Administrivia
- Status: 3 new RFC published, 2 RFC missref, 4 IESG review
  - MartinV: Inter-Subnet-Forwarding requires Bum-procedures, igmp-mld proxy.
- 6 documents in Shepherds review
  - From BESS-Service-Chaining review: document far from being published ;
  - Proposal is to park document
  - MartinV: problems date back. No requirement to proceed, may stay in WGLC until work resumed by someone
  - AlSa: none of main authors are present; StLi: contacted many times via email; MaVi: editors changed regularly.
- 6 documents ready for WGLC
- 2 new WG documents: waiting for authors to publish as WG draft, remain as individual
- Many documents ready for WG adopt: authors must advise if documents not ready for adopt
- WG Milestones: late on Yang model milestones, NSH close, VPLS-multihoming should be OK.
- IPSec sidebar (chairs) occurred in June.
  - Be present in IDR for comments on

SRv6 BGP based overlay (Gaurav Dawra - LinkedIn)
- Presented before (ietf98) + EVPN services in IDR + BESS at ietf104
- Document matured, no significant changes to document, multiple customer deployments globally
- BGP packing issue addressed; +Jorge, +Ali
- BGP Packing
  - Issue: with sub-optimal packing
  - Introduced flexibility of adv Func & Arg , Sub-sub-TLV
  - Part of SID shifted into Label field
- Implemenation status: many globally, multi-vendors, multiple platforms/forwarding planes
  - (draft iexists in Spring re: deployments)
- ASajassi: most concerns addressed, draft in good shape. Ready to progress in WG.
- StLi (individual): why not use Tunnel-Encaps to singal doing SRv6
  - Trying to remain consistant with SR signaling

- Would like to see Tunnel-Encaps to specify SRv6
- Packing: don't like that there are 2 ways to do same thing. Consider single one ?
- KetanT: by definition: SID flexible for Fct/Arg, **should** fit in label field. But don't want to remove that option.
- ASajassi: having both packing methods, second one introduces very little overhead.
- Poll: read & ready ?

Unequal-LB (Ali Sajassi - Cisco)

- Short update on draft
- Unequal access links to multi-homing PEs: weighted DF election
- Section 4.4 added to optimise Weighted DF election in HRW: reference that draft
- Good ??? , pending implementation
  - StLik: roadmap of implementation? Timing? (implementation policy)
  - AlSa: Cisco will collect & report back to mailing list.
- JeffT: Bandwidth extended community is non-transitive so cannot be used for eBGP
  - Ali AI to follow-up
  - Draft for BandW extcomm not moving forward
- Jeff Haas: JNPR's implementation is transitive
  - Use what is appropriate for your solution, but be aware there may be interop issues
- V
- V

Extended mobility for EVPN-IRB (Ali Sajassi - Cisco)

- Has been implemented
- RFC7432 assumes 1-1 mapping for Host-MAC binding
- Draft describes situations where this may not be the case
  - Mobility procedures for adv. Evpn-irb
  - Second slide
- Updates since last presentation
  - (from comments) race-condition captured in draft & remoedy
- Ready for WGLC

LSP Ping (Parag Jain – Cisco)

- Presented ietf Prague 2015, Montreal 2018
- Rev-00 published
- Last major revision in rev-5, sub-tlvs changed & re-arranged but no significant changes since then
- Stable for over 1yr.
- JRabadan/Nok
  - TLVs: E-Tag id before Etherseg identifier vs 7432 other way around ?
  - PJain: just for alignment purposes- even though based on draft, currently based on word-alignment
  - PJain: can follow 7432 order since no-implementations
  - JRabadan: missing mcast
- LABu: Any implementations?

EVPN control plane for Geneve (Sami Boutros – VMWare)
- First presented ietf99 / 2017
- GNV Adopted by NVO as generic encapsulation
  - Geneve tunnel-encap provided
- New Ethernet option TLV adding BUM and Leaf bits
- Sue Hares to chairs: how does this relate to last conversation re: tunnel encaps?
  - BESS or IDR; Tunnel-Encap draft is closed, being finished
  - Geneve & BIER: must be careful on basic functionality.
  - Comment to this draft specifically: Geneve Underlay/Overlay can be numbered 1,2,3 ?
- ASajassi: Tunnel-Encap draft is being published, don't want to add more to it or ensure in-sync.
  - Here: define RFC5512 ExtComm
  - Everything else comes from EVPN routes but not using Tunnel-Encap here.
  - Ali: Geneve is dataplane encapsulation, BGP is control plane- only 2.
- Ali / Sami: Compliant with 5512, and this is also compliant with Tunnel-Encap draft
  - Geneve just another IANA type for what's already defined

Fast DF Recovery (Patrice Brissette – Cisco)
- Quick update (presented a while ago)
- RFC7432 recovery for link or node: 3s peering timer -> Recovery approx.

3s.
- ◦ 2 options being proposed here
- Handshake: message to PEs (new RT-12 and RT-13)
    - ◦ Looking to optimise for 2-PE
- NTP-Sync: advertise carving time;
- Seeking WG LC

MVPN Source Discovery Interop (Jeffrey Zhang – Juniper)
- In WG LC but considering adding RFC8364 PIM Flooding Mech and Source Discovery (PFM-SD) section
    - ◦ Uses PFM to flood (s,g) and join(s,g)
- Applicability/interop with MVPN: trigger MVPN SA routes also from PFM-SD (in addition to MSDP & PIM register)
- Seeking WG comments on PFM-SD: option#1: rename & inlude PFM-SD or option#2: new draft to cover PFM-SD.

- Acee Lindem/Cisco: how widely deployed id PFM-SD ?
    - ◦ StigVenaas/Cisco: exist implementations but not sure how many deployments
- Rishabh Parekh/Cisco: using same extcomm to carry SA as well as originator IP ?
- Not a problem even if using same extcomm: MSPD does carry RP address, other is address of FirstHop router
- Kesavan Thiru/Cisco: opinion = decouple into a new draft (option#2)
    - ◦ Could learn SA today, tomorrow could be new mechanism to learn Mcast source.
- StigVenaas/Cisco: can envision use-cases where one site using PFM-SD and other using ?? and useful to have BGP bridge those.
    - ◦ One draft or not, useful that it be same route to announce how source is discovered.
- StLitk: Understand Implementations but not many deployments; Opinion is #2 decouple so we can finish SA interopation, and tbh if there are few/little deployments maybe wait for interested customer for this.

MCast EVPN Signaled L3VPN (Jeffrey Zhang – Juniper)

- L3VPNs:
    - ◦ Uni RFC2547/4364

- ◦ Mcast: RFC6513, RFC6514
- L3VPNs using EVPN Safi (RT-5) evpn-prefix-advertisement
- How to do Multicast in EVPN SAFI is ourtside of scope of that draft

- Option#1: Optimised Inter-Subnet Multicast: SupplementalBD stretched across DCIs
- Option#2: RFC6514 procedures
  - ◦ ASajassi/Cisco: Captured also in EVPN-MVPN interop draft, there is some overlap.
    - ▪ Pure L3 vs. L2/L3 mixed
  - ◦ JRabadan/Nokia: nice draft b/c clarifies solutions MCast for EVPN.
    - ▪ Option#1 and #2 specified somewhere else, Option#3 is the only new thing
- Option#3: adapt RFC6514 procedures, using EVPN SAFI (instead of
  - ◦ Cross-reference of 6514 vs. EVPN route types: only missing one is MVPN Type 5 Source Active -> no equivalent in EVPN.
- Seeking comments. Intro = scenarios/options. Not seeking adoption yet, will perfect & iterate.

NH encoding discussion – Open discussion
- Continued from mailing alias: RFC5549 IPV4 over IPV6 encoding does not follow NH encoding of RFC4364 IPV4
- RD is NLRI property (uniqueness) not a NH property
- IPv6 in NH: Addr and LinkLocal: which one to use?

Do all implementations use NH length to parse NH ?

Stephane/Orange presenting summary table
- Jeff Haas/Juniper: this comes up with every new implementation. Justification in 2868 not being followed.
- #1 item causing issues with new implementations.

Fix stt in specification ? JHaas: how to progress knowing this is an issue?
- Cant change behaviour existing documents
- After survey complete – survey useful to do.

Being done in IDR? SHares/ : IDR can do the survey, first step to see if there's something to do

JeffTanstu/Arrcus: really good information to know.