# Cisco CCNA (200-301)

## Episode Title: Reviewing IPv6 Addressing

Learner Objective: Review IPv6 network addressing concepts

Episode Title: Reviewing IPv6 Addressing

Description: You will review some details of IPv6 to learn its scope the need of it for networks on the internet.

### Q: Why do we need to it?

• The limitation of the IPv4 address space could not keep up with the rapid depletion of the IPv4 addresses on the internet.

## Q: How big is the IPv6 address space pool?

• So big that even analogies fail to logically describe it.

#### Q: How different is IPv6 addressing from IPv4 addressing?

- 2 differences
  - IPv4 is binary reported in dotted decimal format (0 -9)
  - IPv6 is binary but reported in hexadecimal format (0 -9, A-F)
    - The address pool is much larger in comparison to 32 bit format of IPv4. It is 128 bit pool size.
- Different address types used for different functions

#### Q: We can help us to break this down a little more?

Yes, let's take a look at the structure.

#### Q: Can you help us with these different address types and how they are used?

- in the next few episodes, we will do exactly that.

#### Endnotes, External, etc.

Objective: 1.9