



To: Adrian Farrel and Kireeti Kompella, IETF CCAMP WG Co-Chairs
From: Jim Jones, OIF TC Chair
Copy: Alex Zinin and Bill Fenner, IETF Routing Area Directors
Subject: Follow up questions concerning GMPLS parameters

Dear Adrian and Kireeti,

OIF very much appreciates your help with our questions concerning GMPLS parameters in your response liaison of October 2005. After discussion of your liaison letter, we had a number of follow-up questions (issues are numbered as in our liaison of July 2005):

1. NCC and RCC field values for STS-3c/VC-4 connections

The revision to RFC 3946 proposed by CCAMP looks acceptable to us. We also agree that the receiving entity should be liberal in what it accepts, i.e., either 0 or 1 should be accepted at the receiver. We would ideally prefer that a single value be identified as the “recommended” value to use by the sender, to further remove any potential interoperability issue.

2. Setting of NVC for VCAT connections

It is our understanding from CCAMP’s response that NVC is always >0 for VCAT setup, e.g., if a single connection is being set up as part of a larger VCAT connection, the value NVC=1 would be used in the PATH message.

We note that there may be more complex scenarios that need to be considered, such as connections being set up initially without being part of a VCAT group and subsequently being added to a VCAT group. An ITU-T Liaison with related discussion has been received by us and was also copied to CCAMP.

3. Length of the Switching Capability Descriptor

We appreciate the verification from CCAMP.

4. Use of ADMIN_STATUS in the PATH message

We appreciate CCAMP’s advice.

5. Handling of multiple received ResvConf Request objects

It is our understanding from CCAMP’s response that a ResvConf Request object received in the Resv message should only trigger sending of the ResvConf message if there is a change in the Resv message, i.e., it is not a refresh message.

If in fact it is desirable to trigger a new ResvConf message without making a change to an existing session and associated connection, we believe that a possible mechanism for doing this is to first send a Resv message removing the ResvConf Request object and then send a subsequent Resv message with the ResvConf Request object reinserted, thus differentiating the request from a refresh.

We also noted the advice that the ADMIN_STATUS object offers a reliable mechanism as an alternative to ResvConf, however are unclear as to the procedure for triggering ADMIN_STATUS, for example, to determine when the originating endpoint is ready to receive signal during connection setup.

6. Symmetry of Refresh Reduction

We appreciate the clarification from CCAMP.

7. Sending of ACKs bundled with RSVP Hello

We appreciate the clarification from CCAMP. We did in fact mean “piggybacking” of ACKs with the Hello message, which we now understand is prohibited based on RFC 3209.

8. TSPEC format for Ethernet

We appreciate CCAMP’s interest in OIF requirements for Ethernet connection control. As a result of discussions within OIF and review of ITU-T G.8011 and MEF.6 and MEF.10, we have identified the following attributes as requiring support in signaling to specify the Ethernet bandwidth profile and request that CCAMP identify a mechanism for carrying this in the protocol, e.g., a new Sender_Tspec/Flowspec format for Ethernet :

CIR (Committed Information Rate): Maximum rate required under normal conditions, service level guaranteed.

CBS (Committed Burst Size): Limits the number of bytes for a burst while conforming to CIR.

EIR (Excess Information Rate): Maximum rate required under burst conditions, no guarantee of performance.

EBS (Excess Burst Size): Limits the number of bytes for a burst while conforming to EIR.

CF (Coupling Flag) and **CM** (Colour Mode): Give a choice for different modes of operation.

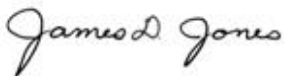
These are defined in the following references:

[1] Metro Ethernet Forum, MEF.10 - Ethernet Services Attributes Phase 1, Nov. 2004

[2] ITU-T Recommendation G.8011/Y.1307 (2004), Am. 1 (2005), “Ethernet Services Framework”.

We would like to also bring to CCAMP’s attention that MEF has defined as set of TLVs for these attributes for use in their E-LMI (Ethernet Link Management Interface) specification and these may be of use to CCAMP in its work.

Best regards,



Jim Jones
OIF Technical Committee Chair