Inband Network Telemetry Extensions

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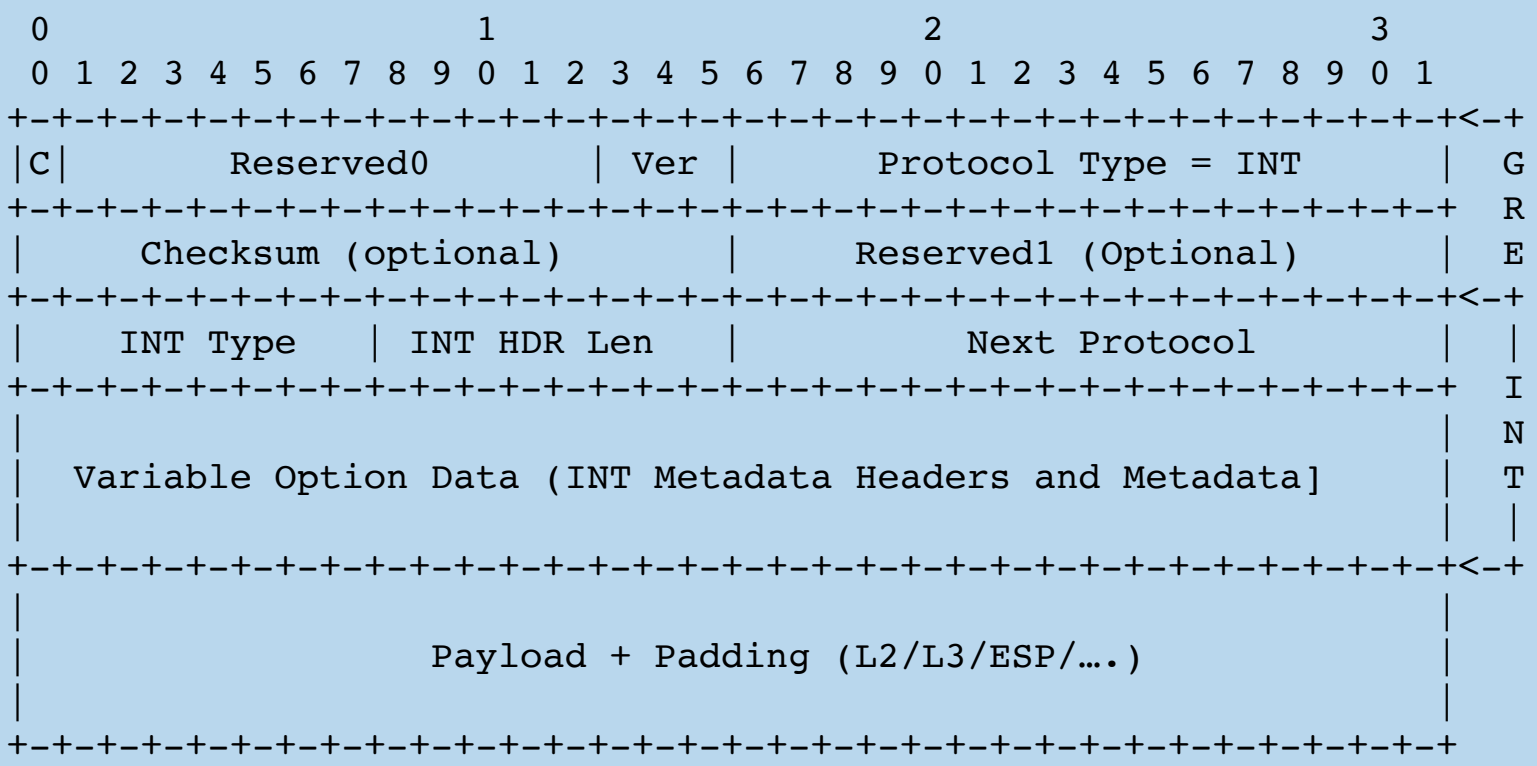
INT – IPv4 GRE

INT in IPv4 (GRE)

- GRE encapsulation is defined in [RFC2784].
- The GRE Protocol Type value is TBD_INT.
- The INT Header is defined as follows:
  - **INT Type:** 8-bit field defining the INT Header type, as defined in
    - INT Hop-By-Hop Type
    - INT Destination Type
  - **INT Hdr Len:** 8-bit Length field contains the length of the variable INT data octets in 4-octet units.
  - **Next Protocol:** 16 bits Next Protocol Type field contains the protocol type of the packet following IOAM protocol header. When the most significant octet is 0x00, the Protocol Type is taken to be an IP Protocol Number as defined in [IP_PROT]. Otherwise, the Protocol Type is defined to be an EtherType value from [ETYPES]. An implementation receiving a packet containing a Protocol Type which is not listed in one of those registries SHOULD discard the packet.

INT in IPv4 (GRE) - contd

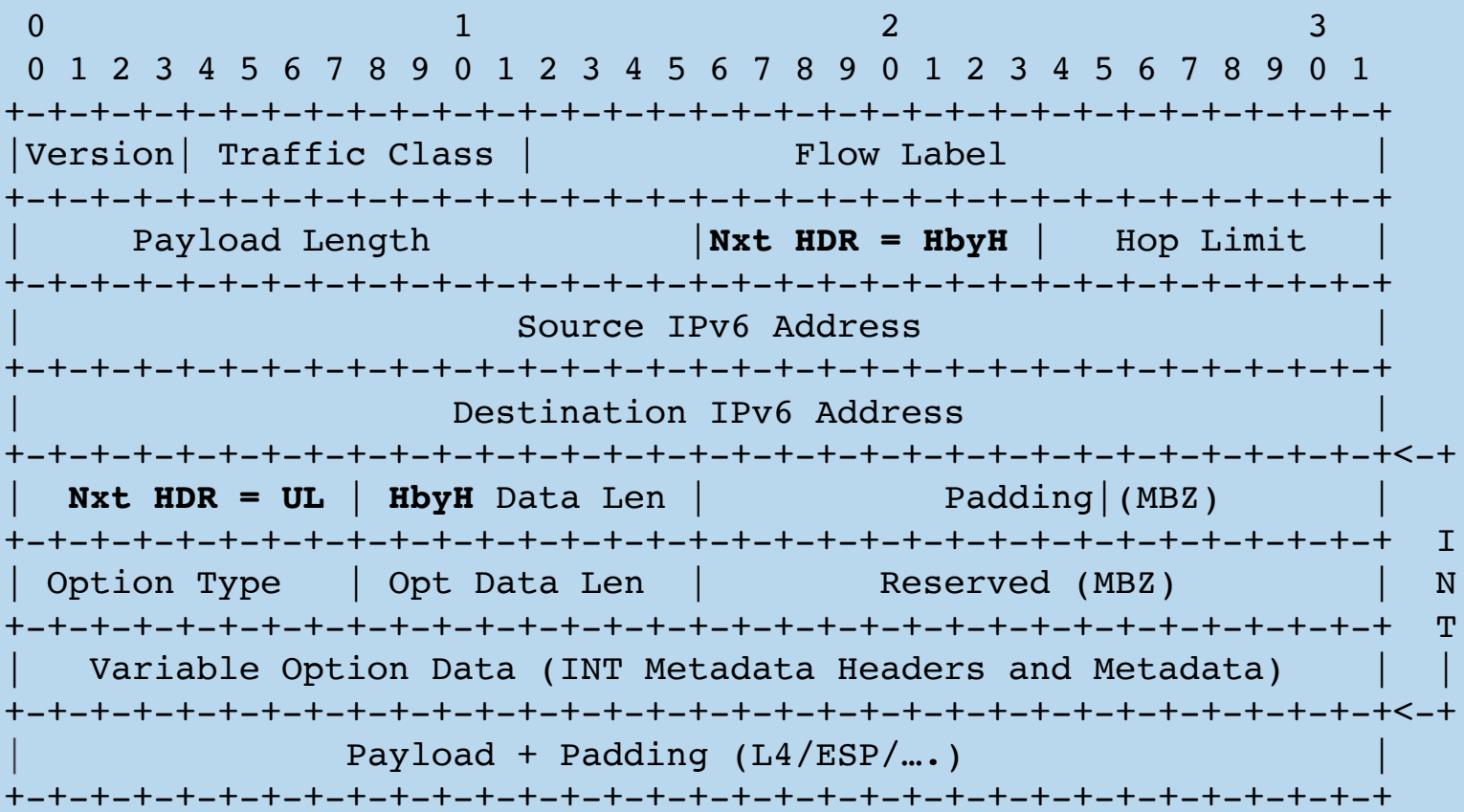
INT Metadata following GRE Header:



INT – IPv6 Extension Header

INT in IPv6

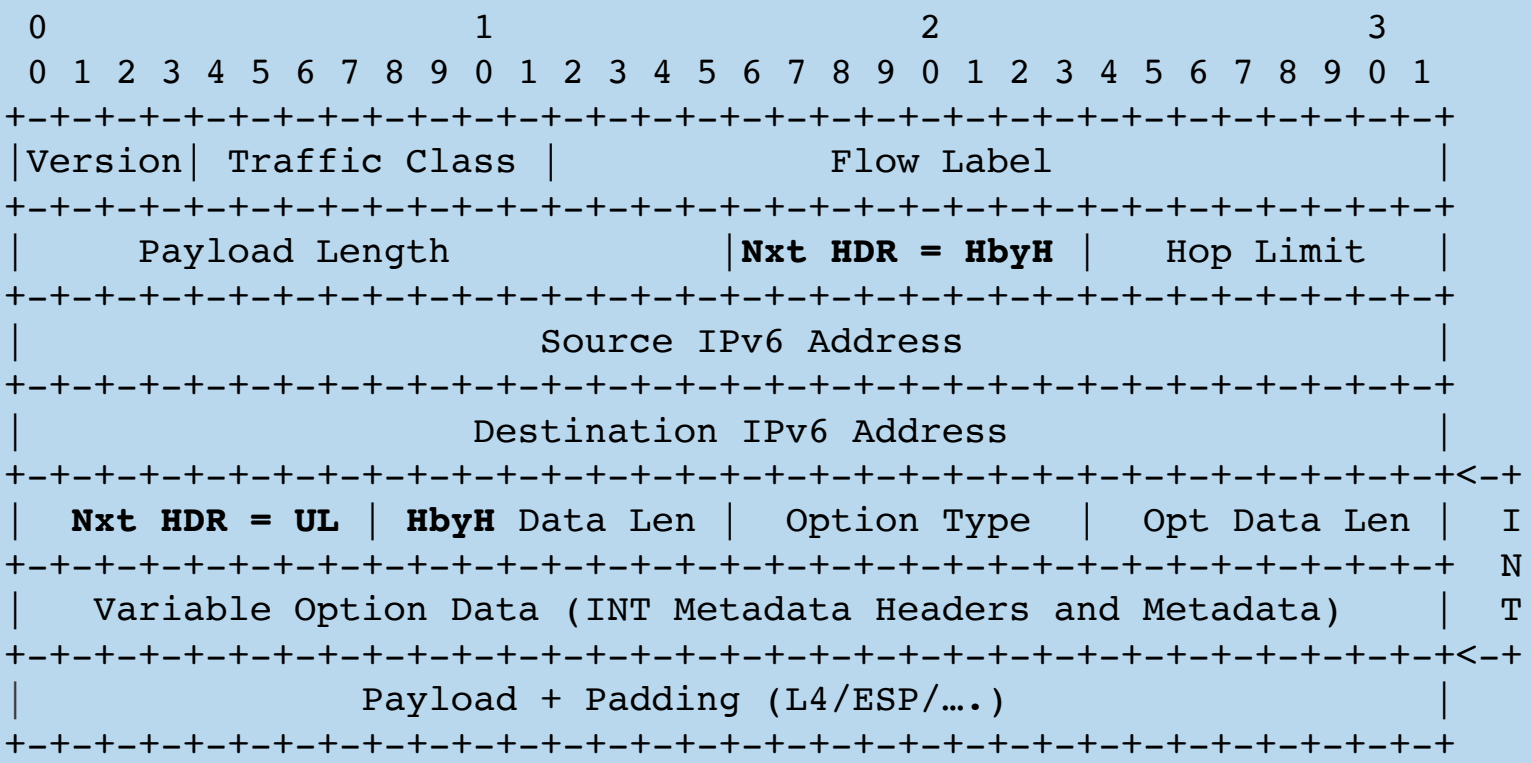
IPv6 HbyH header Option:



- Option Type: 8-bit identifier of the type of option.
  - 001xxxxxx 8-bit identifier of the type of option. xxxxxx=TBD_IANA_INT_HOP_BY_HOP_OPTION_IPV6.
  - 001xxxxxx 8-bit identifier of the type of option. xxxxxx=TBD_IANA_INT_DESTINATION_OPTION_IPV6 .
- Opt Data Len: 8-bit unsigned integer. Length of the Reserved and Option Data field of this option, in octets.
- Reserved (MBZ): 16-bit field MUST be filled with zeroes.

INT in IPv6

IPv6 HbyH header Option:



- Option Type: 8-bit identifier of the type of option.
  - 001xxxxxx 8-bit identifier of the type of option. xxxxxx=TBD_IANA_INT_HOP_BY_HOP_OPTION_IPV6.
  - 001xxxxxx 8-bit identifier of the type of option. xxxxxx=TBD_IANA_INT_DESTINATION_OPTION_IPV6 .
- Opt Data Len: 8-bit unsigned integer. Length of the Reserved and Option Data field of this option, in octets.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