

What is IPv4 address? What are the different classes of IPv4?

An IP address is a 32-bit dynamic address of a node in the network. An IPv4 address has 4 octets of 8-bit each with each number with a value up to 255. IPv4 classes are differentiated based on the number of hosts it supports on the network.

IP addresses are divided in five classes.

- 1) Class A addresses range from 1-127
- 2) Class B addresses range from 128-191
- 3) Class C addresses range from 192-223
- 4) Class D addresses range from 224-239
- 5) Class E addresses range from 240-255

Following addresses have special purpose: -

- **0** [zero] is reserved and represents all IP addresses;
- **127** is a reserved for loopback IP address and it is used for testing.
- **255** is a reserved address and it is used for broadcasting purpose.