Fundamentos de Redes – Projecto

Networks Addresses

VLAN & Sub Networks		IP Address(IPv4 Private | IPv4 Public | IPV6 Global)
DMZ		10.133.0.0/24 200.163.163.0/26 2100:0:0:9900::/64
Internal Datacenter		10.133.1.0/24 200.163.163.64/28 2100:0:0:9901::/64
Engineering VLAN		10.133.2.0/24 200.163.163.80/28 2100:0:0:9902::/64
Admin VLAN		10.133.3.0/24 200.163.163.112/29 2100:0:0:9903::/64
Video Conference VLAN		10.133.4.0/24 200.163.163.96/28 2100:0:0:9904::/64
Marketing VLAN		10.133.5.0/24 - 2100:0:0:9905::/64
Nat/Pat of R1		200.163.163.120/29 a 200.163.163.125/29
P2P	**SWL3 C1 – SWL3 C2**	10.133.6.0/30 - 2100:0:0:9906:0:0:0:0/126
	SWL3 C1 – Router 1	10.133.6.4/30 - 2100:0:0:9906:0:0:0:4/126
	SWL3 C1 – Router A	10.133.6.8/30 - 2100:0:0:9906:0:0:0:8/126
	SWL3 C2 – Router 1	10.133.6.12/30 - 2100:0:0:9906:0:0:0:C/126
	SWL3 C2 – Router A	10.133.6.16/30 - 2100:0:0:9906:0:0:0:10/126
	Router 1 – ISP	- 101.0.0.0/24 3001:A:A:A::/64

Router and L3 Switches Info

Equipamento	VLAN / Interface	IPv4 Privado	IPv4 Publico	Ipv6 Global
SWL3 C1	F0/0 – Router A	10.133.6.9/30	----------------------	2100:0:0:9906:0:0:0:9/126
	F0/1 – Router 1	10.133.6.5/30	----------------------	2100:0:0:9906:0:0:0:5/126
	F1/0 – SWL3 C2	10.133.6.1/30	----------------------	2100:0:0:9906:0:0:0:1/126
	F1/1 – DMZ LAN	10.133.0.1/24	200.163.163.1/26	2100:0:0:9900:0:0:0:1/64
	F1/2 – D.C VLAN	10.133.1.1/24	200.163.163.65/28	2100:0:0:9904:0:0:0:1/64
	F1/3 – SWL3 F2	TRUNK	----------------------	TRUNK
	F1/4 – SWL3 F1	TRUNK	----------------------	TRUNK
	Engineering VLAN	10.133.2.1/24	200.163.163.81/28	2100:0:0:9902::1/64
	Admin VLAN	10.133.3.1/24	200.163.163.113/29	2100:0:0:9903::1/64
	Videoconf. VLAN	10.133.4.1/24	200.163.163.97/28	2100:0:0:9904::1/64
	Marketing VLAN	10.133.5.1/24	----------------------	2100:0:0:9905::1/64
SWL3 C2	F0/0 – Router A	10.133.6.17/30	----------------------	2100:0:0:9906:0:0:0:11/126
	F0/1 – Router 1	10.133.6.13/30	----------------------	2100:0:0:9906:0:0:0:D/126
	F1/0 – SWL3 C1	10.133.6.2/30	----------------------	2100:0:0:9906:0:0:0:2/126
	F1/1 – SWL3 F1	TRUNK	----------------------	TRUNK
	F1/2 – SWL3 F2	TRUNK	----------------------	TRUNK
	Engineering VLAN	10.133.2.2/24	200.163.163.82/28	2100:0:0:9902::2/64
	Admin VLAN	10.133.3.2/24	200.163.163.98/29	2100:0:0:9903::2/64
	Videoconf. VLAN	10.133.4.2/24	200.163.163.114/29	2100:0:0:9904::2/64
	Marketing VLAN	10.133.5.2/24	----------------------	2100:0:0:9905::2/64
SWL3 F1	F0/0 – EWS 3	TRUNK	----------------------	TRUNK
	F0/1 – EWS 4	TRUNK	----------------------	TRUNK
	F1/0 – SWL3 F2	TRUNK	----------------------	TRUNK
	F1/1 – SWL3 C1	TRUNK	----------------------	TRUNK
	F1/2 – SWL3 C2	TRUNK	----------------------	TRUNK
SWL3 F2	F0/0 – EWS 1	TRUNK	----------------------	TRUNK
	F0/1 – EWS 2	TRUNK	----------------------	TRUNK
	F1/0 – SWL3 F1	TRUNK	----------------------	TRUNK
	F1/1 – SWL3 C1	TRUNK	----------------------	TRUNK
	F1/2 – SWL3 C2	TRUNK	----------------------	TRUNK
Router 1	F0/0 – SWL3 C2	10.133.6.14/30	----------------------	2100:0:0:9906:0:0:0:E/126
	F0/1 - ISP	101.0.0.1/30	----------------------	3001:A:A:A::1/126
	F1/0 – SWL3 C1	10.133.6.6/30	----------------------	2100:0:0:9906:0:0:0:6/126
Router A	F0/0 – SWL3 C1	10.133.6.10/30	----------------------	2100:0:0:9906:0:0:0:A/126
	F0/1 – SWL3 C2	10.133.6.18/30	----------------------	2100:0:0:9906:0:0:0:12/126
	F1/0 – Old Building	192.168.2.1/23	----------------------	----------------------

Default gateways

VLAN / LAN	Default gateway primária	Default gateway secundária
DMZ	SWL3 C1 10.133.0.1/24 2100:0:0:9900:0:0:0:1/64	-------------------------------------
Internal Datacenter	SWL3 C1 10.133.1.1/24 2100:0:0:9904:0:0:0:1/64	-------------------------------------
Engineering VLAN	SWL3 C2 10.133.2.2/24 2100:0:0:9902::2/64	SWL3 C1 10.133.2.1/24 2100:0:0:9902::1/64
Admin VLAN	SWL3 C2 10.133.3.2/24 2100:0:0:9903::2/64	SWL3 C1 10.133.3.1/24 2100:0:0:9903::1/64
Video Conference VLAN	SWL3 C2 10.133.4.2/24 2100:0:0:9904::2/64	SWL3 C1 10.133.4.1/24 2100:0:0:9904::1/64
Marketing VLAN	SWL3 C2 10.133.5.2/24 2100:0:0:9905::2/64	SWL3 C1 10.133.5.1/24 2100:0:0:9905::1/64

Diagrama de divisão dos Endereços Públicos IPv4

200.163.163.0/25

200.163.163.0/26
DMZ

200.163.163.64/26

200.163.163.64/27

200.163.163.96/27

200.163.163.64/28
I. Datacenter

200.163.163.80/28
Eng.VLAN

200.163.163.96/28
V.C VLAN

200.163.163.112/28

200.163.163.112/29
Admin VLAN

200.163.163.120/29
Router1 NAT/PAT
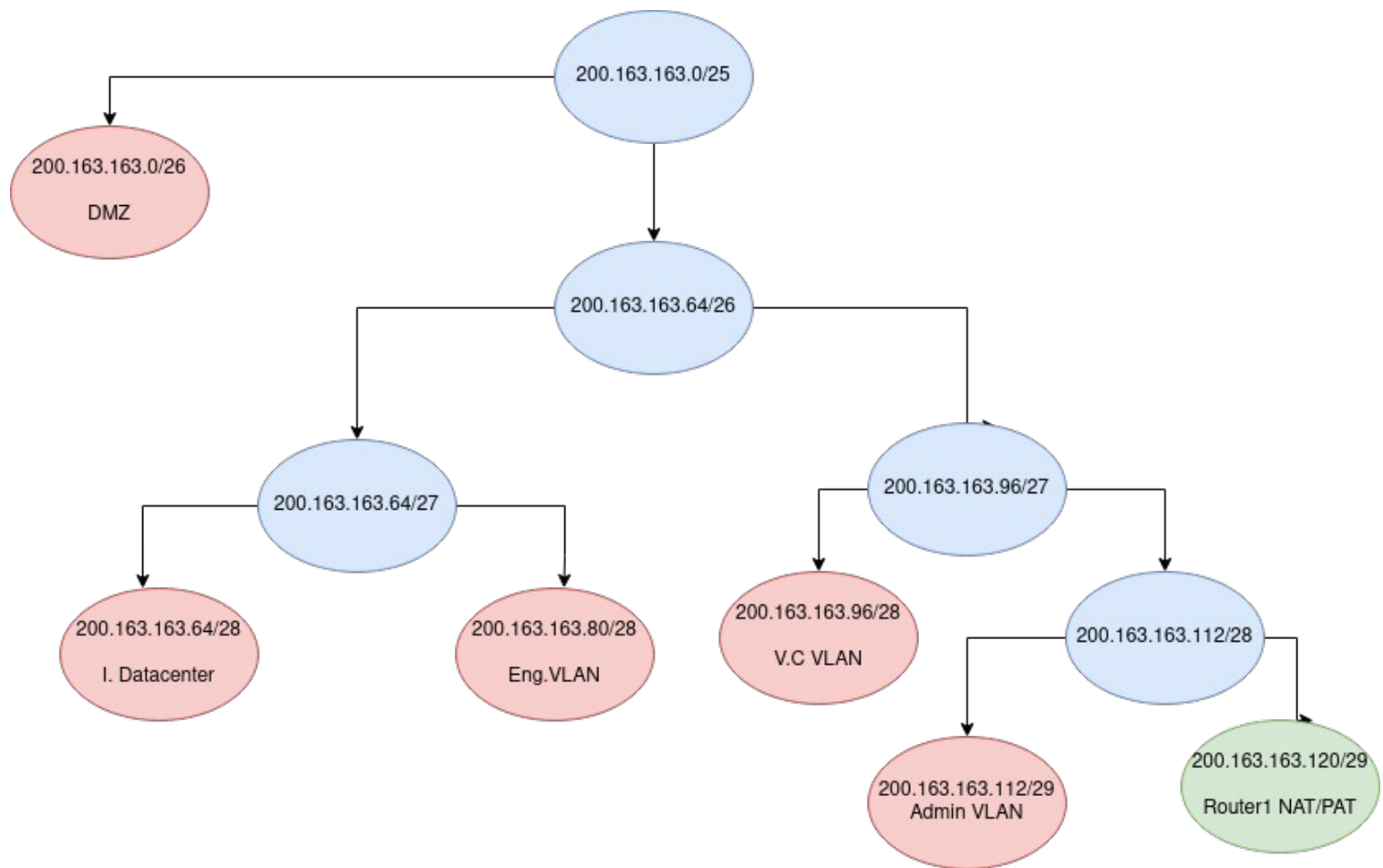
Turma P1
Tiago Barros nº 88963
12/11/2020