Use Cases and Requirements for Layer Independent OAM Management in multi-layer environments

draft-king-opsawg-lime-multi-layer-oam-use-case

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Motivation & Requirements

- Motivation
  - Network OAM complicated by multiple technologies and layers
    - Lack of a common OAM management architecture
    - Models discussed:
      - Centralized control point responsible for the overall OAM management
      - Distributed, with delegation of layer-specific OAM management control points
- Requirements
  - Layer independent Operations, Maintenance & Administration Management (OAM)
    - Unified view of OAM information for each domain or layer
    - Correlation of OAM information, and detect faulty elements in the end-to-end service path
    - Consistent configuration, reporting, and presentation of OAM mechanisms
    - Security model requirements

Current Document Scope

- Use cases for layer independent OAM management and highlight the issues encountered with existing OAM protocols
  - *Multi-layer multi-region OAM Consolidation in the Management Plane*
  - *Multiple layer OAMs stitching in different parts of the network*
  - *Stitching OAM at layer requiring L4 to L7 service*
  - *Multi-Region Overlay OAM Stitching*
- Outline existing technologies to facilitate layer independent OAM management, including MEF work, ITU-T work, IETF related work
- Discuss how OAM might be configured via a unified management interface
- Establish security model requirements for layer independent OAM management

Next steps – More questions…

- Given the rapid development and acceptance of LIME do we still need a general use case I-D?
  - Are four use cases too many?
  - Should we focus on a single use case?
- Are these even the right use cases?
  - Where are the operator reviews and contributions?
- Other questions?