

Update on L2/L3 VPN YANG Modules

[draft-ietf-opsawg-l3sm-l3nm](#)

[draft-ietf-opsawg-l2nm](#)

S. Barguil, O. Gonzalez de Dios , (Telefonica)
Q. Wu (Huawei), M. Boucadair (Orange), A. Aguado
(Nokia), V. Lopez, L. Oliva (Telefonica)D. Voyer (Bell
Canada), L. Munoz, M. Julian (Vodafone)
D. King (ODC), L. Jalil (Verizon), S. Litwosky (Cisco),
Italo Busi (Huawei). J. Ma (China Unicom),
Erez Segev (ECI Telecom)

OPSAWG meeting

20th November 2020, virtual IETF 109

<https://github.com/IETF-OPSAWG-WG/l3nm>

<https://github.com/IETF-OPSAWG-WG/l2nm>

draft-ietf-opsawg-l3sm-l3nm: Changes (1/2)

- Yang doctor's review comments addressed
 - Editorial issues: e.g., add NMDA compliance sentence, fix revision dates
 - Clarified use of appendix A (implementations) as per RFC6982
 - Cleanup of reusable groupings (only 1 grouping now in L3NM)
- The new YANG module uses the VPN common module
 - Relation with common module explained in the draft
- Added a section on Sample Uses of the L3NM Data Model
 - Enterprise Layer 3 VPN Services
 - Multi-Domain Resource Management
- VPN profiles explained
- Added “vpn-type” to Indicate the VPN service signaling type
- Multicast explanation updated

draft-ietf-opsawg-l3sm-l3nm: Changes (2/2)

- Explained Underlay Transport (TE, LDP)
- RD assignment/auto-assignment solved based on choice (defined in common module)

```
- | +--rw ie-profile* [ie-profile-id]
-   |   +--rw ie-profile-id    string
-   |   +--rw (rd-choice)?
-   |   |   +--:(directly-assigned)
-   |   |   |   +--rw rd?      rt-types:route-distinguisher
-   |   |   +--:(pool-assigned)
-   |   |   |   +--rw rd-pool-name? string
-   |   |   |   +--ro rd-assign?  rt-types:route-distinguisher
-   |   |   +--:(full-autoassigned)
-   |   |   |   +--rw auto?      empty
-   |   |   |   +--ro rd-assigned? rt-types:route-distinguisher
-   |   |   +--:(no-rd)
-   |   |   +--rw no-rd?        empty
```

draft-ietf-opsawg-l3sm-l3nm: Open Issues

- Editorial issues
 - Draft related : #198 Review trees in the document, [#197](#) update text on RD autoassignment)
 - In the yang module: Review the order inside the module for better readability ([#188](#)) and Review all BGP-related descriptions ([#183](#))
- Evaluate Service feasibility only request (now CRUD operations are supported) (issue [#196](#))
- Clean up service type and signaling option type and avoid content overlapping (issue [#195](#))
- Security: Review PE-CE security section (issue [#192](#))
- Static routes: additional static routes attributes (issue [#191](#))
- Decide whether we need to cover access to CSP (RFC8299) (issue [#189](#))
- Use documentation IPv4 addresses in the examples + Add IPv6 Examples ([#187](#))

draft-ietf-opsawg-l3sm-l3nm: Next Steps

- Current version has solved all issues raised in the mailing list and in github issue tracker
 - Including the common module issue
- Authors consider that current version is stable
- Almost ready for the WGLC (minor issues only, waiting for “vpn-common” and l2nm)
- Reviews and comments are welcomed

draft-ietf-opsawg-l2nm: Changes

- Yang module update: The new version uses the VPN common module groupings
 - The relation with common module is explained in the draft
 - Examples: admin-status, underlay transport and multicast groupings
- Editorial improvements:
 - Add subsections explaining VPN profiles, signaling options (service type), VPN network access, connection, etc.
 - Removed full tree (too long) and dissected into subtrees for better readability

draft-ietf-opsawg-l2nm: Open issues (1/2): EVPN Support

- Several GAPS detected to support the EVPN creation:
 - **Service Type:**
 - PBB-EVPN, VXLAN-EVPN, EVPN
 - Ethernet Segment Identifier (**ESI**)
 - **Specific service parameters:**
 - ingress-replication
 - arp-proxy
 - arp-suppression
 - nd-proxy
 - nd-suppression
 - flood-unknown-unicast-suppression
 - **PBB service parameter:**
 - RD, RT assignment (**re-used from the VPN common**)
 - as-value (**re-used from the VPN common**)
 - bridge-domain
 - mode-type
 - I,B identifiers

draft-ietf-opsawg-l2nm: Open issues (2/2)

- EVPN issues:
 - Issue [#25](#) EVPN: Missing validation for dot1q
 - Issue [#23](#) EVPN: t-ldp with static label
 - Issue [#22](#) EVPN: Add support for dot1q push/pop/translate options
 - Issue [#21](#) EVPN: ESI missing for multi-homed evpn-vpws
 - Issue [#20](#) EVPN: Control-word missing
 - Issue [#19](#) EVPN: Vpws-evpn IDs missing
- Issue [#5](#) how precedence-type is different from access-priority under availability question
- Add examples (issue [#11](#)) and section on Sample Uses of the L2NM Data Model
- Issue [#26](#) Node list: Limit elements for Point-to-point services

draft-ietf-opsawg-l2nm: Next Steps

- Complete EVPN support
- Solve all open issues in github
- Reviews and comments are welcome
- Next version with EVPN & Issues fixed will be hopefully suitable for last call