAN12	203.182.102.248	30	203.182.102.251	203.182.102.249 - 203.182.102.250	203.182.102.250	203.182.102.249	-
NAT/PAT	-	31	-	203.182.102.252 - 203.182.102.253	203.182.102.252 - 203.182.102.253	-	-

Privadas:

172.24.22.0/23

255.255.11111110.0

7 bits- 128 redes

$256 / 128 = 2$ em 2

VLAN2 200 -> 2^8

VLAN4 110 -> 2^7

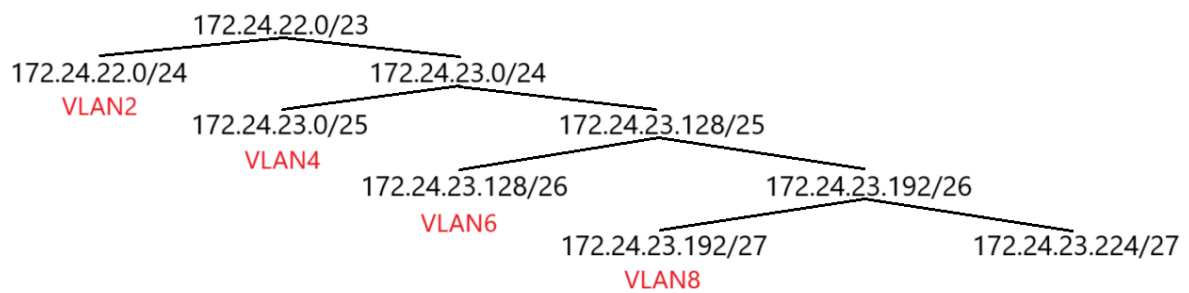
VLAN6 50 -> 2^6

VLAN8 25 -> 2^5

VLAN12 0 -> 0

Router2: g0/0- 192.168.101.184

Router 2: g0/0- 2002:5755::0291/64



Private IPv4

Department	Network Address	Mask (n. of bits)	Broadcast Address	Available addresses for hosts and routers(first-last)	Used addresses for hosts	Gateway1 address
VLAN2	172.24.22.0	24	172.24.22.255	172.24.22.1 - 172.24.22.254	172.24.22.2 - 172.24.22.201	172.24.22.1
VLAN4	172.24.23.0	25	172.24.23.127	172.24.23.1 - 172.24.23.126	172.24.23.2 - 172.24.23.111	172.24.23.1
VLAN6	172.24.23.128	26	172.24.23.191	172.24.23.129 - 172.24.23.190	172.24.23.130 - 172.24.23.179	172.24.23.129
VLAN8	172.24.23.192	27	172.24.23.223	172.24.23.193 - 172.24.23.222	172.24.23.194 - 172.24.22.218	172.24.23.193

R2 - 2002:A202:BC84:01::/56
ESW2 - 2002:A202:BC84:02::/56

Global IPv6

Department	Network Address	Mask (n. of bits)	Broadcast Address	Available addresses for hosts and routers(first-last)	Used addresses for hosts	Gateway1 address
VLAN2	2002:A202:BC84:0200::	64		2002:A202:BC84:0200::1 - 2002:A202:BC84:0200:FFFF:FFFF:FFFF:FF	2002:A202:BC84:0200::2 - 2002:A202:BC84:0200::D5	2002:A202:BC84:0200::1
VLAN4	2002:A202:BC84:0201::	64		2002:A202:BC84:0201::1 - 2002:A202:BC84:0201:FFFF:FFFF:FFFF:FF	2002:A202:BC84:0201::2 - 2002:A202:BC84:0201::83	2002:A202:BC84:0201::1
VLAN6	2002:A202:BC84:0100::	64		2002:A202:BC84:0100::1 - 2002:A202:BC84:0100:FFFF:FFFF:FFFF:FF	2002:A202:BC84:0100::2 - 2002:A202:BC84:0100::65	2002:A202:BC84:0100::1
VLAN8	2002:A202:BC84:0101::	64		2002:A202:BC84:0101::1 - 2002:A202:BC84:0101:FFFF:FFFF:FFFF:FF	2002:A202:BC84:0101::2 - 2002:A202:BC84:0101::1F	2002:A202:BC84:0101::1

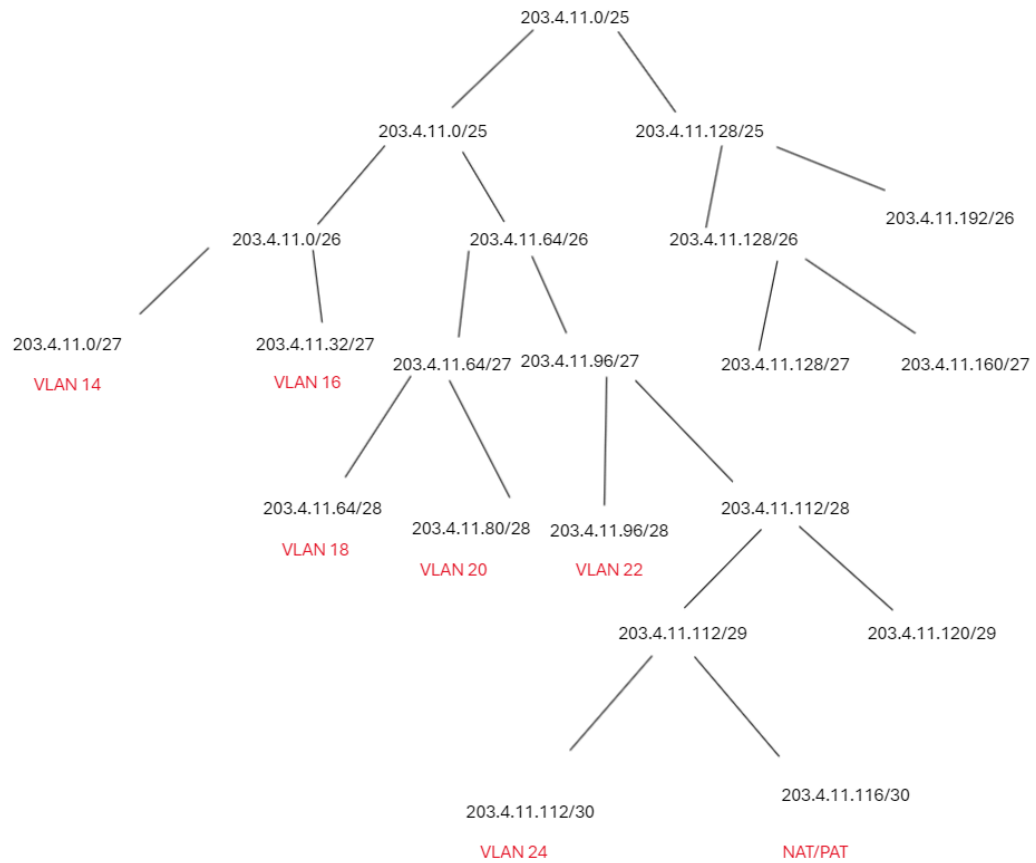
Horoscope INC:

Públicas

203.4.11.0/25
255.255.255.10000000

1 bit- 2 redes
 $256/2 = 128$ em 128

VLAN 14 28 -> 2⁵
VLAN16 27 -> 2⁵
VLAN18 13 -> 2⁴
VLAN20 10 -> 2⁴
VLAN22 7 -> 2⁴
VLAN24 1 address -> 2²
NAT/PAT 3 -> 2²



Public IPv4

Department	Network Address	Mask (n. of bits)	Broadcast Address	Available addresses for hosts and routers(first-last)	Used addresses for hosts	Gateway1 address	Gateway2 address
VLAN14	203.4.11.0	27	203.4.11.31	203.4.11.1 - 203.4.11.30	203.4.11.2 - 203.4.11.29	203.4.11.1	
VLAN16	203.4.11.32	27	203.4.11.63	203.4.11.33 - 203.4.11.62	203.4.11.34 - 203.4.11.60	203.4.11.33	
VLAN18	203.4.11.64	28	203.4.11.79	203.4.11.65 - 203.4.11.78	203.4.11.66 - 203.4.11.78	203.4.11.65	
VLAN20	203.4.11.80	28	203.4.11.95	203.4.11.81 - 203.4.11.94	203.4.11.82 - 203.4.11.91	203.4.11.81	
VLAN22	203.4.11.96	28	203.4.11.111	203.4.11.97 - 203.4.11.110	203.4.11.98 - 203.4.11.104	203.4.11.97	
VLAN24	203.4.11.112	30	203.4.11.115	203.4.11.113 - 203.4.11.114	203.4.11.114	203.4.11.113	
NAT/PAT	-	30	-	203.4.11.116 - 203.4.11.119	203.4.11.116 - 203.4.11.118	-	

Privado
172.24.92.0/23

255.255.11111110.0

7 bits- 128 redes

$256/128 = \text{redes } 2 \text{ a } 2$

VLAN22 155 -> 2^8

VLAN18 57 -> 2^6

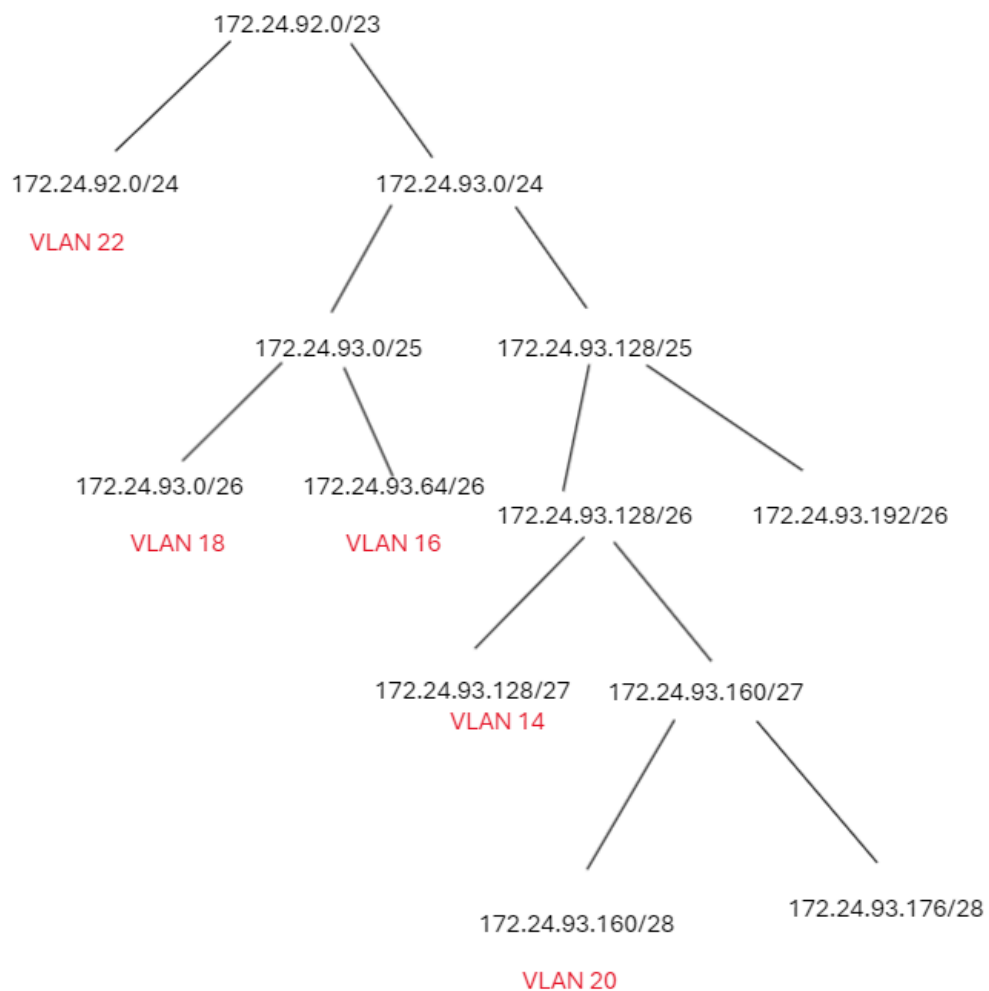
VLAN16 55 -> 2^6

VLAN 14 25 -> 2^5

VLAN20 10 -> 2^4

VLAN24 0 addresses

172.24.92.0/23



Private IPv4

Department	Network Address	Mask (n. of bits)	Broadcast Address	Available addresses for hosts and routers(first-last)	Used addresses for hosts	Gateway1 address	Gateway2 address
VLAN22	172.24.92.0	24	172.24.92.255	172.24.92.1 - 172.24.92.254	172.24.92.2 - 172.24.92.156	172.24.92.1	
VLAN18	172.24.93.0	26	172.24.93.63	172.24.93.1 - 172.24.93.62	172.24.93.2 - 172.24.93.58	172.24.93.1	
VLAN16	172.24.93.64	26	172.24.93.127	172.24.93.65 - 172.24.93.126	172.24.93.66 - 172.24.93.120	172.24.93.65	
VLAN14	172.24.93.128	27	172.24.93.159	172.24.93.129 - 172.24.93.158	172.24.93.130 - 172.24.93.154	172.24.93.129	
VLAN20	172.24.93.160	28	172.24.93.175	172.24.93.161 - 172.24.93.174	172.24.93.162 - 172.24.93.171	172.24.93.161	

Router 1: g0/0 192.168.101.121 /24

Router1: g0/0- 2002:5755::0220 /64

Global IPv6

[illegible]