

Class A N.H.H.H 255.0.0.0  
Class B N.N.H.H 255.255.0.0  
Class C N.N.N.H 255.255.255.0

$2^8 - 2 = 254$

$2^{16} = 65536$

$2^{24} < 16$  milyon

10 ofis, 300 pc

10 adet Class B

10 Network

$2^{16}$  65536 host/network

152.48.0.0

152.49.0.0

152.50.0.0

...

152.57.0.0

Şirket: 7 şehirde ofisi  
500 host/ofis

133.86.0.0 / 255.255.0.0

10000101.01010110.00000000.00000000

Subnet

10000101.01010110.00000000.00000000	-	133.86.0.0/255.255.224.0
10000101.01010110.00100000.00000000	-	133.86.32.0/255.255.224.0
10000101.01010110.01000000.00000000	-	133.86.64.0/255.255.224.0
10000101.01010110.01100000.00000000	-	133.86.96.0/255.255.224.0
10000101.01010110.10000000.00000000	-	133.86.128.0/255.255.224.0
10000101.01010110.10100000.00000000	-	133.86.160.0/255.255.224.0
10000101.01010110.11000000.00000000	-	133.86.192.0/255.255.224.0
10000101.01010110.11100000.00000000	-	133.86.224.0 reserved

## LAN-1

10000101.01010110.00000000.00000000 - 133.86.0.0  
Loopback test

10000101.01010110.00011111.11111111 - 133.86.31.255  
b/c address

10000101.01010110.00000000.00000001 - 133.86.0.1

10000101.01010110.00000000.00000010 - 133.86.0.2

10000101.01010110.00000000.00000011 - 133.86.0.3

.

10000101.01010110.00000000.11111111 - 133.86.0.255

10000101.01010110.00000001.00000000 - 133.86.1.0

10000101.01010110.00000001.00000001 - 133.86.1.1

10000101.01010110.00000001.00000010 - 133.86.1.2

.

10000101.01010110.00000001.11110101 - 133.86.1.245

## LAN-2

10000101.01010110.00100000.00000000 - 133.86.32.0  
10000101.01010110.00111111.11111111 - 133.86.63.255

10000101.01010110.00100000.00000001 - 133.86.32.1  
10000101.01010110.00100000.00000010 - 133.86.32.2

.

10000101.01010110.00100000.11111111 - 133.86.32.255  
10000101.01010110.00100001.00000000 - 133.86.33.0  
10000101.01010110.00100001.00000001 - 133.86.33.1  
10000101.01010110.00100001.00000010 - 133.86.33.2

.

10000101.01010110.00100001.11110101 - 133.86.33.245

133.86.165.55/ 255.255.224.0

Subnet mask

10000101.01010110.00100000.00000010

11111111.11111111.11100000.00000000 -> subnet mask  
255.255.224.0

133.86.165.55

10000101.01010110.10100101.00110111

11111111.11111111.11100000.00000000

10000101.01010110.10100000.00000000 -> 133.86.160.0

133.86.236.47

10000101.01010110.11101100.00101111

11111111.11111111.11100000.00000000

10000101.01010110.11100000.00000000 -> 133.86.224.0

133.86.236.47/19

1    0    0    1    1    1    0    1 == 157  
128 64   32   16   8    4    2    1  
128+0    +0    +16 +8    +4    +0    +1 = 157

237  
1        1        1    0    1    1    0    1  
128+   64 +    32 + 0 + 8 + 4 + 0 +1

T T : T  
F T : F  
T F : F  
F F : F

45.86.75.241/15

45.86.75.241 255.254.0.0

11111111.11111110.00000000.00000000 -> 255.254.0.0