Netmask

A netmask is a mask used to divide an IP address into subnets and specify the number of available host addresses in the subnet.

The netmask consists of a 32-bit sequence on the format `255.255.225.255`.

There are three commonly used network classes:

Class	Netmask length	# of networks	Number of hosts	Netmask
Class A	8	126	16777214	255.0.0.0
Class B	16	16382	65534	255.255.0.0
Class C	24	2097150	254	255.255.255.0

The last `0` and `255` in a sequence are always assigned and cannot be used as host addresses.

For example, in `255.255.225.0`, `0` is the assigned network address.

In `255.255.255.255`, `255` is the assigned IPv4 broadcast address.