Extension to LMP (rfc4209) for Dense Wavelength Division Multiplexing (DWDM) Optical Line Systems

draft-dharinigert-ccamp-g-698-2-lmp-03.txt

draft-dharinigert-ccamp-opt-imp-lmp-01-txt

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Motivation & Problem statement

- ITU-T G.698.2 defined the “Application Codes” and their optical parameters to operate a DWDM system in a multi-vendor approach.
- LMP is protocol of choice to exchange optical link property between client and server devices
- NON-GOAL: LMP doesn’t replace routing or signalling

Motivation:

- Provide a standard way to exchange G.698.2 parameter ranges between client and server.
- Support client and server devices to access local and remote optical parameters
- Provide a simple way to share information about optical parameters across packet and optical devices

Contents

The two drafts are complementary and cover the previous draft-dharinigert-ccamp-g-698-2-lmp-02.txt. They are an extension of rfc4209 in support of ITU-T G.698.2 and ITU-T G.694.1 parameters.

Based on ccamp/ITU-T meeting in Orlando, drafts are split into a G698.2 part and an extended part:

- draft-dharinigert-ccamp-g-698-2-lmp-03.txt

  Includes standard application codes, Transceiver power and frequency (or bandwidth)

- draft-dharinigert-ccamp-opt-imp-lmp-01-txt

  Includes all optical parameters defined in G.698.2 and extensions such as status information.

How we split the document

- draft-dharinigert-ccamp-g-698-2-lmp-03.txt
  - addresses concerns of ITU-T representatives where the "application code" defined in G.698.2 + Transceiver power + the frequency is enough to determine a transceiver characteristics and to check the optical impairments

- draft-dharinigert-ccamp-opt-imp-lmp-01-txt
  - Provide parameter discovery capabilities for non-application code G.698.2
  - Enable additional parameter exchange for control purposes

Changes from IETF-86

- new document covering non-G.698.2:
  - draft-dharinigert-ccamp-opt-imp-lmp-01-txt
  - Containing al the G.698.2 optical parameters and PM except: G.698.2 application code, Power. Frequency

- Modified:
  - draft-dharinigert-ccamp-g-698-2-lmp-03.txt
  - Removed all the optical parameters (G.698.2) and PM except: application code, Power. frequency

Next Steps

- Refine the contents / extension and keep alignment with SNMP MIB structure
- Add flex spectrum parameters
- Keep alignment and interactions to ITU-T alive to realign the draft to new Recommendation editions

- Based on discussions in Orlando, authors consider drafts to be ready for WG documents:
  - draft-dharinigert-ccamp-opt-imp-lmp-01-txt
  - draft-dharinigert-ccamp-g-698-2-lmp-03.txt