

Dada la dirección 1.0.0.0 calcular 25 subredes

1.0.0.0 calcular 25 subredes

1.0.0.0 255.0.0.0

11111111.00000000.00000000.00000000

$$2^n - 2 = 2^5 - 2 = 32 - 2 = 30$$

11111111.1111000.0000000.0000

255.248.0.0

$$\text{Prefijo} = 32 - n = 32 - 5 = 27$$

$$256 - 248 = 8$$

$$\text{Prefijo} = /27$$

1.0.0.0

	DIRECCIÓN DE RED	1er DIRECCIÓN UTILIZABLE	ÚLTIMA DIRECCIÓN UTILIZABLE	DIRECCIÓN DE DIFUSIÓN	MÁSCARA
0	1.0.0.0	1.0.0.1	1.7.255.254	1.7.255.255	255.248.0.0
1	1.8.0.0	1.8.0.1	1.15.255.254	1.15.255.255	255.248.0.0
2	1.16.0.0	1.16.0.1	1.23.255.254	1.23.255.255	255.248.0.0
3	1.24.0.0	1.24.0.1	1.31.255.254	1.31.255.255	255.248.0.0
4	1.32.0.0	1.32.0.1	1.39.255.254	1.39.255.255	255.248.0.0
5	1.40.0.0	1.40.0.1	1.47.255.254	1.47.255.255	255.248.0.0
6	1.48.0.0	1.48.0.1	1.55.255.254	1.55.255.255	255.248.0.0
7	1.56.0.0	1.56.0.1	1.63.255.254	1.63.255.255	255.248.0.0
8	1.64.0.0	1.64.0.1	1.71.255.254	1.71.255.255	255.248.0.0
9	1.72.0.0	1.72.0.1	1.79.255.254	1.79.255.255	255.248.0.0
10	1.80.0.0	1.80.0.1	1.87.255.254	1.87.255.255	255.248.0.0
11	1.88.0.0	1.88.0.1	1.95.255.254	1.95.255.255	255.248.0.0
12	1.96.0.0	1.96.0.1	1.103.255.254	1.103.255.255	255.248.0.0
13	1.104.0.0	1.104.0.1	1.111.255.254	1.111.255.255	255.248.0.0
14	1.112.0.0	1.112.0.1	1.119.255.254	1.119.255.255	255.248.0.0
15	1.120.0.0	1.120.0.1	1.127.255.254	1.127.255.255	255.248.0.0
16	1.128.0.0	1.128.0.1	1.135.255.254	1.135.255.255	255.248.0.0
17	1.136.0.0	1.136.0.1	1.143.255.254	1.143.255.255	255.248.0.0
18	1.144.0.0	1.144.0.1	1.151.255.254	1.151.255.255	255.248.0.0
19	1.152.0.0	1.152.0.1	1.159.255.254	1.159.255.255	255.248.0.0
20	1.160.0.0	1.160.0.1	1.167.255.254	1.167.255.255	255.248.0.0
21	1.168.0.0	1.168.0.1	1.176.255.254	1.176.255.255	255.248.0.0

22	1.176.0.0	1.176.0.1	1.183.255.254	1.183.255.255	255.248.0.0
23	1.184.0.0	1.184.0.1	1.191.255.254	1.191.255.255	255.248.0.0
24	1.192.0.0	1.192.0.1	1.199.255.254	1.199.255.255	255.248.0.0
25	1.200.0.0	1.200.0.1	1.207.255.254	1.207.255.255	255.248.0.0

Dada la dirección 140.1.0.0 calcular 500 subredes

140.1.0.0 calcular 500 subredes

140.1.1.0 255.0.0.0

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$2^n - 2 = 2^9 - 2 = 512 - 2 = 510$

11111111.11111111.11111111.10000000

255.255.255.128

Prefijo =  $32 - n = 32 - 9 = 23$

$256 - 128 = 128$

Prefijo = /23

	DIRECCIÓN DE RED	1er DIRECCIÓN UTILIZABLE	ÚLTIMA DIRECCIÓN UTILIZABLE	DIRECCIÓN DE DIFUSIÓN	MÁSCARA
0	140.1.0.0	140.1.0.0	140.1.0.126	140.1.0.127	255.255.255.128
1	140.1.0.128	140.1.0.129	140.1.0.255	140.1.1.0	255.255.255.128
2	140.1.1.1	140.1.1.2	140.1.1.127	140.1.1.128	255.255.255.128
3	140.1.1.129	140.1.1.130	140.1.2.0	140.1.2.1	255.255.255.128
4	140.1.2.2	140.1.2.3	140.1.2.128	140.1.2.129	255.255.255.128
5	140.1.2.130	140.1.2.131	140.1.3.1	140.1.3.2	255.255.255.128

Dada la dirección 192.168.3.0/27

255.255.255.224

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$2^n - 2 = 2^5 - 2 = 32 - 2 = 30$

11111111.11111000.00000000.0000

255.255.255.224

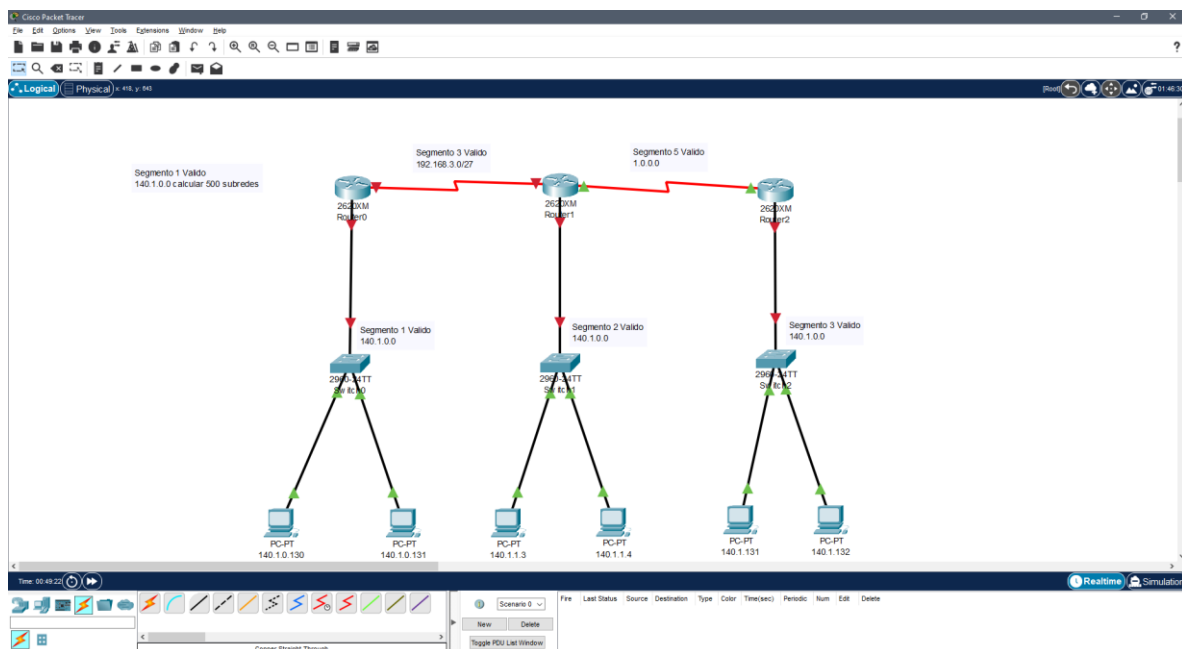
Prefijo =  $32 - n = 32 - 5 = 27$

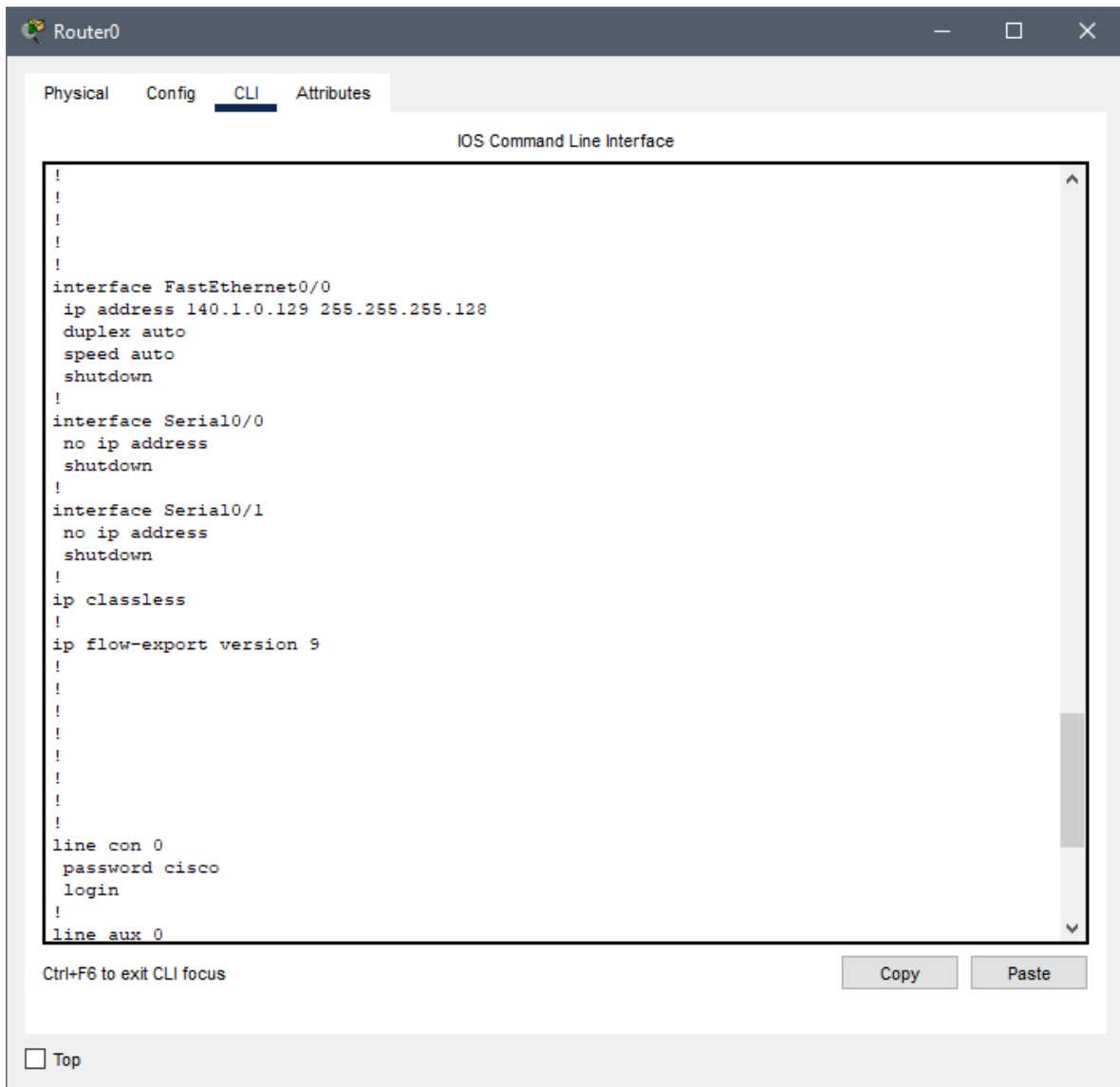
$256 - 224 = 32$

Prefijo = /27

	DIRECCIÓN DE RED	1er DIRECCIÓN UTILIZABLE	ÚLTIMA DIRECCIÓN UTILIZABLE	DIRECCIÓN DE DIFUSIÓN	MÁSCARA
0	192.168.3.0	192.168.3.0	192.168.3.31	192.168.3.255	255.255.255.224
1	192.168.3.32	192.168.3.32	192.168.3.63	192.168.3.255	255.255.255.224
2	192.168.3.64	192.168.3.64	192.168.3.95	192.168.3.255	255.255.255.224
3	192.168.3.96	192.168.3.96	192.168.3.127	192.168.3.255	255.255.255.224
4	192.168.3.128	192.168.3.128	192.168.3.159	192.168.3.255	255.255.255.224

Solo subo lo que alcance a terminal no me alcanzo el tiempo.





Router1

Physical

Config

CLI

Attributes

IOS Command Line Interface

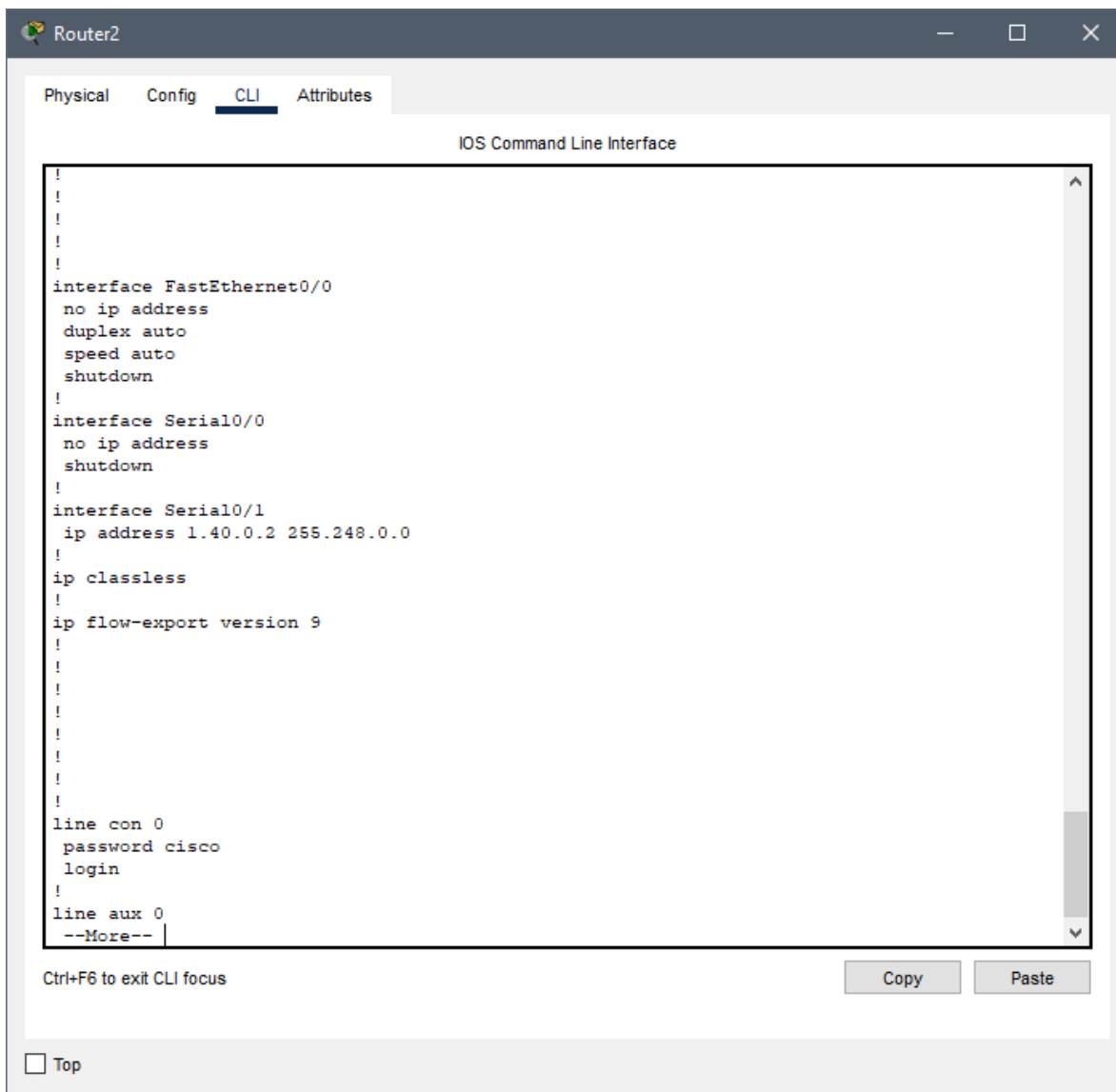
```
!  
!  
!  
!  
!  
!  
!  
interface FastEthernet0/0  
  no ip address  
  duplex auto  
  speed auto  
  shutdown  
!  
interface Serial0/0  
  ip address 1.40.0.1 255.248.0.0  
  clock rate 64000  
!  
interface Serial0/1  
  no ip address  
  shutdown  
!  
ip classless  
!  
ip flow-export version 9  
!  
!  
!  
!  
!  
!  
!  
line con 0  
  password cisco  
  --More--
```

Ctrl+F6 to exit CLI focus

Copy

Paste

☐ Top



## Prueba de Pings entre router 2 y 3

