|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 9 | 17 | 25 | 128 | 2 | 128 |
| 2 | 10 | 18 | 26 | 192 | 4 | 64 |
| 3 | 11 | 19 | 27 | 224 | 8 | 32 |
| 4 | 12 | 20 | 28 | 240 | 16 | 16 |
| 5 | 13 | 21 | 29 | 248 | 32 | 8 |
| 6 | 14 | 22 | 30 | 252 | 64 | 4 |
| 7 | 15 | 23 | 31 | 254 | 128 | 2 |
| 8 | 16 | 24 | 32 | 255 | 256 | 1 |

UDP – DSNR - TF

Classful – IGRP RIPv1

2000::/3 – global aggregately unicast addresses

FC00::/8 and FD00::/8 – unicast site-local addresses

|  |  |  |
| --- | --- | --- |
| IPv6 Prefixes | | Range |
| 2000::/3 | global aggregately unicast addresses | 2000 - 3FFF |
| FC00::/8 and FD00::/8 | unicast site-local addresses | FC00 – FDFF |
| FF00::/8 | Multicast addresses which are used for one-to-many communications | FF00 – FFFF |
| FF01::/16 | Node-local |  |
| FF02::/16 | Link-local (used to form neighbor adjacencides) |  |
| FF05::/16 | Site-local |  |
| FF08::/16 | Organization-local |  |
| FF0E::/16 | Global |  |
| FE80::/10 | Unicast link-local addresses | FE80 - FEBF |

IPv6 Static Routes

Fully specified static route – Ipv6 static route in which destination network, outbound interface, and next-hop IPv6 address are all configured directly

* IPv6 route 2001:db8:a::/32 fastethernet 0/1 2001:db8:b::1

Directly attached static routes – route specifies the destination IPv6 network and the outbound interface

* IPv6 route 2001:db8:a::/32 fastethernet 0/1

Recursive static routes - specifies the destination IPv6 network and the IPv6 next-hop address only

* IPv6 route 2001db8:a::/32 2001:db8:a::1

Floating static routes – compromised of any of the other three types. Typically used as a backup route. Floating static routes typically are configured with an administrative distance value.

* IPv6 route 2001:db8:a::/32 2001:db8:a::1 5

128 2 128

192 4 64

224 8 32

240 16 16

248 32 8

252 64 4

254 128 2

255 256 1

UDP – DSNR – TF

Classful – IGRP RIPv1

2000 – globally aggregated unicast

FC – unicast link local

FF00 – Multicast

FF01 – node local

FF02 – Link-local

FF05 – Site-local

FF08 – Organization local

FF0E - Global

FE – Unicast link-local

Full specified: \_\_/32 fe0/1 \_\_

Directly attached: \_\_/32 fe0/1

Recursive: \_\_/32 \_\_

Floating: \_\_/32 \_\_ #

Every awesome cisco engineer will need info daily

HSRP Version 1 virtual MAC address – ACxx

HSRP Version 2 virtual MAC address - Fxxx

GLBP virtual MAC address – 0102

VRRP Virtual MAC address – 0101

Interfaces OSPF broadcast enables by default – Ethernet, FDDI

Interfaces OSPF non broadcast enabled by default – Frame Relay, X.25