

Signaling & Routing Extension for Links with Variable Discrete Bandwidth

draft-long-ccamp-rsvp-te-availability-05

draft-long-ccamp-ospf-availability-extension-04

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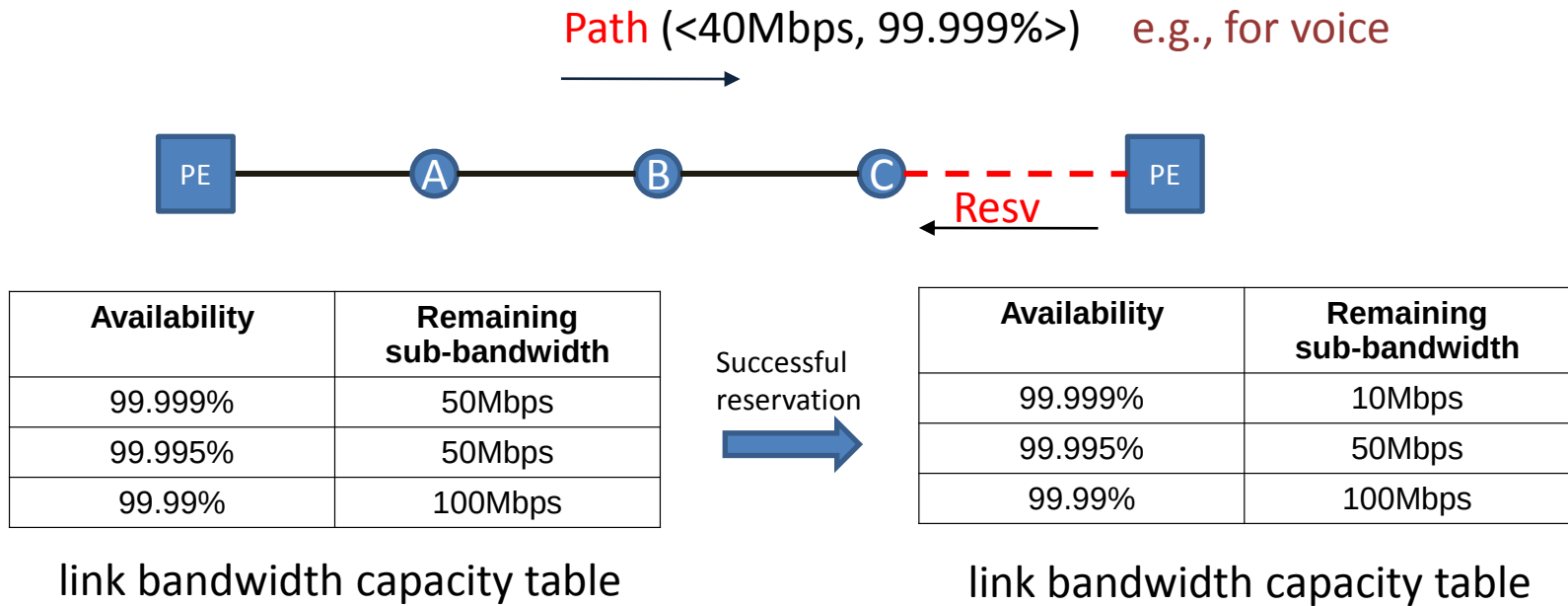
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Problem and Solution



- Packet switching network may pass through the links with variable discrete bandwidth
- Availability is used to describe the bandwidth for such links.
- Availability requirement is proposed to consider when setting up an LSP

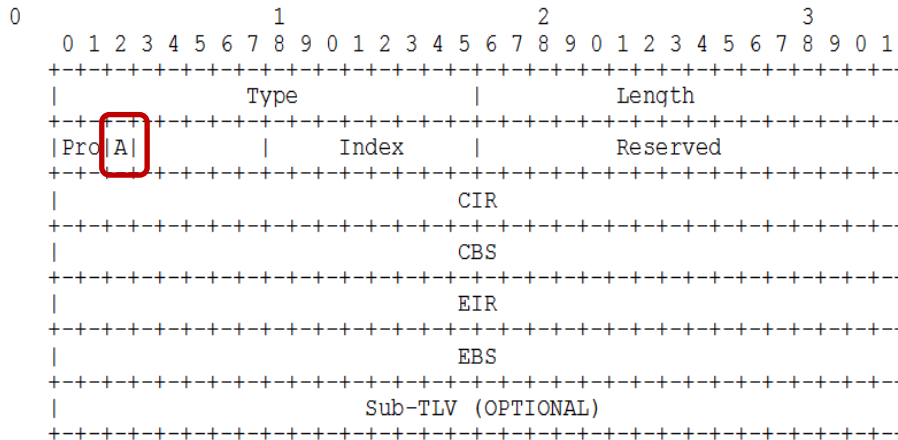
Signaling & Routing Extension

- “draft-long-ccamp-rsvp-te-availability-05” addresses the signaling extension
 - Define an Extended Ethernet Bandwidth Profile TLV
 - Define an availability sub-TLV to specify the availability requirement
- “draft-long-ccamp-ospf-availability-extension-04” addresses the routing extension
 - Define an availability information sub-TLV to notify the availability information for path calculation

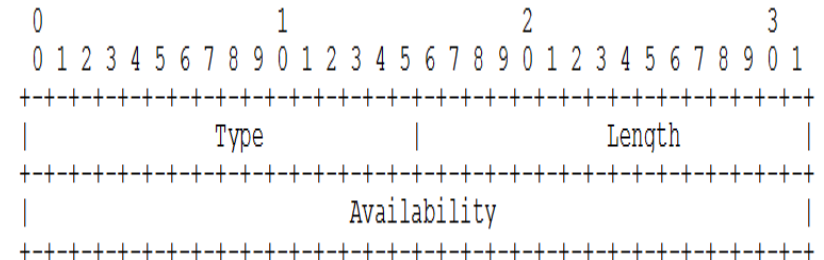
Changes

- Addressed comments received on the drafts
 - Signaling draft:
 - Clarification on scope: target all the links with variable discrete bandwidth, not only for microwave
 - Backward compatibility: define an Extended Ethernet Bandwidth Profile
 - Routing draft:
 - Switching capability: the switching capability of Availability sub-TLV is PSC-1/ PSC-2/ PSC-3/ PSC-4
- Editorial improvements

Extended Ethernet Bandwidth Profile



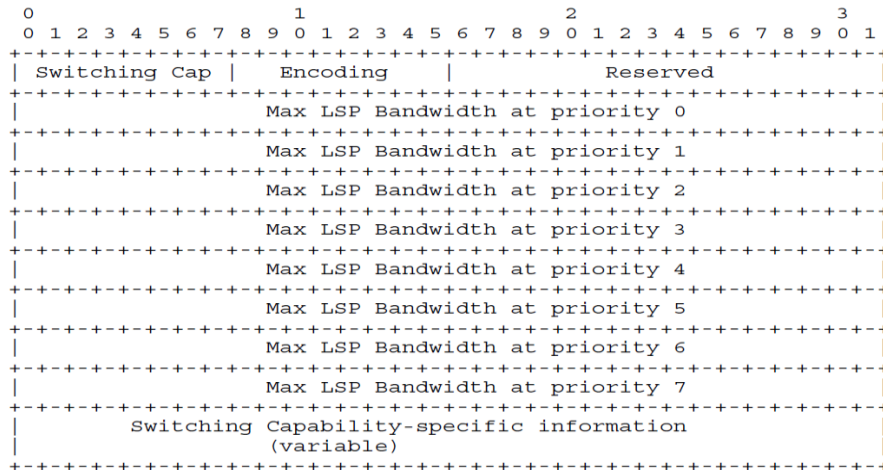
Extended Ethernet Bandwidth Profile



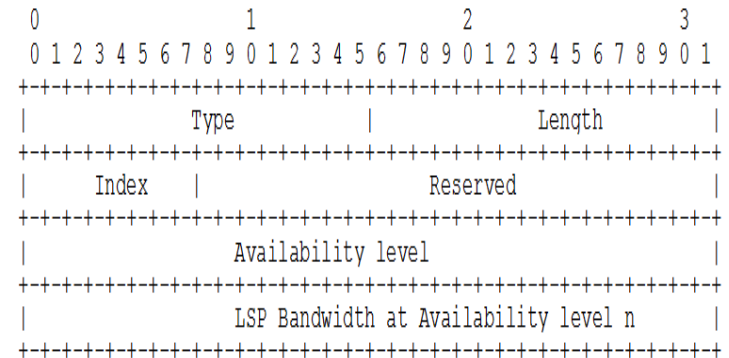
Availability requirement sub-TLV

- The Ethernet Bandwidth Profile(RFC6003) doesn't have the ability to carry sub-TLV
- An Extended Ethernet Bandwidth Profile is defined with a “AF” field and optional sub-TLVs
 - If the AF field is set to 1, Availability sub-TLV MUST be included in the Extended Ethernet Bandwidth Profile TLV.
 - If the AF field is set to value 0, an Availability sub-TLV SHOULD NOT be included

Switching capability



ISCD sub-TLV



Availability information sub-TLV

- The routing extension is to define a sub-TLV under ISCD sub-TLV of the link TLV (RFC4203).
- When the Switching Capability field is PSC-1, PSC-2, PSC-3, PSC-4, the Switching Capability specific information field MAY include one or more ISCD Availability sub-TLV(s).

Next step

- More comments and feedback from the group
- Request adoption as a WG document
 - WG adoption is the beginning of the process, not the end

Thanks