BFD MIB Extensions for MPLS and MPLS-TP Networks

draft-vkst-bfd-mpls-mib-01

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Motivation

- The existing BFD MIB [draft-ietf-bfd-mib-10] models the BFD protocol functionality to support neighbor monitoring in IP networks. It does not support the requirements for usage of BFD over MPLS and MPLS-TP networks

Introduction

- This draft defines extensions to the BFD-STD-MIB to configure BFD for MPLS and MPLS-TP paths
- Objects described in the MIB will support the functionalities for BFD over MPLS [RFC 5884] and Proactive CC-CV-RDI for MPLS-TP using BFD [draft-ietf-mpls-tp-cc-cv-rdi-06]
- The MIB defines the following
    - Extensions to BFD Session table
    - Extensions to BFD Session Performance table

BFD MIB Extensions

- BFD Session Extension Table
  - Objects defined to identify BFD session parameters catering to MPLS/ MPLS-TP networks
    - Session Role (Active/Passive)
    - Session Mode (CC/CV)
    - Timer Negotiation Flag – To enable/disable timer negotiation
  - Objects to associate the BFD session to the MPLS or MPLS-TP paths
    - Map Type – To specify the type of path being monitored (Non-TE LSP / TE LSP / PW / MEP)
    - Map pointer – Row pointer to associate the BFD session to the respective instance of the path being monitored
- BFD Session Performance Table Extensions
  - Performance counters for Mis-connectivity defects, Loss of Continuity defects, Remote Defect Indications

Update 01 version

- bfdSessExt <*> - bfdSessMpls<*>
  - BFD session extensions are specifically handled for MPLS & MPLS-TP networks in the MIB tables.

Next Steps

- Does the WG find this work useful and satisfying for the chartered items towards BFD MIB module for MPLS and MPLS-TP networks?
  - If so, we ask that the WG accept draft-vkst-bfd-mpls-mib-01 as WG document

- Additional comments/reviews are requested

Thank You