

Network Addresses

Network Address	Ethernet or TCP/IP Format	Primary Function	Devices which use it
Physical Hardware MAC	HEX: HH-HH-HH-HH-HH	Uniquely identifies a NIC. Used to route packets over a LAN using shared media.	Bridges Switches
Logical Software IP	Dotted-Decimal: D.D.D.D ¹	Identifies a host on the Internet or on a LAN. Used to route packets through the Internet.	Routers Gateways Nameservers
Port	N ²	Identifies a process/application on a host.	Gateways
Socket	D.D.D.D:N	Uniquely identifies a process on the Internet.	Gateways
Domain Name	server.domain.name	Identifies a host on the Internet, usually a server, in a form convenient for human beings. May be considered an alias for the corresponding IP address.	Hosts Nameservers

¹ Each 'D' can only take on values between 0 and 255. This is the IPv4 form of the address only.

² 'N' is an integer between 0 and 65,535 (i.e. $2^{16}-1$). As a rule, clients use values of 1024 or above and servers use 'well-known' values between 0 and 1023.