Subredes direcciones IP IPV4 IPV6

Nombre del dispositivo dirección de red 00 255

Dispositivos de red identificar un dispositivo en red

Direcciones son únicas ip de dominio

Subredes: redes secundarias, proviene de la red principal

Particionar una red para abastecer otros sectores necesidades

octetos

|  |  |  |
| --- | --- | --- |
| CLASE | Rango de IPS | Máscara |
| A | 0.0.0.0 – 127.255.255.255 | 255.0.0.0 |
| B | 128.0.0.0 - 191.255.255.255 | 255.255.0.0 |
| C | 192.0.0.0 – 223.255.255.255 | 255.255.255.0 |
| D | 224.0.0.0 -239.255.255.255 |  |
| E | 240.0.0.0 – 255.255.255.255 |  |

192.168.3.0 clase C 255.255.255.0 /24

178.10.0.0 Clase B 255.255.0.0

10.10.10.0 clase A 255.0.0.0

11111111.11111111.11111111.00000000 /24 255.255.255.0

11111111.11111111.00000000.00000000 /16 255.255.0.0

11111111.00000000.00000000.00000000 /8 255.0.0.0

2ᶺ7 =**128**, 2ᶺ6 =**64,** 2ᶺ5 =**32**, 2ᶺ4 =**16**, 2ᶺ3 =**8**, 2ᶺ2 =**4**, 2ᶺ1 =**2**, 2ᶺ0 =**1**

1 1 0 0 1 0 0 1 = 201

187= 1 0 1 1 0 0 0 1

2ᶺn-2 = Host

2ᶺn = Subredes

Clase C 196.100.1.0 /24

2ᶺn-2 = 36 + 2 = 38 host

2ᶺ6-2 = 64-1= 63 salto, cantidad de direcciones,

11111111.11111111.11111111.11000000 /26

2ᶺ2= 4 subredes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Red | 1era Utiliza | Ult. Utiliza | Broadcast | Máscara |
| 196.100.1.0 | 196.100.1.1 | 196.100.1.62 | 196.100.1.63 | 255.255.255.192 |
| 196.100.1.64 | 196.100.1.65 | 196.100.1.126 | 196.100.1.127 | 255.255.255.192 |
| 196.100.1.128 | 196.100.1.129 | 196.100.1.190 | 196.100.1.191 | 255.255.255.192 |
| 196.100.1.192 | 196.100.1.193 | 196.100.1.254 | 196.100.1.255 | 255.255.255.192 |

2ᶺn-2= 10+2 host

Clase C 201.120.10.0 / 24 255.255.255.0

2ᶺ4-2= 16-1= 15 salto

2ᶺ4= 16 subredes

32-4= /28 255.255.255.240

11111111.11111111.11111111.11110000

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Red | 1 ult | Ult. Ult | Broadcast | máscara |
| 201.120.10.0 | 201.120.10.1 | 201.120.10.14 | 201.120.10.15 | 255.255.255.240 |
| 201.120.10.16 | 201.120.10.17 | 201.120.10.30 | 201.120.10.31 | 255.255.255.240 |
| 201.120.10.32 | 201.120.10.33 | 201.120.10.46 | 201.120.10.47 | 255.255.255.240 |
| 201.120.10.48 | 201.120.10.49 | 201.120.10.62 | 201.120.10.63 | 255.255.255.240 |