

IP Index (WIP)

This Document Outlines plenty of publicly recognized IPv4 and IPv6 Addresses

IPv4 Space

Address Block	Address range	Number of Addresses	Scope	Description
0.0.0.0/8	0.0.0.0-0.255.255.255	16,777,216	Software	Current
10.0.0.0/8	10.0.0.0-10.255.255.255	16,777,216	Private network	Used for local communications within a private network.
100.64.0.0/10	100.64.0.0-100.127.255.255	4,194,304	Private network	Shared address space for communications between a service provider and its subscribers when using a carrier-grade NAT.
127.0.0.0/8	127.0.0.0-127.255.255.255	16,777,216	Host	Used for loopback addresses to the local host.
169.254.0.0/16	169.254.0.0-169.254.255.255	65,536	Subnet	Used for link-local addresses between two hosts on a single link when no IP address is otherwise specified, such as would have normally been retrieved from a DHCP server.
172.16.0.0/12	172.16.0.0-172.31.255.255	1,048,576	Private network	Used for local communications within a private network.

192.0.0.0/24	192.0.0.0-192.0.0.255	256	Private network	IETF Protocol Assignments, DS-Lite (/29).
192.0.2.0/24	192.0.2.0-192.0.2.255	256	Documentation	Assigned as TEST-NET-1, documentation and examples.
192.88.99.0/24	192.88.99.0-192.88.99.255	256	Internet	Reserved. Formerly used for IPv6 to IPv4 relay (included IPv6 address block 2002::/16).
192.168.0.0/16	192.168.0.0-192.168.255.255	65536	Private network	Used for local communications within a private network.
198.18.0.0/15	198.18.0.0-198.19.255.255	131,072	Private network	Used for benchmark testing of inter-network communications between two separate subnets.
198.51.100.0/24	198.51.100.0-198.51.100.255	256	Documentation	Assigned as TEST-NET-2, documentation and examples.
203.0.113.0/24	203.0.113.0-203.0.113.255	256	Documentation	Assigned as TEST-NET-3, documentation and examples.
224.0.0.0/4	224.0.0.0-239.255.255.255	268,435,456	Internet	In use for IP multicast. (Former Class D network.)
233.252.0.0/24	233.252.0.0-233.252.0.255	256	Documentation	Assigned as MCAST-TEST-NET, documentation and examples.
240.0.0.0/4	240.0.0.0-255.255.255.254	268,435,455	Internet	Reserved for future use. (Former Class E network.)
255.255.255.255/32	255.255.255.255	1	Subnet	Reserved for the "limited broadcast" destination address.

IPv6 Space

Address Block	First address	Last Address	Number of addresses	Scope	Description
::/128	::	::	1	Software	Unspecified address
::1/128	::1	::1	1	host	Loopback address—a virtual interface that loops all traffic back to itself, the local host
::ffff:0:0/96	::ffff:0.0.0.0	::ffff:255.255.255.255	2^{32}	Software	IPv4-mapped addresses
::ffff:0:0:0/96	::ffff:0:0.0.0.0	::ffff:0:255.255.255.255	2^{32}	Software	IPv4 translated addresses
64:ff9b::/96	64:ff9b::0:0:0:0	64:ff9b::255.255.255.255	2^{32}	Global Internet	IPv4/IPv6 translation
64:ff9b:1::/48	64:ff9b:1::	64:ff9b:1:ffff:ffff:ffff:ffff:ffff	2^{80} with 2^{48} for each IPv4	Private internets	IPv4/IPv6 translation
100::/64	100::	100::ffff:ffff:ffff:ffff	2^{64}	Routing	Discard prefix
2001:0000::/32	2001::	2001::ffff:ffff:ffff:ffff	2^{96}	Global Internet	Teredo tunneling
2001:20::/28	2001:20::	2001:2f:ffff:ffff:ffff:ffff	2^{100}	Software	<u>ORCHIDv2</u>

2001:db8::/32	2001:db8::	2001:db8:ffff:ffff:ffff:ffff:ffff:ffff	2^{96}	Documentation	Addresses used in documentation and example source code
2002::/16	2002::	2002:ffff:ffff:ffff:ffff:ffff:ffff:ffff	2^{112}	Global Internet	The <u>6to4</u> addressing scheme (deprecated)
fc00::/7	fc00::	fdff:ffff:ffff:ffff:ffff:ffff:ffff:ffff	2^{121}	Private Internets	<u>Unique local address</u>
fe80::/64 from fe80::/10	fe80::	fe80::ffff:ffff:ffff:ffff	2^{64}	Link	<u>Link-local address</u>
ff00::/8	ff00::	ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff	2^{120}	Global Internet	<u>Multicast address</u>

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