



INSTITUTO TECNOLÓGICO DE CANCÚN

CALCULO DE REDES

MIGUEL ÁNGEL OY CASTRO

21 ENERO 2021

PROFESOR: ISMAEL JIMÉNEZ SÁNCHEZ

FUNDAMENTOS DE TELECOMUNICACIONES

Decimal: 192 . 168 . 10 . 0 /24
Binario: 11000000.10101000.00001010.00000000
Bits RED: 8 + 8 + 8
= 24 -> /24



172.16.0.0/19

IP	10101100 00010000 00000000 00000000	172.16.0.0
MASK	11111111 11111111 11100000 00000000	255.255.224.0
ID	10101100 00010000 00000000 00000000	172.16.0.0/19
WCARD	00000000 00000000 00011111 11111111	0.0.31.255
BCAST	10101100 00010000 00011111 11111111	172.16.31.255
1ST IP	10101100 00010000 00000000 00000001	172.16.0.1
LAST IP	10101100 00010000 00011111 11111110	172.16.31.254

172.16.0.0/21		
IP	10101100 00010000 00000000 00000000	172.16.0.0
MASK	11111111 11111111 11111000 00000000	255.255.248.0
ID	10101100 00010000 00000000 00000000	172.16.0.0/21
WCARD	00000000 00000000 00000111 11111111	0.0.7.255
BCAST	10101100 00010000 00000111 11111111	172.16.7.255
1ST IP	10101100 00010000 00000000 00000001	172.16.0.1
LAST IP	10101100 00010000 00000111 11111110	172.16.7.254

172.16.8.0/22		
IP	10101100 00010000 00001000 00000000	172.16.8.0
MASK	11111111 11111111 11111100 00000000	255.255.252.0
ID	10101100 00010000 00001000 00000000	172.16.8.0/22
WCARD	00000000 00000000 00000011 11111111	0.0.3.255
BCAST	10101100 00010000 00001011 11111111	172.16.11.255
1ST IP	10101100 00010000 00001000 00000001	172.16.8.1
LAST IP	10101100 00010000 00001011 11111110	172.16.11.254

172.16.12.0/22		
IP	10101100 00010000 00001100 00000000	172.16.12.0
MASK	11111111 11111111 11111100 00000000	255.255.252.0
ID	10101100 00010000 00001100 00000000	172.16.12.0/22
WCARD	00000000 00000000 00000011 11111111	0.0.3.255
BCAST	10101100 00010000 00001111 11111111	172.16.15.255
1ST IP	10101100 00010000 00001100 00000001	172.16.12.1
LAST IP	10101100 00010000 00001111 11111110	172.16.16.254

172.16.16.0/23		
IP	10101100 00010000 00010000 00000000	172.16.16.0
MASK	11111111 11111111 11111110 00000000	255.255.254.0
ID	10101100 00010000 00010000 00000000	172.16.16.0/23
WCARD	00000000 00000000 00000001 11111111	0.0.1.255
BROADCAST	10101100 00010000 00010001 11111111	172.16.17.255
1RAIP	1RAIP 10101100 00010000 00010000 00000001	172.16.16.1
ULT IP	10101100 00010000 00010001 11111110	172.16.17.254

172.16.16.0/23

IP	10101100 00010000 00010000 00000000	172.16.16.0
MASK	11111111 11111111 11111110 00000000	255.255.254.0
ID	10101100 00010000 00010000 00000000	172.16.16.0/23
WCARD	00000000 00000000 00000001 11111111	0.0.1.255
BCAST	10101100 00010000 00010001 11111111	172.16.17.255
1ST IP	10101100 00010000 00010000 00000001	172.16.16.1
LAST IP	10101100 00010000 00010001 11111110	172.16.17.254

172.16.18.0/23

IP	10101100 00010000 00010010 00000000	172.16.18.0
MASK	11111111 11111111 11111110 00000000	255.255.254.0
ID	10101100 00010000 00010010 00000000	172.16.18.0/23
WCARD	00000000 00000000 00000001 11111111	0.0.1.255
BCAST	10101100 00010000 00010010 11111111	172.16.18.255
1ST IP	10101100 00010000 00010010 00000001	172.16.18.1
LAST IP	10101100 00010000 00010010 11111110	172.16.18.254

172.16.20.0/24

IP	10101100 00010000 00010100 00000000	172.16.20.0
MASK	11111111 11111111 11111111 00000000	255.255.255.0
ID	10101100 00010000 00010100 00000000	172.16.20.0/24
WCARD	00000000 00000000 00000000 11111111	0.0.0.255
BCAST	10101100 00010000 00010100 11111111	172.16.20.255
1ST IP	10101100 00010000 00010100 00000001	172.16.20.1
LAST IP	10101100 00010000 00010100 11111110	172.16.20.254

172.16.21.0/24

IP	10101100 00010000 00010101 00000000	172.16.21.0
MASK	11111111 11111111 11111111 00000000	255.255.255.0
ID	10101100 00010000 00010101 00000000	172.16.21.0/24
WCARD	00000000 00000000 00000000 11111111	0.0.0.255
BCAST	10101100 00010000 00010101 11111111	172.16.21.255
1ST IP	10101100 00010000 00010101 00000001	172.16.21.1
LAST IP	10101100 00010000 00010101 11111110	172.16.21.254

172.16.22.0/24

IP	10101100 00010000 00010110 00000000	172.16.22.0
MASK	11111111 11111111 11111111 00000000	255.255.255.0
ID	10101100 00010000 00010110 00000000	172.16.22.0/24
WCARD	00000000 00000000 00000000 11111111	0.0.0.255
BCAST	10101100 00010000 00010110 11111111	172.16.22.255
1ST IP	10101100 00010000 00010110 00000001	172.16.22.1
LAST IP	10101100 00010000 00010110 11111110	172.16.22.254

172.16.23.0/25

IP	10101100 00010000 00010111 00000000	172.16.23.0
MASK	11111111 11111111 11111111 10000000	255.255.255.128
ID	10101100 00010000 00010111 00000000	172.16.23.0/25
WCARD	00000000 00000000 00000000 01111111	0.0.0.127
BCAST	10101100 00010000 00010111 01111111	172.16.23.127
1ST IP	10101100 00010000 00010111 00000001	172.16.23.1
LAST IP	10101100 00010000 00010111 01111110	172.16.23.126

172.16.23.127/26

IP	10101100 00010000 00010111 01111111	172.16.23.127
MASK	11111111 11111111 11111111 11000000	255.255.255.192
ID	10101100 00010000 00010111 01000000	172.16.23.64/26
WCARD	00000000 00000000 00000000 00111111	0.0.0.63
BCAST	10101100 00010000 00010111 01111111	172.16.23.127
1ST IP	10101100 00010000 00010111 01000001	172.16.23.65
LAST IP	10101100 00010000 00010111 01111110	172.16.23.126