

## Basic IP Subnets

### Class C Address Space

Prefix	Subnet	Host	Usable
/32	255.255.255.255	1	1
/31	255.255.255.254	2	0
/30	255.255.255.252	4	2
/29	255.255.255.248	8	6
/28	255.255.255.240	16	14
/27	255.255.255.224	32	30
/26	255.255.255.192	64	62
/25	255.255.255.128	128	126
/24	255.255.255.0	256	254

### Class B Space is denoted in numbers of Class C's

Ripe	Subnet	# of Class C's
/23	255.255.254.0	2
/22	255.255.252.0	4
/21	255.255.248.0	8
/20	255.255.240.0	16
/19	255.255.224.0	32
/18	255.255.192.0	64
/17	255.255.128.0	128
/16	255.255.0.0	256
/8	255.0.0.0	66,400

### Private IP Addresses

RFC 1918 requests that organizations make use of the private Internet address space for hosts that require IP connectivity within their enterprise network, but do not require external connections to the global Internet. For this purpose, the IANA has reserved the following three address blocks for private internets:

- 10.0.0.0/8
- 127.0.0.0/8
- 172.16.0.0/12
- 192.168.0.0/16

IP's above 224.0.0.0 are used for both multicast and experimental purposes.