

NVO3-OAM-Requirements

Huawei

Cisco

FT

KDDI

Dell

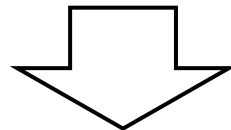
Brocade

- This document focuses on
 - the Fault Management ,
 - Performance Management and
 - to a limited extent the Configuration Management aspects.

Revisions (from '-01' to '-02')

- **Merge** original Section 5.3 — 5.7 into a single section named “Connectivity Performance Management”

- 5.3. Frame Loss
- 5.4. Frame Delay
- 5.5. Frame Delay Variation
- 5.6. Frame Throughput
- 5.7. Frame Discard



- 5.3. Connectivity Performance Management
 - 5.3.1. Frame Loss
 - 5.3.2. Frame Delay
 - 5.3.3. Frame Delay Variation
 - 5.3.4. Frame Throughput
 - 5.3.5. Frame Discard

- **Add two new Section**

- 5.4. Continuity Check**

- NVO3 OAM **MUST** provide functions that allow any arbitrary NV edge device to perform a Continuity Check to any other NV edge device.

- NVO3 OAM **MUST** provide functions that allow any arbitrary NV edge device to perform a Continuity Check to any other NV edge device using a path associated with a specified flow.

- NVO3 OAM **SHOULD** provide functions that allow any arbitrary NV edge device to perform a Continuity Check to any other NV edge device over any section of any selectable least-cost path.

- NVO3 OAM **SHOULD** provide the ability to perform a Continuity Check on sections of any selectable path within the network.

- 5.14. Live Traffic Monitoring**

- NVO3 OAM implementations **MAY** provide methods to utilize live traffic for troubleshooting and performance monitoring.

- **Add** new content to original Section “5.9 Data Path Forwarding”

5.9. Data Path Forwarding

Origin

R13) NVO3 OAM frames MUST be forwarded along the same path (i.e., links (including LAG members) and nodes) as the NVO3 data frames.

R14) NVO3 OAM frames MUST provide a mechanism to exercise/trace all data paths that result due to ECMP/LAG hops in the underlay network.

Additions

NVO3 OAM frame MUST be possible arranged to follow the path taken by a specific flow.

NVE MUST have the ability to identify frames that require OAM processing.

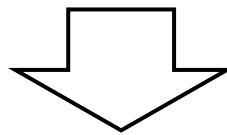
- **Rewrite Section — Application Independence**

5.14. Application Independence

R22) NVO3 OAM MUST [*** discuss -- is this too strong? ***] be independent of the application technologies and specific application OAM capabilities.

'-01'

[Comment -- ECM: Noticed Nicira implementation has a dedicated NVP manager node to play the role of FCAPS here. It is both application layer and OAM layer. May not meet this requirement. In reality, due to the nature of overlay network, very often, vendors are going to make everything all together to a dedicated manager node.]



5.11. Application Independence

'-02'

R22) NVO3 OAM MAY be independent of the application technologies and specific application OAM capabilities.

Discussion

- Comments?