

Consegna 23 gennaio 2023 \\\nOliviero Camarota

“Scrivere per i seguenti IP: IP Network, IP Gateway ‘convenzionale’, IP Broadcast, **quali e quanti ottetti per gli host**, **quanti e quali per la network**. “

- 1.1.1.1/8
- 128.1.6.5/12
- 200.1.2.3/24
- 192.192.1.1/22
- 126.5.4.3/9
- 200.1.9.8/24
- 172.16.0.4/16

IP 1.1.1.1/8

IP BIN 00000001.00000001.00000001.00000001

SUBNET MASK 255.0.0.0

SUBNET BIN 11111111.00000000.00000000.00000000

IP NETWORK 1.0.0.0

IP NETWORK BIN 00000001.00000000.00000000.00000000

IP GATEWAY ‘CONVENZIONALE’ 1.0.0.1

IP BROADCAST 1.255.255.255

IP BROADCAST BIN 00000001.11111111.11111111.11111111

HOST (2^{24}) - 2 = 16,777,216

IP 128.1.6.5/12

IP BIN 10000000.00000001.00000110.00000101

SUBNET MASK 255.240.0.0

SUBNET BIN 11111111.11110000.00000000.00000000

IP NETWORK 128.0.0.0

IP NETWORK BIN 10000000.00000000.00000000.00000000

IP GATEWAY ‘CONVENZIONALE’ 128.0.0.1

IP BROADCAST 128.15.255.255

IP BROADCAST BIN 10000000.00001111.11111111.11111111

HOST (2^{20}) - 2 = 1,048,576

IP 200.1.2.3/24

IP BIN 11001000.00000001.00000010.00000011

SUBNET MASK 255.255.255.0

SUBNET BIN 11111111.11111111.11111111.00000000

IP NETWORK 200.1.2.0

IP NETWORK BIN 11001000.00000001.00000010.00000000

IP GATEWAY ‘CONVENZIONALE’ 200.1.2.1

IP BROADCAST 200.1.2.255

IP BROADCAST BIN 11001000.00000001.00000010.11111111

HOST (2^8) - 2 = 254

IP 192.192.1.1/22

IP BIN 11000000.11000000.00000001.00000000

SUBNET MASK 255.255.252.0

SUBNET BIN 11111111.11111111.11111100.00000000

IP NETWORK 192.192.0.0

IP NETWORK BIN 11000000.11000000.00000000.00000000

IP GATEWAY ‘CONVENZIONALE’ 192.192.0.1

IP BROADCAST 192.192.3.255

IP BROADCAST BIN 11000000.11000000.00000011.11111111

HOST (2^{10}) - 2 = 1022

IP 126.5.4.3/9
IP BIN 01111110.0000101.0000100.00000011
SUBNET MASK 255.128.0.0
SUBNET BIN 11111111.10000000.00000000.00000000
IP NETWORK 126.0.0.0
IP NETWORK BIN 01111110.00000000.00000000.00000000
IP GATEWAY ' CONVENZIONALE ' 126.0.0.1
IP BROADCAST 126.127.255.255
IP BROADCAST BIN 01111110.01111111.11111111.11111111
HOST (2^{23}) - 2 = 8,388,306

IP 200.1.9.8/24
IP BIN 11001000.00000001.00001001.00001000
SUBNET MASK 255.255.255.0
SUBNET BIN 11111111.11111111.11111111.00000000
IP NETWORK 200.1.9.0
IP NETWORK BIN 11001000.00000001.00001001.00000000
IP GATEWAY ' CONVENZIONALE ' 200.1.9.1
IP BROADCAST 200.1.9.255
IP BROADCAST BIN 11001000.00000001.00001001.11111111
HOST (2^8) - 2 = 254

IP 172.16.0.4/16
IP BIN 10101100.00010000.00000000.00000100
SUBNET MASK 255.255.0.0
SUBNET BIN 11111111.11111111.00000000.00000000
IP NETWORK 172.16.0.0
IP NETWORK BIN 10101100.00010000.00000000.00000000
IP GATEWAY ' CONVENZIONALE ' 172.16.0.1
IP BROADCAST 172.16.255.255
IP BROADCAST BIN 10101100.00010000.00000000.00000000
#HOST (2^{16}) - 2 = 65,534