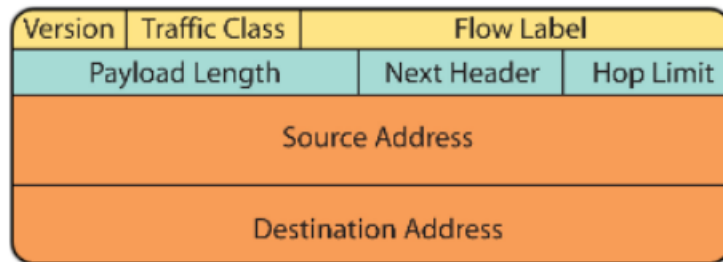


IPv6 Header Explanation



Version: It is a 4-bit field which indicates that the packet is an IPv6.

Traffic Class: Is an 8-bit field used with priority of the traffic.

Flow Label: A 20-bit field which uses a specific source address to a specific destination address to label packets in the same flow. The router saves the flow, and know how to handle packets in the same flow, which makes routing faster.

Payload length: Is a 16-bit field which contains the length in octets/bits of the data.

Next Header: Is a n 8-bit field containing the transport layer protocol like TCP or UDP. If extension header is in use, this field tells if all routers need to examine the packet or only the last.

Hop Limit: Is an 8-bit field which specify how many hops a packet can take before being discarded. The maximum is 255 hops.

Source Address: This is a 128-bit field containing the IPv6 address of the originating node.

Destination Address: This is a 128-bit field containing the IPv6 address of the intended recipient.