# Signaling & Routing Extension for Links with Variable Discrete Bandwidth

draft-long-ccamp-rsvp-te-availability-02 draft-long-ccamp-ospf-availability-extension-01

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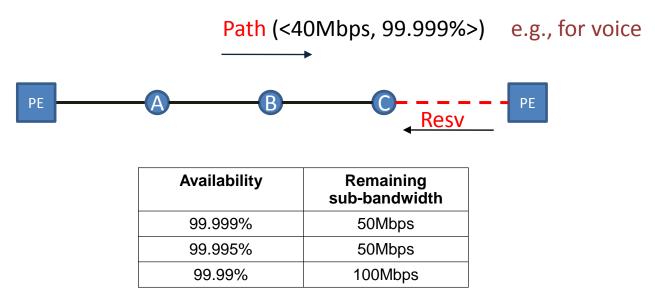
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#### **Problem and Solution**



link bandwidth capacity table

- 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-02" addresses the signaling extension
  - Define an availability flag in the "Profile" filed in bandwidth Profile TLV
  - Define an availability requirement sub-TLV to specify the availability requirement
- "draft-long-ccamp-ospf-availability-extension-01" addresses the routing extension
  - Define an availability information sub-TLV to notify the availability information for path calculation

### Changes

- Addressed comments received on the draft
  - Clarify what if a hop cannot support the availability sub-TLV
  - The drafts were updated to align with existing RFC, RFC6003 and RFC4203.
- Change the error code and the error value
  - error code "Admission Control Error"
  - error value "Requested Bandwidth Unavailable
- Fill in IANA consideration section
- Text improvements

#### **Open Discussion**

 There was comment on reusing the Multi-TSPEC draft to solve the problem in IETF 87

Sender	Rtr-1	Rtr-2 .	Rtr-N	Receive
   PATH	(with 3 TSPEC:			_
PESV	>    (with 3 FLOWS)	į į	//>        AMbps	į
KESV			// <	± 1
(Rtr-	2 cannot grant	t 12Mbps, l	out can grant	4Mbps)
:	ResvErr "ERR_1 		EEMPT" (trim //>	-
RESV	(with 2 FLOWS)			į
<	<			
i i	reservatio		shed at 4Mbps	s 

Multi-TSPEC

 The multi-TSPEC draft seems for different application; not applicable to this scenario

# Next step

- Solicit comments from the group
- Refine the drafts

**Thanks**