Liaison Statement: In response to liaison statement to the IETF regarding Proposed IETF BFD WG work on Ethernet LAG

Submission 2012-09-25 Date: From: Bidirectional Forwarding Detection (Jeffrey Haas) IEEE 802.1 (tony@jeffree.co.uk) To: Cc: adrian@olddog.co.uk dromasca@avaya.com eric.gray@ericsson.com Response Contact: Technical jhaas@pfrc.org Contact: wardd@cisco.com Purpose: In response Referenced Liaison response to IETF regarding Proposed IETF BFD WG work on Ethernet LAG liaison: Attachments: (none) Body: Dear Tony, Thank you for your prompt response with regards to our liaison letter regarding BFD over Ethernet LAGs. The IETF BFD Working Group is happy to hear that IEEE is willing to work with us in specifying the interworking of BFD over Ethernet LAGs. In particular, your response seems to provide good guidance in how we may be able to draft a specification for BFD in this scenario. After further consideration of our proposal, the authors of the BFD over Ethernet LAG draft have largely decoupled the BFD functionality from LACP. When using LACP for a LAG, BFD will monitor the fact that the LAG member link has entered the Distributing state and use this transition to activate the BFD session. Furthermore, the BFD working group will not make any modifications to LACP, and this work will not be used to influence the LACP state machine. Our intent is that BFD solely influences the traffic load balancer, an implementation detail we believe is outside the scope of 802.1ax, to control whether traffic is sent on a LAG member link or not. With regard to your comment: "We must point out Link Aggregation is a (lower) Layer 2 construct, not a Layer 3 construct. It is not uncommon to connect a router to a bridge via an aggregated link. In this case, it is not clear how one uses а Layer 3 protocol to support the aggregation, or how to achieve interoperability when two different protocols are used (i.e. BFD and CFM) for the same purpose for the two connected systems." the Working Group even at this early stage is in agreement with you.

The initial Internet-Draft (which at this stage is still not a working group document) for BFD over Ethernet LAGs is currently intended to only address the case where there is no bridging involved, and intended to operate over LAG members that are each IP-capable links. Some discussion has occurred among the draft authors about BFD over Ethernet LAGs with bridges and we may pursue this scenario at a later date, in which case we may discuss the details with you further.

In the meantime, you can see the latest copy of the Internet-Draft at http://datatracker.ietf.org/doc/draft-mmm-bfd-on-lags/ Please be aware that the BFD working group is now considering adopting this document as formally part of its work.

We look forward to continuing to work with you on this problem space.

Regards, Jeffrey Haas, David Ward IETF BFD Co-Chairs