Ipv4

IP stands for Internet Protocol and v4 stands for Version Four (IPv4). IP version four addresses are 32-bit integers which will be expressed in decimal notation.

Example- 192.0.2.126 could be an IPv4 address.

Parts of IPv4

- **Network part:**
  The network part indicates the distinctive variety that's appointed to the network. The network part conjointly identifies the category of the network that's assigned.
- **Host Part:**
  The host part uniquely identifies the machine on your network. This part of the IPv4 address is assigned to every host.
  For each host on the network, the network part is the same, however, the host half must vary.

  ## Subnet number:

  This is the nonobligatory part of IPv4. Local networks that have massive numbers of hosts are divided into subnets and subnet numbers are appointed to that.

  ## Characteristics of IPv4

  IPv4 could be a 32-Bit IP Address.

  IPv4 could be a numeric address, and its bits are separated by a dot.

  The number of header fields is twelve and the length of the header field is twenty.

It has Unicast, broadcast, and multicast style of addresses.

IPv4 supports VLSM (Virtual Length Subnet Mask).

IPv4 uses the Post Address Resolution Protocol to map to the MAC address.

Advantages of IPv4

IPv4 security permits encryption to keep up privacy and security.

IPV4 network allocation is significant and presently has quite 85000 practical routers.

It becomes easy to attach multiple devices across an outsized network while not NAT.

This is a model of communication so provides quality service also as economical knowledge transfer.

IPV4 addresses are redefined and permit flawless encoding.