

1.

IP: 128.1.6.5/12

Ip Binario: 10000000.00000001.00000110.00000101

Maschera: 11111111.11111000.00000000.00000000 = 255.240.0.0

Ip Network: 10000000.00000000.00000000.00000000 = 128.0.0.0

Ip Broadcast: 10000000.00001111.11111111.11111111 = 128.15.255.255

Ip Gateway 1: 10000000.00000000.00000001 => 128.0.0.1

Ip Gateway 2: 10000000.00001111.11111111.11111110 => 128.15.255.254

Ottetti per host: 2,5

Ottetti per rete: 1,5

Calcolo Host disponibili: $2^{(32-12)} - 2 = 1.048.574$

2.

IP: 200.1.2.3/24

IP binario: 11001000.00000001.00000010.00000011

Maschera: 11111111.11111111.11111111.00000000 => 255.255.255.0

Ip Net: 11001000.00000001.00000010.00000000 => 200.1.2.0

Ip Broadcast: 11001000.00000001.00000010.11111111 => 200.1.2.255

Ip gateway 1: 11001000.00000001.00000010.00000001 => 200.1.2.1

Ip Gateway 2: 11001000.00000001.00000010.11111110 => 200.1.2.254

Ottetti per Host: 1

ottetti per rete: 3

Calcolo Host disponibili $2^{(32-24)} - 2 = 254$

3.

IP: 192.192.1.1/22

Ip binario: 11000000.11000000.00000001.00000001

Maschera: 11111111.11111111.11111100.00000000 => 255.255.252.0

Ip net: 11000000.11000000.00000000.00000000 => 192.192.0.0

Ip broadcast: 11000000.11000000.00000011.11111111 => 192.192.3.255

Ip gateway 1: 11000000.11000000.00000000.00000001 => 192.192.0.1

Ip gateway 2: 11000000.11000000.00000011.11111110 => 192.192.3.254

Ottetti per Host: 1,2

Ottetti per rete: 2,8

calcolo host disponibili: $2^{(32-22)} - 2 = 1022$

4.

IP: 126.5.4.3/9

Ip binario: 01111110.00000101.00000100.00000011

Maschera: 11111111.10000000.00000000.00000000 => 255.128.0.0

Ip Net: 01111110.00000000.00000000.00000000 => 126.0.0.0

Ip Broadcast: 01111110.01111111.11111111.11111111 => 126.127.255.255

Ip gateway 1: 01111110.00000000.00000000.00000001 => 126.0.0.1

Ip gateway 2: 01111110.01111111.11111111.11111110 => 126.127.255.254

Ottetti per host: 2,9

Ottetti per rete: 1.1

calcolo host disponibili: $2^{(32-9)} - 2 = 8.388.606$

5.

Ip: 200.1.9.8/24

Ip binario: 11001000.00000001.00001001.00001000

Maschera: 11111111.11111111.11111111.00000000 => 255.255.255.0

Ip net: 11001000.00000001.00001001.00000000 => 200.1.9.0

Ip broadcast: 11001000.00000001.00001001.11111111 => 200.1.9.255

Ip Gateway1: 11001000.00000001.00001001.00000001 => 200.1.9.1

Ip gateway 2: 11001000.00000001.00001001.11111110 => 200.1.9.254

Ottetti per host: 1

ottetti per rete : 3

calcolo host disponibili: $2^{(32-24)} - 2 = 254$

6.

Ip: 172.16.0.4/16

Ip binario: 10101100.00010000.00000000.00000100

Maschera: 11111111.11111111.00000000.00000000 => 255.255.0.0

Ip net: 10101100.00010000.00000000.00000000 = 172.16.0.0

ip broadcast: 10101100.00010000.11111111.11111111 => 172.16.255.255

Ip gateway 1: 10101100.00010000.00000000.00000001 => 172.16.0.1

Ip gateway 2: 10101100.00010000.11111111.11111110 => 172.16.255.254

ottetti per host: 2

ottetti per rete: 2

calcolo host disponibili: $2^{(32-16)} - 2 = 65534$