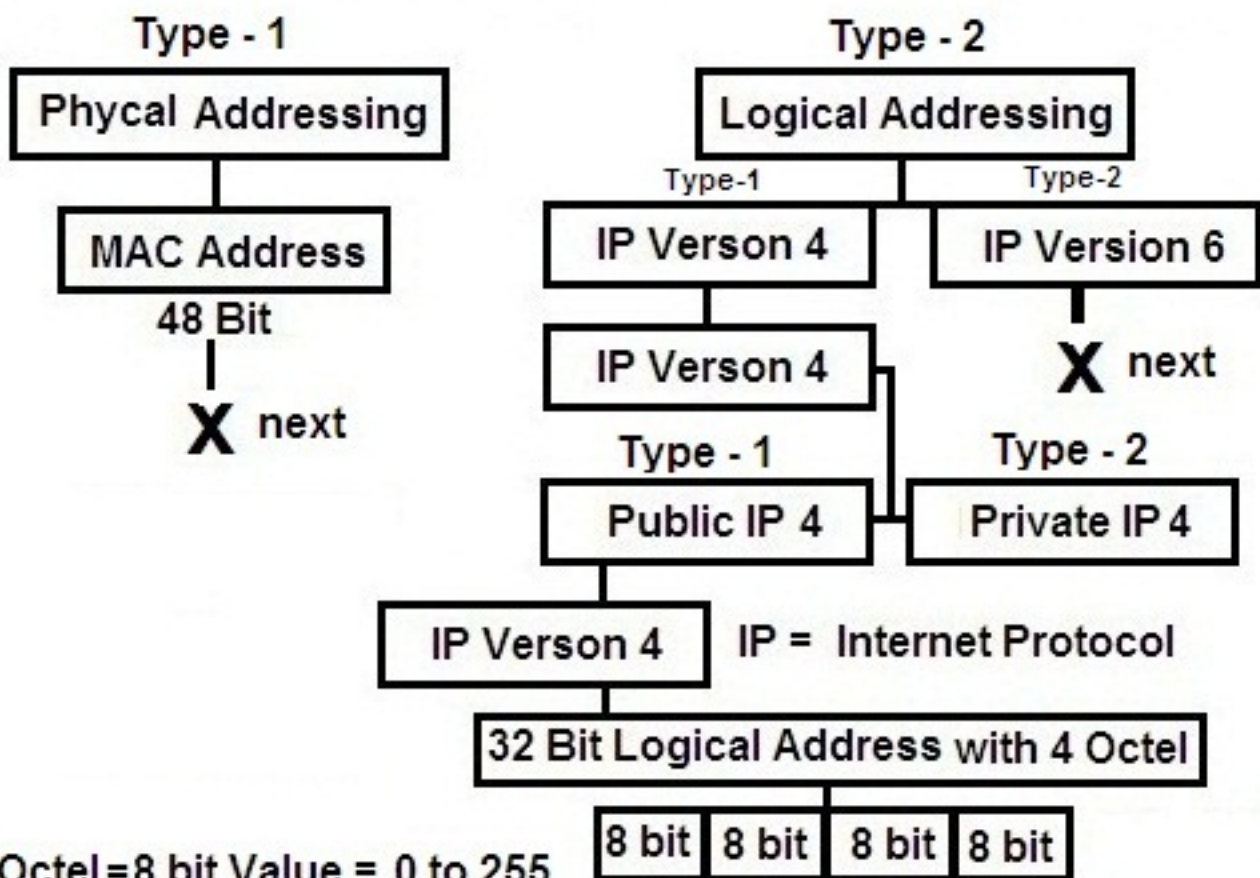


UNDERSTANDING INTERNET IP ADDRESS



One Octet = 8 bit Value = 0 to 255

IP Address = Network ID + Host ID 192.168. 1. 1

5 RANGE COVERS 5 CLASS OF IP ADDRESS

NAME	From IP Address				To IP Address				
Class A	1	0	0	0	126	0	0	0	For Very Big LAN
Class B	128	0	0	0	192	255	0	0	For Big LAN
Class C	192	0	0	0	223	255	255	0	For Small LAN
Class D	224	0	0	0	239	0	0	0	Multitask
Class E	240	0	0	0	255	0	0	0	Reserch

NET WORK ID
 N = Network = 1
 H = Host = 0

Class A	N	H	H	H
Class B	N	N	H	H
Class C	N	N	N	H

Reserved Loop Back Address
 127.0.0.0

Sub net Mask 11111111 00000000 00000000 00000000 Binary Vluue

Decimal Value 255 0 0 0

192.168.1.10 = Class C Network = N · N · N · H Network = 192.0.0.0

192.168.1.10 = N · N · N · H = 1.1.1.0 Subnet Mask = 255.255.255.0

Decimal to Binary Value Convergen

7	6	5	4	3	2	1	0
2	2	2	2	2	2	2	2
128	64	32	16	8	4	2	1

192=	1	1	0	0	0	0	0
168=	1	0	1	0	1	0	0
1=	0	0	0	0	0	0	1
10=	0	0	0	0	1	0	1

Class B 150.10.20.30
 Network ID = 150.0.0.0
 Class B Subnet = N. N.H.H
 OR Subnet = 255.255.0.0
 Broadcast ID = 150.10.255.255

No of Host = $2^{16} - 2 = 65534$ IP

Reserved IP
 Private IP Class A 10.0.0.0
 Private IP Class B 172.16.x.x to 172.31.x.x
 Private IP Class C 192.168.0.0 to 192.168.255.255

16	15	14	13	12	11	10	9	8
2	2	2	2	2	2	2	2	2
65536	32768	16384	8192	4096	2048	1024	512	256

7	6	5	4	3	2	1	0
2	2	2	2	2	2	2	2
128	64	32	16	8	4	2	1