

How Does the Internet Work?



IP

IP (Internet Protocol Address)

#.#.#.#

IP Range

0.0.0.0

...

255.255.255.255

Private IPs

10.###

172.16.## – 172.31.##

192.168.##

Number of IP Address (IP4)

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$$2^{32} = 4294967296$$

IP Address (IPv6)

IPv6 addresses are represented as eight groups of four hexadecimal digits groups being separated by colons,

for example

2001:0db8:0000:0042:0000:8a2e:0370:7334

Number of IP Address (IP6)

$2^{128} =$

340,282,366,920,938,463,463,374,607,431,768,211,456