

Subneteo

▼ Subneteo de una red clase B con 50 subredes

Dirección IP: 132.18.0.0 50 subredes y 1000host por subred

1. Mascara Actual

255.255.0.0 /16

11111111.11111111.00000000.00000000

2. Bits para las subredes

$2^6=64 \rightarrow n=6$

3. Nueva mascara

11111111.11111111.11111100.00000000

255.255.252.0 /22

4. Cantidad de host

$2^{10}-2=1024-2=1022$

5. Salto de red

$256-252=4$

Tabla

Subred	IP de Red	Primera IP Utilizable	Última IP Utilizable	IP Broadcast
1	132.18.0.0/22	132.18.0.1	132.18.3.254	132.18.3.255
2	132.18.4.0/22	132.18.4.1	132.18.7.254	132.18.7.255
3	132.18.8.0/22	132.18.8.1	132.18.11.254	132.18.11.255
4	132.18.12.0/22	132.18.12.1	132.18.15.254	132.18.15.255
5	132.18.16.0/22	132.18.16.1	132.18.19.254	132.18.19.255
6	132.18.20.0/22	132.18.20.1	132.18.23.254	132.18.23.255
7	132.18.24.0/22	132.18.24.1	132.18.27.254	132.18.27.255
8	132.18.28.0/22	132.18.28.1	132.18.31.254	132.18.31.255
9	132.18.32.0/22	132.18.32.1	132.18.35.254	132.18.35.255
10	132.18.36.0/22	132.18.36.1	132.18.39.254	132.18.39.255
11	132.18.40.0/22	132.18.40.1	132.18.43.254	132.18.43.255
12	132.18.44.0/22	132.18.44.1	132.18.47.254	132.18.47.255
13	132.18.48.0/22	132.18.48.1	132.18.51.254	132.18.51.255

Subred	IP de Red	Primera IP Utilizable	Última IP Utilizable	IP Broadcast
14	132.18.52.0/22	132.18.52.1	132.18.55.254	132.18.55.255
15	132.18.56.0/22	132.18.56.1	132.18.59.254	132.18.59.255
16	132.18.60.0/22	132.18.60.1	132.18.63.254	132.18.63.255
17	132.18.64.0/22	132.18.64.1	132.18.67.254	132.18.67.255
18	132.18.68.0/22	132.18.68.1	132.18.71.254	132.18.71.255
19	132.18.72.0/22	132.18.72.1	132.18.75.254	132.18.75.255
20	132.18.76.0/22	132.18.76.1	132.18.79.254	132.18.79.255
21	132.18.80.0/22	132.18.80.1	132.18.83.254	132.18.83.255
22	132.18.84.0/22	132.18.84.1	132.18.87.254	132.18.87.255
23	132.18.88.0/22	132.18.88.1	132.18.91.254	132.18.91.255
24	132.18.92.0/22	132.18.92.1	132.18.95.254	132.18.95.255
25	132.18.96.0/22	132.18.96.1	132.18.99.254	132.18.99.255
26	132.18.100.0/22	132.18.100.1	132.18.103.254	132.18.103.255
27	132.18.104.0/22	132.18.104.1	132.18.107.254	132.18.107.255
28	132.18.108.0/22	132.18.108.1	132.18.111.254	132.18.111.255
29	132.18.112.0/22	132.18.112.1	132.18.115.254	132.18.115.255
30	132.18.116.0/22	132.18.116.1	132.18.119.254	132.18.119.255
31	132.18.120.0/22	132.18.120.1	132.18.123.254	132.18.123.255
32	132.18.124.0/22	132.18.124.1	132.18.127.254	132.18.127.255
33	132.18.128.0/22	132.18.128.1	132.18.131.254	132.18.131.255
34	132.18.132.0/22	132.18.132.1	132.18.135.254	132.18.135.255
35	132.18.136.0/22	132.18.136.1	132.18.139.254	132.18.139.255
36	132.18.140.0/22	132.18.140.1	132.18.143.254	132.18.143.255
37	132.18.144.0/22	132.18.144.1	132.18.147.254	132.18.147.255
38	132.18.148.0/22	132.18.148.1	132.18.151.254	132.18.151.255
39	132.18.152.0/22	132.18.152.1	132.18.155.254	132.18.155.255
40	132.18.156.0/22	132.18.156.1	132.18.159.254	132.18.159.255
41	132.18.160.0/22	132.18.160.1	132.18.163.254	132.18.163.255
42	132.18.164.0/22	132.18.164.1	132.18.167.254	132.18.167.255
43	132.18.168.0/22	132.18.168.1	132.18.171.254	132.18.171.255
44	132.18.172.0/22	132.18.172.1	132.18.175.254	132.18.175.255
45	132.18.176.0/22	132.18.176.1	132.18.179.254	132.18.179.255
46	132.18.180.0/22	132.18.180.1	132.18.183.254	132.18.183.255

Subred	IP de Red	Primera IP Utilizable	Última IP Utilizable	IP Broadcast
47	132.18.184.0/22	132.18.184.1	132.18.187.254	132.18.187.255
48	132.18.188.0/22	132.18.188.1	132.18.191.254	132.18.191.255
49	132.18.192.0/22	132.18.192.1	132.18.195.254	132.18.195.255
50	132.18.196.0/22	132.18.196.1	132.18.199.254	132.18.199.255

▼ Subneteo de una red clase A

Dirección IP: 10.0.0.0 8 subredes

1. Mascara Actual

255.0.0.0 /8

11111111.00000000.00000000.00000000

2. Bits para las subredes

$2^3=8 \rightarrow n=6$

3. Nueva mascara

11111111.11100000.00000000.00000000

255.224.0.0 /11

4. Cantidad de host

$2^{21}-2=2,097,152-2=2,097,150$

5. Salto de red

$256-224=32$

Tabla

Subred	IP de Red	Primera IP Utilizable	Última IP Utilizable	IP Broadcast
1	10.0.0.0/11	10.0.0.1	10.31.255.554	10.31.255.555
2	10.32.0.0/11	10.32.0.1	10.63.255.254	10.63.255.255
3	10.64.0.0/11	10.64.0.1	10.95.255.254	10.95.255.255
4	10.96.0.0/11	10.96.0.1	10.127.255.255	10.127.255.255
5	10.128.0.0/11	10.128.0.1	10.159.255.254	10.159.255.255
6	10.160.0.0/11	10.160.0.1	10.191.255.254	10.191.255.255
7	10.192.0.0/11	10.192.0.1	10.223.255.254	10.223.255.255
8	10.224.0.0/11	10.224.0.1	10.224.255.254	10.224.255.255

▼ Subneteo de una red clase C

Dirección IP: 172.20.10.0/24 3 subredes

1. Mascara Actual

255.255.255.0 /24

11111111.11111111.11111111.00000000

2. Bits para las subredes

$2^2=4 \rightarrow n=2$

3. Nueva mascara

11111111.11111111.11111111.11000000

255.255.255.192 /26

4. Cantidad de host

$2^6-2=64-2=62$

5. Salto de red

$256-192=64$

Tabla

Subred	IP de Red	Primera IP Utilizable	Última IP Utilizable	IP Broadcast
1	172.20.10.0/26	172.20.10.1	172.20.10.62	172.20.10.63
2	172.20.10.64/26	172.20.10.65	172.20.10.126	172.20.10.127
3	172.20.10.128/26	172.20.10.129	172.20.10.191	172.20.10.192