

For example– the IPv6 address FEDC: 0001: 0000: 0000: 0000: 0000: ABDC: 0FF0 can be compressed to FEDC: 1:: ABDC: FF0. For example– 0:0:0:0:0:0: 10.1.8.24 or in compressed form ::10.1.8.24 IPv6 address prefixes can be written in a manner similar to CIDR notation ipv6–address/ prefix–length where ipv6 address is an IPv6 address prefix–length is a decimal value specifying how many leftmost contiguous bits of the address comprise the prefix. Unicast Addresses: Aggregatable global unicast addresses are analogous to routable IPv4 IP addresses. The variable–length field comprising of these leading bits is called Format Prefix (FP). They are assigned in blocks to ISPs, who then assign portions of the addresses to businesses and end users. The IPv6 global aggregatable global unicast address format is as follows–Also, the IPv6 address FEDC: 0000: 0000: 0001: 0000: 0000: ABDC: 0FF0 can be compressed to FEDC :: 1: 0: 0: ABDC: FF0. Unicast addresses are distinguishable from Multicast addresses from high–order octet of the addresses.