Cisco CCNA (200-301)

Episode Title: Describing IPv6 Anycast, Multicast and EUI-64

Learner Objective: Describe the usage of IPv6 Anycast, Multicast and Modified EUI 64
Episode Title: Describe IPv6 Anycast, Multicast and EUI 64
Description: IPv6 has several different address types unlike IPv4 where there is only one. These types have different usages. You will learn the format and different usages

Q: What are Anycasts, Multicasts and EUI-64 Addresses?

- Anycast Addresses (no unique format)
    - not source addresses
    - it is not unique in format
    - connect to the "nearest" of a group (multiple servers can use the same Anycast address)
    - refers to how unicast addresses are routed.
- Multicast (FF00::/12)
    - is a "one to many" or "many to many" communication.
    - works in the same manner as regular multicast traffic does.
- Modified EUI-64
    - Auto configuration of IPv6 host
    - NetworkID + 48 bit MAC, split by 16 bit FFEE
    - Guarantees a unique IPv6 address
    - could be categorized as a unicast address.

Endnotes, External, Etc.,

1.9 Compare IPv6 address types

- 1.9.d Anycast
- 1.9.e Multicast
- 1.9.f Modified EUI 64

RFC 4291 (https://datatracker.ietf.org/doc/html/rfc4291)