

IPv6 Cheat sheet

Name	Description	Format
Global Unicast	Publicly routable	2000::/3
Unique Local	Routable in the LAN	FC00::/7
Link Local	Not routable	FE80::/10
Multicast	Addresses for groups	FF00::/8
Anycast	Shared addresses	2000::/3
Default route	Equivalent to 0.0.0.0 in IPv4	::/0

IPv6 Addressing Format

***Note:** IPv6 uses 128bit address compared to IPv4 32 bits.

The address is written as:

X:X:X:X:X:X:X

Each 'X' is a 16-bit hexadecimal field (0-9 A-F)

Address Types

Unicast - One-to-one communication

Multicast - One-to-many communication

Anycast - An address configured in multiple locations

Address Shortening

***Note:** leading zeros in each field can be removed.

For example:

2001:0DB8:0000:0001:0000:0000:0000:0001 **can be written as...**

2001:DB8:0:1:0:0:0:1 **can be written as...**

2001:DB8:0:1::1

CISCO IPv6 Verification commands

R1#show ipv6 interface brief

R1#show ipv6 neighbors