

ISIS Extensions for FlexE Link Advertisement

draft-zhu-ccamp-flexe-link-advertisement-01

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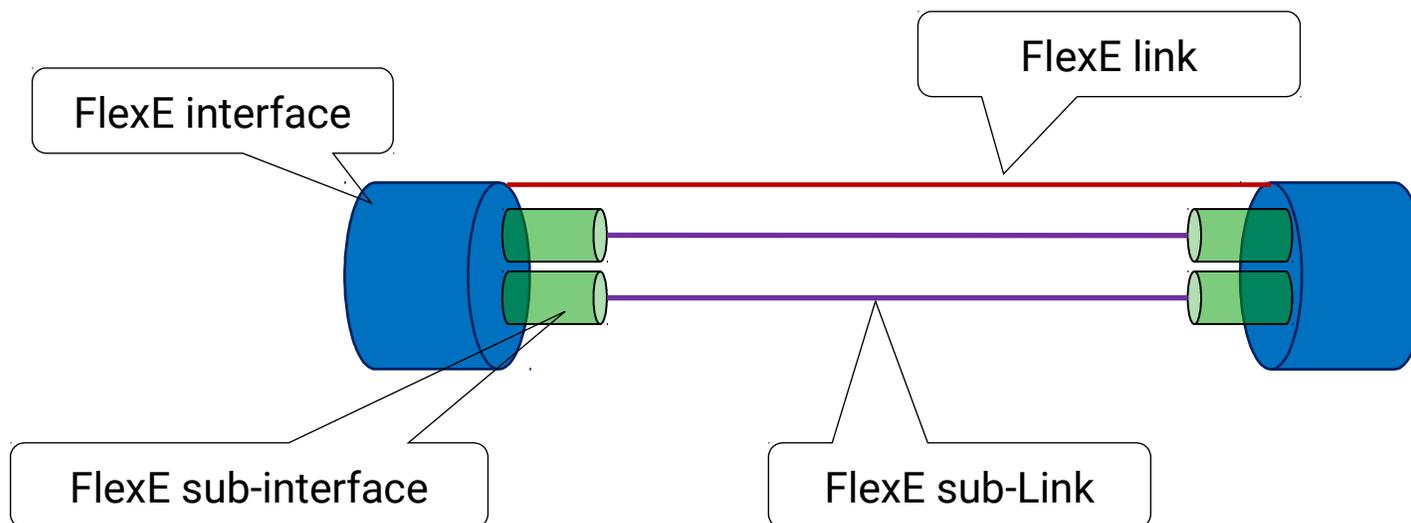
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History of This Document

- draft-zcdc-isis-flexe-extention-00 was published in March 13, 2017
 - Submitted to ISIS WG, presented in IETF 98th meeting
 - Two major comments received so far:
 - This work should be done in CCAMP WG
 - Moved to CCAMP
 - Submitted as draft-zhu-ccamp-flexe-link-advertisement
 - The Interface Switching Capability Descriptor (ISCD) TLV may not be the right TLV for carrying FlexE link attributes;
 - The ISCD is designed to describe the “Interface Switching Capability”, and this is not about FlexE Switching;
 - Define a new TLV to carry the FlexE link attributes (see follow-up slides)

Terminologies

- A FlexE interface
 - Is a logical interface and consists of 1 to 254 100GBASE-R Ethernet interfaces
 - Can be channelized into multiple sub-interfaces
- A FlexE sub-interface
 - Is a channelized sub-interface of an FlexE interface
- A FlexE link connects two FlexE interfaces
- A FlexE sub-link connects two FlexE sub-interfaces



FlexE Link Advertisement

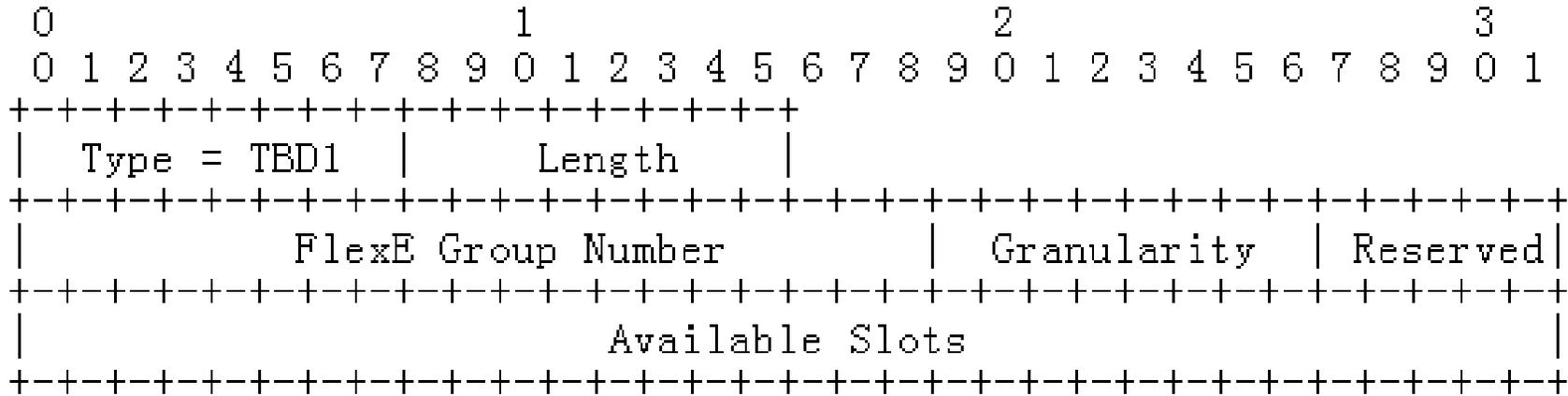


Figure 2: FlexE Interface sub-TLV

- FlexE Interface sub-TLV
 - A new sub-TLV to the extended IS reachability TLV [RFC5303]
 - Describing the attributes of a FlexE interface
 - Carrying the FlexE Group Number, Granularity, and Available Slots of a FlexE interface

FlexE Sub-link Advertisement

- A FlexE sub-link
 - Advertised as an normal link
 - Add a new flag to “Link attribute sub-TLV” [RFC5029] to indicate whether a link is a “Channelized FlexE sub-link”
 - The flag can be used by a controller or a node to compute a path that is required to over FlexE sub-links.

Next steps

- Extensions to OSPF
- Solicit more reviews and comments

Thanks