1_4 Enrutamiento VLSM

⊙ Creado	@20 de marzo de 2025 16:29
≡ Etiquetas	
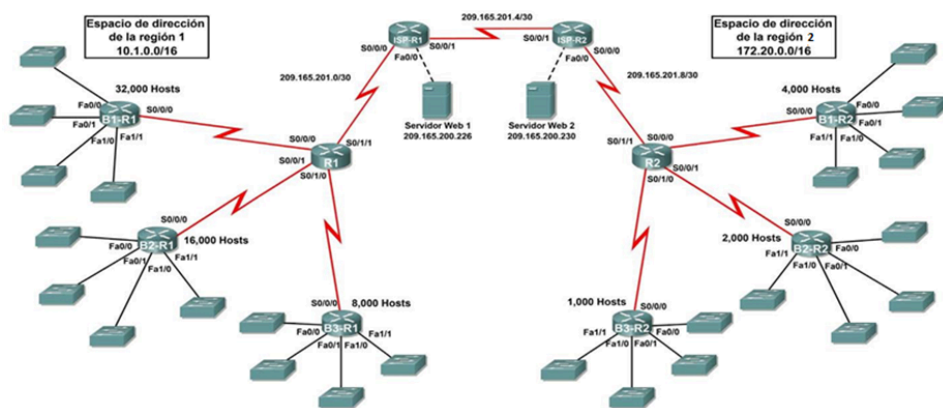
Espacio de dirección en la región 1.   10.1.0.0/16

LAN Fast Ethernet

#subred	Router	Hosts solicitados	hosts resultantes	id red	Máscara decimal	1ra IP útil	última IP útil	broadcast	Saltos
0	B1-R1	32,000	32,768	10.1.0.0/17	255.255.128.0	10.1.0.1	10.1.127.254	10.1.127.255	128
1	B2-R1	16,000	16,384	10.1.128.0/18	255.255.192.0	10.1.128.1	10.1.191.254	10.1.191.255	64
2	B3-R1	8,000	8,192	10.1.192.0/19	255.255.224.0	10.1.192.1	10.1.223.254	10.1.223.255	32

WAN Serial 10.1.0.0/16

#subred	Router	Hosts solicitados	hosts resultantes	id red	Máscara decimal	1ra IP útil	última IP útil	broadcast	saltos
3	B1-R1	2	2	10.1.224.0/30	255.255.255.252	10.1.224.1	10.1.224.2	10.1.224.3	4
4	B2-R1	2	2	10.1.224.4/30	255.255.255.252	10.1.224.5	10.1.224.6	10.1.224.7	4
5	B3-R1	2	2	10.1.224.8/30	255.255.255.252	10.1.224.9	10.1.224.10	10.1.224.11	4

Tabla de direccionamiento para R1

Dispositivo	Interfaz	Dirección IP	Máscara de subred
R1	S0/0/0	10.1.224.2	255.255.255.252
	S0/0/1	10.1.224.6	255.255.255.252
	S0/1/0	10.1.224.10	255.255.255.252
	S0/1/1	209.165.201.2	255.255.255.252
B1-R1	Fa0/0	10.1.0.1	255.255.128.0
	Fa0/1	10.1.0.11	255.255.128.0
	Fa1/0	10.1.3.21	255.255.128.0
	Fa1/1	10.1.4.31	255.255.128.0
	S0/0/0	10.1.224.1	255.255.255.252
B2-R1	Fa0/0	10.1.128.1	255.255.192.0
	Fa0/1	10.1.128.11	255.255.192.0
	Fa1/0	10.1.128.21	255.255.192.0
	Fa1/1	10.1.128.31	255.255.192.0
	S0/0/0	10.1.224.5	255.255.255.252
B3-R1	Fa0/0	10.1.192.1	255.255.224.0
	Fa0/1	10.1.192.11	255.255.224.0
	Fa1/0	10.1.192.21	255.255.224.0
	Fa1/1	10.1.192.31	255.255.224.0
	S0/0/0	10.1.224.9	255.255.255.252
ISP-R1	S0/0/0	209.165.201.1	255.255.255.252
	S0/0/1	209.165.201.5	255.255.255.252
	Fa0/0	209.165.200.225	255.255.255.252
Servidor Web 1	NIC	209.165.200.226	255.255.255.252

Espacio de dirección en la región 2.   172.20.0.0/16

LAN Fast Ethernet

#subred	Router	Hosts solicitados	hosts resultantes	id red	Máscara decimal	1ra IP útil	última IP útil	broadcast	Saltos
0	B1-R2	4,000	4,090	172.20.0.0/20	255.255.240.0	172.20.0.1	172.20.239.254	172.20.239.255	16
1	B2-R2	2,000	2,046	172.20.240.0/21	255.255.248.0	172.20.240.1	72.20.247.254	72.20.247.255	8
2	B3-R2	1,000	1,024	172.20.248.0/22	255.255.252.0	172.20.248.1	172.20.251.254	172.20.251.255	4

WAN Serial 172.20.0.0/16

#subred	Router	Hosts solicitados	hosts resultantes	id red	Máscara decimal	1ra IP útil	última IP útil	broadcast	saltos
3	B1-R2	2	2	172.20.252.0/30	255.255.255.252	172.20.252.1	172.20.252.2	72.20.252.3	4

#subred	Router	Hosts solicitados	hosts resultantes	id red	Máscara decimal	1ra IP útil	última IP útil	broadcast	saltos
4	B2-R2	2	2	**172.20.252.4/30**	255.255.255.252	**172.20.252.5**	**172.20.252.6**	**172.20.252.7**	4
5	B3-R2	2	2	**172.20.252.4/30**	255.255.255.252	**172.20.252.9**	**172.20.252.10**	**172.20.252.11**	4

Dispositivo	Interfaz	Dirección IP	Máscara de subred
R2	S0/0/0	72.20.252.2	255.255.255.252
	S0/0/1	172.20.252.6	255.255.255.252
	S0/1/0	172.20.252.10	255.255.255.252
	S0/1/1	209.165.201.10	255.255.255.252
B1-R2	Fa0/0	172.20.0.1	255.255.240.0
	Fa0/1	172.20.0.11	255.255.240.0
	Fa1/0	172.20.0.21	255.255.240.0
	Fa1/1	172.20.0.31	255.255.240.0
	S0/0/0	72.20.252.1	255.255.255.252
B2-R2	Fa0/0	172.20.240.1	255.255.248.0
	Fa0/1	172.20.240.11	255.255.248.0
	Fa1/0	172.20.240.21	255.255.248.0
	Fa1/1	172.20.240.31	255.255.248.0
	S0/0/0	172.20.252.5	255.255.255.252
B3-R2	Fa0/0	172.20.248.1	255.255.252.0
	Fa0/1	172.20.248.11	255.255.252.0
	Fa1/0	172.20.248.21	255.255.252.0
	Fa1/1	172.20.248.31	255.255.252.0
	S0/0/0	172.20.252.9	255.255.255.252
ISP-R2	S0/0/0	209.165.201.6	255.255.255.252
	S0/0/1	209.165.201.9	255.255.255.252
	Fa0/0	209.165.200.229	255.255.255.252
Servidor Web 2	NIC	209.165.200.230	255.255.255.252