

# Lime connection-oriented update

## draft-ietf-lime-yang-oam-model-04

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# Major Changes Between 03-04

- **Connectionless OAM part were completely removed.**
  - Remove ping and traceroute from the Introduction and section 6.2.
  - Remove “[RFC792]” “[RFC4443]” “[RFC4656]” “[RFC5357]” from the Normative References and Information References.
  - Change “DSCP” to “EXP” in the priority leaf node description.
  - Change “ping echo request” to “continuity-check” in the count leaf node and packet-size leaf node description.
  - Change “traceroute” to “path-discovery” in the count leaf node description
- **Add section 7 to introduce the Connection-oriented OAM applicability.**

# Some details for CO applicability statements

## • Trill OAM

- The TRILL YANG module is augmenting connection oriented OAM module ([draft-ietf-trill-yang-pm](#) & [draft-ietf-trill-yang-oam](#) )
- Introduce these extensions according to the [draft-ietf-trill-yang-oam](#).
  - MD level:
    - **Technology Type Extension:** by adding **identity trill**.
  - MA level:
    - **Connectivity-Context Extension:** by adding a **connectivity-context-vlan case** and a **Fine Grain Label case** into connectivity-context.
  - MEP level:
    - **MEP address Extension:** by adding a **nickname case** into the MEP address choice node.
    - **ECMP Extension:** by adding a **flow-entropy-trill case** into the flow-entropy choice node.
  - RPC Extension:
    - the continuity-check and connectivity- verification RPC commands are extended with trill specific such as upstream-rbridge, next-hop-rbridge, etc.

## • MPLS TP OAM

- Introduce the extension method for MPLS TP OAM
  - MD level:
    - **Technology Type Extension and Sub Technology Type Extension:** by adding **identity mpls-tp** and **identity technology-sub-type**
    - **domain name** can be assigned to **area-ID** or the provider's **Autonomous System Number(ASN)**
  - MA level:
    - MA Name can be assigned to MEG LSP ID or MEG Section ID or MEG PW ID[RFC6370]
    - **Connectivity-Context Extension:** by adding a **case** for **connectivity-context-mpls**
  - MEP level:
    - **MEP-ID** can be assigned to **MPLS-TP LSP\_MEP\_ID**.
  - RPC Extension:
    - the continuity-check and connectivity- verification RPC commands are extended with MPLS-TP specific such as exp, receive-interval, detect-multiplier, etc.

# Some input from Greg

- Separate typedef and grouping defined in the CO model and put them into a new model
- In addition, define several new groupings such as MD-reference, MA-reference, MEP-reference, etc. in this new model

```
grouping maintenance-domain-reference {  
  description  
    "This grouping uniquely identifies a maintenance domain."  
  leaf maintenance-domain {  
    type leafref {  
      path "/goam:domains/goam:id";  
    }  
  }  
  description  
    "A reference to a specific Maintenance Domain."  
}
```

```
grouping maintenance-association-end-point-reference {  
  description  
    "This grouping uniquely identifies a maintenance association. It consists  
    of a maintenance-association-reference and a maintenance-association-end-point leafref";  
  uses maintenance-association-reference;  
  leaf maintenance-association-end-point {  
    type leafref {  
      path  
"/goam:domains[goam:id=current()/../domains]/goam:MAAs[goam:id=current()/../MAAs]/goam:MEP/goam:mep-identifier";  
    }  
  }  
  description  
    "A reference to a specific Maintenance association End Point."  
}
```

```
grouping maintenance-association-reference {  
  description  
    "This grouping uniquely identifies a maintenance association. It consists  
    of a maintenance-domain-reference and a maintenance-association leafref";  
  uses maintenance-domain-reference;  
  leaf maintenance-association {  
    type leafref {  
      path "/goam:domains[goam:id=current()/../domains]/goam:MAAs/goam:id";  
    }  
  }  
  description  
    "A reference to a specific Maintenance Association."  
}
```

# Next Step

- Issue a new update base on interim meeting discussion.
- Solicit more feedback and comments on the update
- Any other comments or suggestions?