

Extended OAM to Convey In-situ OAM Configuration State

draft-xiao-ippm-ioam-conf-state-01

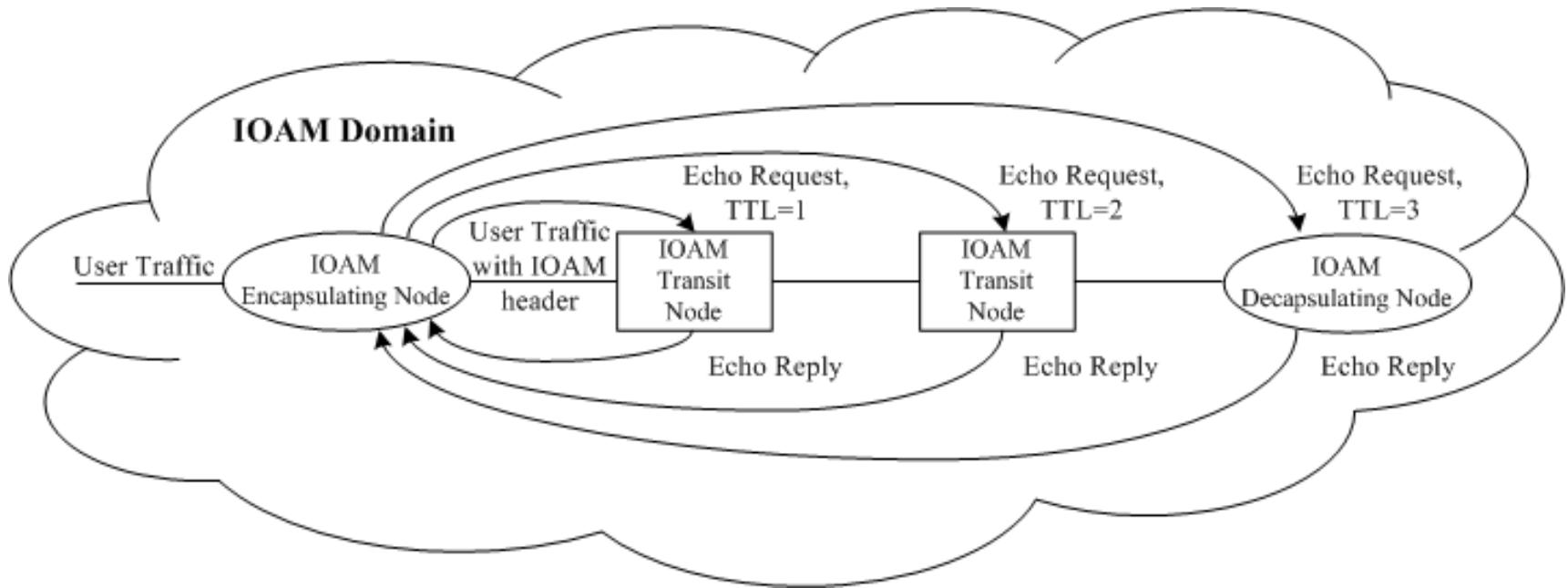
Xiao Min xiao.min2@zte.com.cn

Greg Mirsky gregimirsky@gmail.com

Intention of this draft

- Provide a method for the IOAM encapsulating node to determine IOAM header
 - Static configuration is a potential method, but it's uneasy and inflexible, especially when the IOAM encapsulating node is a host
 - Dynamic acquisition is proposed in this draft, traditional OAM mechanisms such as ICMP Ping or MPLS LSP Ping can be used to convey IOAM configuration state

Principle of this draft



- the principle of this draft is straightforward
 - IOAM configuration data is conveyed from the IOAM transit/decapsulating nodes to the IOAM encapsulating node, by specific OAM probe packets

Two changes (1) – MTU

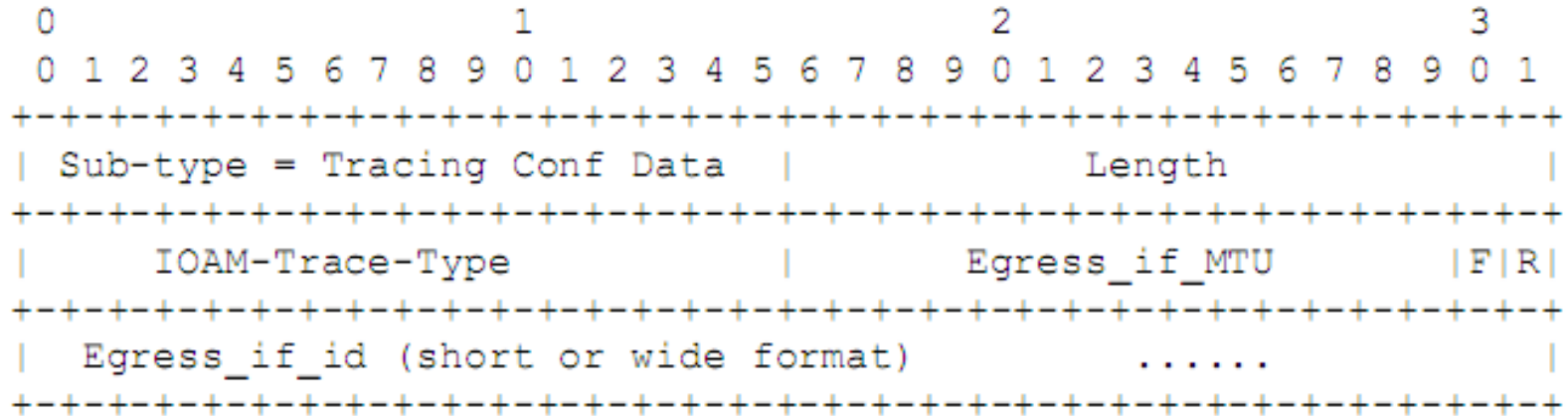


Figure 2: IOAM Tracing Configuration Data Sub-TLV

- MTU is a key issue for In-situ OAM
- In section 4.2 of [draft-ietf-ippm-ioam-data-04] it says “The maximum number of hops and the minimum path MTU of the IOAM domain is assumed to be known”
- This change provides a mechanism to know the minimum path MTU of the IOAM domain

Two changes (2) – Time Stamp

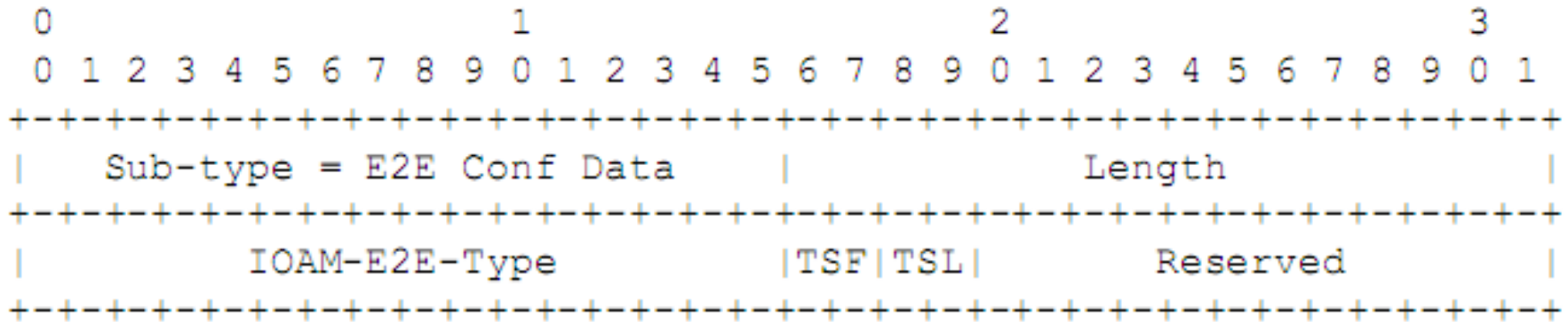


Figure 4: IOAM Edge to Edge Configuration Data Sub-TLV

- In the 02 version of [draft-ietf-ippm-ioam-data] it introduced support for new formats of time stamp, whose formats currently include PTP, NTP and POSIX
- This change enables the IOAM encapsulating node to know the format and length of time stamp configured at the decapsulating node

Next steps

- Ask for more reviews and comments
- Revise this draft to resolve comments
- Ask for WG adoption