

# Connectionless OAM yang model

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# Status update since Buenos Aires

- Discussed it in last 2 interim meeting,
  - Edit session for two documents(CO and CL)
- Updated four versions:
  - 03->04, 04->05;
  - Change base on interim comments, Mailing List comments and Mahesh review.
- Defined Two Models to separate data from data retrieval
  - Connection Less OAM Model
  - Connection Less OAM Method Model

# Connection-less OAM model

- Test Point Address Group
  - Generic Test Point Address representation
- Tools
  - Describe Toolset for Fault detection and Isolation
- Oam Layers
  - In future, it can provide way to relate Oam Test Points for Connection Less
  - Default Level 0(same layer), so if relationship is not known it's not required to be implemented
  - Provide OAM Test points to relate to each other as same layer, client layer, and server layer.
- Test Point Locations Group
  - choice per location-type (ipv4-location-type, ipv6-location-type, etc.)
    - Container test-point-xx-location-list
      - Key xx-location
      - Test Point Location Information
        - » Tools
        - » Oam Layers
- Path Discovery Data
  - Generic grouping for path discovery data
- Continuity check data
  - Generic grouping for continuity check data

Changes since  
IETF95



# Connection Less OAM Method Model

- RPC
  - Continuity Check
    - Support Reachability Verification
      - Continuity Checks are used to verify that a destination is reachable, and are typically sent proactively, though they can be invoked on-demand as well.
  - Path Discovery / Fault localization
    - Identify nodes along the route to destination Test point

# Details of location-type based list

+--rw (location-type)?

+---:(ipv4-location-type)

| +--rw test-point-ipv4-location-list

| +--rw test-point-locations\* [ipv4-location]

| +--rw ipv4-location inet:ipv4-address

...

+---:(ipv6-location-type)

| +--rw test-point-ipv6-location-list

| +--rw test-point-locations\* [ipv6-location]

| +--rw ipv6-location inet:ipv6-address

...

+---:(mac-location-type)

+---:(tunnel-location-type)

..

..

Ipv4 Test point location list

Ipv4 Test point address

Ipv6 Test point location type

# ML discussion Recap

- connectionless OAM model should be limited to continuity check, reachability verification.
- The test-point and many other acronyms should add to Terminology section.
- Some parameters in tool may not appropriate, such as RFC5880, RFC5885, RFC5882, RFC6375, RFC6428.
- The description of the model provided in Section 3 doesn't map to the model hierarchy.
- The oper object should be made clear in the document.
- The IPv4-location and IPv6-location(cc-ipv4-sessions-statistics and cc-ipv6-sessions-statistics) should be collapsed into one.
- Break Model in Two modules Oam Data and Oam Data retrieval Methods
- Does it make sense to present oam-layer in this model?
- Whether it need a pair of source and destination addresses and TLV address?
- Is FEC really an attribute of TP-location?
- Does it really need to enumerate all of the tools?

Agree, and fix in 01 version

Agree, and fix in 04

Discussed in Interim

# ML discussion Recap

- Need to complete the “Reference” section
  - The “technology” leaf’s type should be an identity-ref rather than string.
  - What is the “level” ? And how to use it? It need to be explained clearly.
  - test-point-ipv4-location-list contains both an ipv4 and an ipv6 address. it need to be considered.
  - Long-lived oam session
  - Need to optimize the description statements
  - The terminology should consistent
- Agree, and will fix it
- Agree, and have fixed in 04, and 05
- Agree, and will fix it

# Next Step

- Fix the open issues raised on the list
- Discuss with Netmod use augment or mount the model
- Performance Monitoring to be added as separate draft – Discussed in Interim



