

IP Address

- 1 32 Bits Decimal Address Each Byte Separate With . Called Octet IP Address = Network + Host
- 2 Computers always converts IP address into Binary
- 3 Each Octet must be between 0 - 255
- 4 Can be Static or Dynamic In Case Of Dynamic Have to Use DHCP
- 5 Must be Unique
- 6 ICANN (Internet Corporation For Assigning Names and Number) is responsible to assign unique IP address Range to ISP

Class	1	2	3	4	5	6
Class A	Network Bits	8	No of Host	24	Rule	The First Bit Of The First Byte Is Always 0
	Range	1 - 126	No of Network	126	No Of Host	1,67,77,216 - 2
Class B	Network Bits	16	No of Host	16	Rule	The First Bit Of The First Byte Is Always 1 The Second Bit of The First Byte Is Always 0
	Range	128 - 191	No of Network	16384	No Of Host	65536 - 2
Class C	Network Bits	24	No of Host	8	Rule	The First Bit Of The First Byte Is Always 1 The Second Bit of The First Byte Is Always 1 The Third Bit of the First Byte is Always 0
	Range	192 - 223	No Of Network	20,97,152	No of Host	256 - 2
Class D	1	224 - 239	Reserved For Multicasting			
Class E	2	240 - 255	Reserved For R&D Department of Defense USA			

7 IP Address Class

8 ¹⁰

9 Type Of IP Address

- 1. Loopback 127.x.x.x
- 2. APIPA 169.254.X.X
- 3. Private IP or Fake IP Range
 - Class A 10.0.0.0 - 10.255.255.255
 - Class B 172.16.0.0 - 172.31.255.255
 - Class C 192.168.0.0 - 192.168.255.255
- 4. Public IP or Live IP ²

10 Public IP V/S Private IP Or Live IP V/S Fake IP

- Public IP
 - 1 Routable Into the Internet
 - 2 Provided By ISP
 - 3 Limited IP Addresses Are Available
 - 4 Paid
- Private IP
 - 1 Not Routable Into The Internet
 - 2 Anyone Can Use It
 - 3 Conserve Live IP
 - 4 Free of Charge