

# IETF 93 Routing Area Working Group High-Level Summary

Summaries and Status through IETF 93, July 19 - 24, 2015 in Prague

## BESS

- WG met Monday afternoon
- Stable audience (+100)
- Good meeting with meaningful presentations and constructive discussions on the mic - people applauded at the end of the session
- Other side of the coin: much more time requested (than we had booked) while very little traffic on the list since Dallas. Need to find ways for discussions to also happen on the list.
- IESG buffer nearly empty (1 doc remaining), but 4 to 5 documents will soon knock on the door.
- 2 RFC published, 2 documents Last Called, 2 documents adopted
- 18 WG documents, some ready for WG LC, and few individual I-Ds ready for adoption
  
- Do not hesitate asking us for the "how not to get a slot" slide

## BFD

- Not meeting at IETF 93
- S(eamless)-BFD drafts have completed WGLC and need document shepherd writeup. Being heavily collaborative documents involving a large portion of active WG population, Jeff as chair needs to do writeup. Jeff is behind.
- [RFC 5884](#)-bis had completed WGLC and was in a similar waiting on shepherd writeup. Several comments have recently arrived that need to be evaluated.
- BFD Yang design team has made excellent progress. Will adopt document after IETF 93. (Should have adopted earlier.)
- Work with no new progress:
  - BFD multipoint.
  - BFD stability.
- New Work, not currently in charter, mentioned in and out of BFD:
  - Using BFD with VRRP. (Multiple parties, including some discussion in rtgwg.)
  - BFD for VxLAN.
  - Optimizing BFD authentication. (Previously presented.)
- Potentially dead work:
  - BFD generic authentication and SHA-2 extensions.
  - BFD MPLS MIB.

## BIER

## CCAMP

- Meeting on Wednesday 1550 - 1720
- Recent RFCs
  - RFC 7579: General Network Element Constraint Encoding for GMPLS-Controlled Networks
  - RFC 7580: OSPF-TE Extensions for General Network Element Constraints
  - RFC 7581: Routing and Wavelength Assignment Information Encoding for Wavelength Switched Optical Networks
- Editor queue: [draft-ietf-ccamp-wson-signaling](#)

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- IESG Processing: draft-ietf-ccamp-flexi-grid-fwk, draft-ietf-ccamp-wson-signal-compatibility-ospf
- Completed WG LC: [draft-ietf-ccamp-flexigrid-lambda-label](#)
- Liaison: To ITU-T SG15 Sent 8th, June 2015, response on “LS on ITU-T SG15 OTNT standardization work plan to ccamp”
- Ongoing activities: flexi grid encoding, otn updates, black-links/G.6982, discrete bandwidth extensions, impairment aware WSON.

## **I2RS**

- I2RS topology models have initial input (Filter-based RIB, RIB, and Topology model)
- NETCONF and I2RS are finalizing the requirements for I2RS.
- I2RS security is doing a presentation this afternoon.
- I2RS is meeting Tuesday (7/21)17:40-18:40 and Thursday (7/23)17:40-19:10

## **IDR**

- Met Monday and will meet again Friday
- error-handling, as0 in RFC Ed queue now
- add-paths sent to IESG, but waiting for other add-paths drafts to proceed
- flowspec-redirect-rt-bis scheduled for upcoming telechat
- more to come soon!

## **ISIS**

- Met on Monday 15:20 - 17:20
- New I-Ds
  - [draft-decraene-isis-lsp-lifetime-problem-statement-00](#)
  - [draft-franke-isis-over-ipv6-00](#)
  - [draft-lamparter-isis-p2mp-00](#)
  - [draft-ginsberg-isis-l2bundles-00](#)
- New WG Docs
  - [draft-ietf-isis-prefix-attributes-01](#)
  - [draft-ietf-isis-mpls-elc-00](#)
  - [draft-ietf-isis-pcr-01](#)
- Updated WG Docs
  - [draft-ietf-isis-route-preference-01](#)
  - [draft-ietf-isis-node-admin-tag-02](#)
  - [draft-ietf-isis-segment-routing-extensions-05](#)
  - [draft-ietf-isis-yang-isis-cfg-04](#)
- Existing WG Docs
  - [draft-ietf-isis-mrt-00](#)
  - [draft-ietf-isis-sbfd-discriminator-02](#)
- WG Last Call
  - [draft-ietf-isis-te-metric-extensions-07](#)
- Submitted to IESG
  - [draft-ietf-isis-extended-sequence-no-tlv-06](#)

## **L2TPEXT**

- L2TPEXT did not meet in Prague.
- Current document status is:
  - [draft-ietf-l2tpext-keyed-ipv6-tunnel](#) -> Publication Requested to the AD
  - [draft-sun-l2tpext-keyed-v6-tunnel-yang](#) -> WG Adoption finished, accepted
  - [draft-gp-l2tpext-sbfd-discriminator](#) -> WG Adoption finished, accepted

- [draft-gp-l2tpext-sbfd-discriminator](#) and [draft-gp-pals-seamless-vcv](#) presented in PALS

## LISP

- Meeting on Monday 1520 - 1720
- Review draft status and blocking items
  - Introduction, Impact, Threats
- review pending WG items - LCAF and Crypto
- new documents on hybrid access and multi-tuple EIDs
- discuss rechartering
  - should we recharter
  - if so with what focus

## MANET

## MPLS

- Two meeting is Prague Wednesday July 22 2015, 17:40-19:40 Thursday July 23 2015, 15:20-17:20 (CEST)
- Six new RFCs
- 16 Active wg documents (but will increase a bit when the cut-off is lifted)
  - 4 of them submitted to IESG for publication
  - 1 draft returned to the working group for more work.

## NVO3

- Meets on Wednesday at 3:50pm
  - Plan to discuss the path forward for Control Plane and Management Milestones
  - Will ask for implementation reports, interop testing of Data Plane drafts
- Since IETF-92:
  - Adopted three new WG drafts covering data plane encapsulations
    - <http://datatracker.ietf.org/doc/draft-ietf-nvo3-geneve/>
    - <http://datatracker.ietf.org/doc/draft-ietf-nvo3-gue/>
    - <http://datatracker.ietf.org/doc/draft-ietf-nvo3-vxlan-gpe/>
  - Adopted one new WG draft covering the multicast framework
    - <http://datatracker.ietf.org/doc/draft-ietf-nvo3-mcast-framework/>
- Two interim meetings since IETF 92
  - OAM and Control plane
  - Plan to have more before the next IETF.

## OSPF

- Meeting on Wednesday July 22 2015, 17:40 - 19:40
- Recent RFCs:
  - [RFC 7474](#) – Security Extension for OSPFv2 When Using Manual Key Management
  - [RFC 7503](#) – OSPFv3 Auto-configuration
- Post WG LC - Publication Requested
  - OSPFv2 Prefix/Link? Attributes - [draft-ietf-ospf-prefix-link-attr-06](#)
  - RFC 4960BIS – [draft-ietf-ospf-rfc4970bis-00](#)
- Ongong activities:
  - YANG
    - OSPF Model
      - Multi-vendor design team consensus

- Aligned with Rtg-CFG, key-chain, and Segment Routing models
  - Local RIB added to Operational state
  - Need agreement on Operational state location
- Segment Routing
  - Draft Update this IETF - Hope to WG last call by end of year (may need one more IETF)
- Lots of drafts making use of OSPFv2 Prefix/Link? Attributes - 2-part metrics, seamless BFD, entropy labels, maximally redundant trees, and BIER extensions.
- Other drafts dependent on RFC4970Bis including Routable Addresses and node admin tags.
- OSPFv3 Extended LSAs needs implementations.
- Action items
  - Adoption of OSPFv3
    - Advance OSPFv3 over IPv4
    - Alternate solution for OSPFv3 Extension if Extended LSAs not implemented.

## PALS

- Meeting on Thursday at 17:40
- Drafts to be discussed for the most part management related (OAM and YANG)
- No new RFCs or drafts in the RFC Editor's queue
- However, we currently have five drafts in IESG review (two awaiting new revisions)
- Plus more coming soon:
  - One that has completed WG LC, waiting for shepherd review and writeup
  - Two that have completed WG LC and are awaiting new revisions, then will be submitted
  - One currently in WG last call
  - At least two more very close to WG last call

## PCE

- Meeting on Thursday, 1:00-3:00 PM
- No new RFC since Dallas
- A few documents pending chairs' review (e.g., stateful PCE suite)
- A couple of I-Ds ready for WG LC
- The agenda includes:
  - SR and early codepoint allocation
  - Yang initiative
  - Some proposed new PCEP extensions (e.g., association, binding labels/SID, SFC...)
  - Stateful control

## PIM

## ROLL

IETF 93 - ROLL Meeting (1 hour)

- Recharter: two work items
  - Details about when to use [RFC 6553](#), [RFC 6554](#), and IPv6-in-IPv6 encapsulation.
  - [draft-robles-roll-useofrplinfo/](#)
  - Looking for comments -> we got some
  - TBD: Doc Shepherd, and person in charge of making last call
- Details about how to compress [RFC 6553](#), [RFC 6554](#), and IP headers in the 6LoWPAN adaptation layer context
  - ToDo? (There are already some proposals, which they are going to be modified when the first item is done.)

- Draft's Status
  - \*[draft-ietf-roll-admin-local-policy](#) → RFC Ed Queue
  - \*[draft-ietf-roll-applicability-ami](#) → In WG Last Call: Some comments are being addressed
  - \*[draft-ietf-roll-applicability-home-building](#) → New version submitted addressing LC Comments
  - \*[draft-ietf-roll-mpl-parameter-configuration](#) → In the IESG, issues to be addressed as LC Comments.
  - \*[draft-ietf-roll-trickle-mcast](#) → RFC Editor
- Liaison on concerns on the deprecation of dispatch type in 6LoWPAN and its header compression mechanism to roll --> Deadline 24th July

\*New Drafts:

- \*[draft-thubert-roll-dao-projection](#): To be presented in IETF 93
- \*[draft-tan-roll-clustering-00](#): It was not announced in ML. We are trying to contact the authors

## **RTGWG**

- Two meeting in Prague:
  - Monday July 20 2015, 9:00-11:30
  - Wednesday July 22 2015, 9:00-11:30
- 1 new RFC
  - [RFC 7490](#)
- Total 10 active wg documents
  - 4 new wg documents
- SPF Back-off algorithm for link state IGPs
  - [draft-ietf-rtgwg-backoff-algo-01](#)
- Link State protocols SPF trigger and delay algorithm impact on IGP micro-loops
  - [draft-ietf-rtgwg-spf-uloop-pb-statement-01](#)
- Encapsulation Considerations
  - [draft-ietf-rtgwg-dt-encap-00](#)
- 2 submitted to IESG for publication
- Multicast only Fast Re-Route
  - [draft-ietf-rtgwg-mofrr-06](#) - AUTH48
- Operational management of Loop Free Alternates
  - [draft-ietf-rtgwg-lfa-manageability-11](#) - MISSREF

## **SFC**

## **SIDR**

- Meeting on Friday July 24 0900-1130
- status: ten new draft versions

- two minor refreshes
  - several final versions in response to wglc comments
  - one request for publication (and maybe a second by Friday)
  - two lengthy reviews after wglc
- new drafts proposed to the working group
  - RPKI actions necessary to handle transfer of address blocks
  - possible adverse actions by a certificate authority
- we'll discuss implementation experience of the new RPKI transport protocol
- we'll discuss [draft-sriram-idr-route-leak-detection-mitigation-01](#)
  - accepted by IDR working group

## SPRING

- status:
  - WG docs: 2 new WG drafts (Segment Routing YANG, SPRING OAM Requirements)
  - Nearly for IESG: Problem Statement
  - Adoption call for 4 documents: starting today for 1 month
  - WG Last Call for Architecture: starting today for 1 month (cc IS-IS, OSPF, MPLS, 6MAN)
  - Updating Milestones.

## TEAS

- Meeting on Wednesday July 22 2015, 13:00 - 15:30
- Recent RFCs:
  - [RFC7570](#): Label Switched Path Attribute in the Explicit Route Object
  - [RFC7551](#): RSVP-TE Extensions for Associated Bidirectional Label Switched Paths (LSPs)
  - [RFC7571](#): GMPLS RSVP-TE Extensions for Lock Instruct and Loopback
- Post WG LC - Publication Requested
  - [draft-ietf-teas-fast-lsps-requirements](#)
  - [draft-ietf-teas-rsvp-te-srlg-collect](#)
  - [draft-ietf-teas-te-express-path](#)
- Ongoing activities:
  - YANG
    - TE Topology Model (WG Adopted)
      - Co-ordination with I2RS topology design teams
        - Informal <I2RS-TEAS topology coordination> meeting held on Monday
        - Agreements:
          - TE-Topology Model will augment I2RS base topology model
          - L1/L0 Models will augment TE-Topology Model (CCAMP)
          - Topological elements in L3/L2 topologies will have references to corresponding topological elements in the TE Topology
      - RSVP/TE Models
        - Co-ordination with Openconfig team
  - ACTN

## TRILL

- TRILL is meeting on Thursday
- TRILL has focused on OAM, Active-active support, and Directory support
- ([draft-yizhou-trill-traceable-oam](#), TRILL over IP)
- TRILL is moving on to multi-level and multi-protocol work.
- ([draft-perlman-trill-rbridge-multilevel](#), [draft-zhang-trill-multilevel-single-nickname](#))
- ([draft-eastlake-trill-multi-topology](#))

- TRILL is meeting on 7/23 15:20-17:20