Routing Area Open Meeting
London, March 2014

Area Directors

Stewart Bryant <stbryant@cisco.com>

Adrian Farrel <adrian@olddog.co.uk>

Alia Atlas <akatlas@gmail.com>

Abbreviated Note Well

Note on Note Well

The IESG has made various proposals to change the abbreviated Note Well. This remains work in progress and you should continue to use the old version (the one on the web site)

Note Well

This summary is only meant to point you in the right direction, and doesn't have all the nuances. The IETF's IPR Policy is set forth in BCP 79; please read it carefully.

The brief summary:

•By participating with the IETF, you agree to follow IETF processes.

•If you are aware that a contribution of yours (something you write, say, or discuss in any IETF context) is covered by patents or patent applications, you need to disclose that fact.

•You understand that meetings might be recorded, broadcast, and publicly archived.

For further information: Talk to a chair, ask an Area Director, or review BCP 9 (on the Internet Standards Process), BCP 25 (on the Working Group processes), BCP 78 (on the IETF Trust), and BCP 79 (on Intellectual Property Rights in the IETF)

Note Also…

- Please state your name clearly before speaking at the microphone
- Audio streams and jabber
  - http://tools.ietf.org/agenda/89/
  - This meeting at rtgarea@jabber.ietf.org
- Routing Area mailing list
  - routing-discussion@ietf.org
- Routing Area wiki
  - http://trac.tools.ietf.org/area/rtg/trac/wiki/WikiStart
  - What else would you like to see on it
- Routing Directorate
  - http://www.ietf.org/iesg/directorate/routing.html
- Blue Sheets
  - Are now scanned and published
- Minutes
  - Chairs please send your notes to Deborah

Thank You Stewart

- I can't begin to say how great it has been working with Stewart

- He really gets routing and he really cares about the IETF

- Alia has an incredibly hard act to follow

Photo credit:
www.cookingforengineers.com

Today's Agenda

- Administrivia
- Chair swaps
- Working Group Reports
- Open Discussion / Any Other Business
- ….

- KARP Working Group meeting
  - AKM for routing protocols

Recent Changes

- **Chair swaps**
  - Alia stepping down…
    - I2RS Jeff Haas
    - RTGWG Jeff Tantsura
  - Other swaps
    - ROLL
      - JP Vasseur stepped down
      - Ines Robles steps in

- **SFC WG formally created**

Working Group Reports

- BFD
- CCAMP *
- FORCES *
- IDR
- I2RS
- IS-IS *
- KARP
- L2VPN
- L3VPN
- MANET
- MPLS

- NVO3
- OSPF
- PCE *
- PIM
- PWE3 *
- ROLL *
- RTGWG
- SFC
- SIDR *
- SPRING

- BFD

CCAMP 89 Status Update

- 2 sessions scheduled – Thursday & Friday
  - 0900-1130 Morning Session I, Room: Blenheim
  - 1150-1320 Afternoon Session I, Room: Sovereign
- Highlights:
  - WSON documents post LC'ed
    - 5 of 6 documents ready to do
  - LSP Diversity WG last call resulted in *no* consensus
    - Authors and WG discussing this week
  - Topics on agenda:
    - Inter-TE domain, Support for Flexible Grid, impairments, …

IETF-89 ForCES Status Update

- We did not have a meeting this time
- RFC 7121 release closes the previous charter
- We are behind schedule by about 4 months
- Main core documents:
  - Protocol draft needs a republishing before WG LC
  - Model draft is ready to go WG LC
  - Parallelization draft adopted as WG document
  - Subsidiary management draft 00 released
  - Inter-FE draft still needs some more discussions

I2RS

- behind on most charter items.

- core use case documents reasonably mature, progressing to wg docs.

- progressing architecture and problem statement to last call.

- moving towards selection of modeling language & protocol, goal of selection within the next month.

IDR Document status
IETF 89

Susan Hares and John Scudder

Idr chairs

IDR session 3/6/14 [1300-1500]

- **Where: Blenheim (in basement)**
- **Updates for New Routing**
  - Revised Error Handling for BGP UPDATE Messages -06
  - BGP Link-State Information Distribution Implementation Report
  - Traffic Engineering database dissemination for Hierarchical PCE scenarios
  - BGP Link-State extensions for Segment Routing

  Operational Focused AD
  - Autonomous System (AS) Migration Features and Their Effects on the BGP AS_PATH Attribute
  - Performance-based BGP Routing Mechanism
  - IPv6 BGP Identifier Capability for BGP-4

  Add Paths using BGP
  - ADD-PATH limit capability
  - ADD-PATH for Route Servers

Stats of documents

New Documents:

- draft-ietf-idr-te-lsp-distribution-00
- draft-ietf-idr-te-pm-bgp-00
- draft-ietf-idr-mdcs-00
- draft-ietf-idr-mdrs-00
- draft-ietf-idr-as-migration-00

- Pass WG LC
  - draft-ietf-idr-aigp
  - draft-ietf-idr-bgp-enhanced-route-refresh
  - draft-ietf-idr-last-as-reservation (BCP/Proposed)
  - Draft-ietf-idr-ls-distribution (for Early allocation)
- WG LC planned after IETF 89
  - draft-ietf-idr-ls WG LC
  - draft-as-migration WG LC

IS-IS WG Update

IETF-89, London

Chris Hopps chopps@rawdofmt.org

Hannes Gredler hannes@juniper.net

New RFC

- **RFC 7142**
  - **Reclassification of RFC 1142 to Historic**

WG Docs

- **Active**
  - **draft-ietf-isis-extended-sequence-no-tlv-02**
  - draft-ietf-isis-te-metric-extensions-01
  - draft-ietf-isis-udl-01

- **WG Last Call**
  - draft-ietf-isis-fs-lsp-01

- **Submitted for Publication**
  - draft-ietf-isis-rfc6326bis-01

Active IDs

- ## New
  - draft-chen-isis-source-label-distribution-00
  - **draft-xu-isis-global-label-sid-adv-00**
  - **draft-xu-isis-mpls-elc-00**

- ## Existing IDs
  - **draft-li-isis-mpls-multi-topology-00**
  - draft-li-isis-mpls-vnode-vlink-00
  - draft-li-isis-mrt-00

- ## Updated IDs
  - **draft-liu-isis-auto-conf-01**
  - draft-previdi-isis-segment-routing-extensions-05
  - draft-psarkar-isis-node-admin-tag-01
  - draft-yong-isis-ext-4-distribution-tree-01

Issues

- **Catch-22 in SPRING -> Protocol WGs**
  - 3 proposals for label in IGP advertisement
  - Would like to call for adoption and work on **one** standard.

- KARP

L2VPN Status Update – IETF89

- 3 New RFCs:
  - RFC 7041 (was draft-ietf-l2vpn-pbb-vpls-pe-model)
  - RFC 7080 (was draft-ietf-l2vpn-pbb-vpls-interop)
  - RFC 7117 (was draft-ietf-l2vpn-vpls-mcast)
- 3 in RFC Editor Queue
- 3 more with IESG
- 4 more VPLS drafts, 2 E-Tree, 2 "miscellaneous"
- Remainder of work is E-VPN (4 WG IDs so far)
  - May adopt a few more IDs
- May re-charter to add YANG models
  - VPWS, VPLS, E-VPN…

L3VPN

- Since last IETF:
  - one draft went through IESG to RFC Ed queue
  - 2 drafts recently WG last call'd and 3 more will be soon
  - two drafts recently adopted, and 3 active ones
- We met yesterday
  - a (surprisingly) quite short meeting
- We are currently discussing draft adoption for work that also relate to other working groups (mboned, l2vpn)

- MANET

MPLS WG Status

- **5 New RFCs**
- **5 WG drafts in RFC-Editor's queue** (+5/-5 since last meeting)
- **8 WG drafts in IESG processing** (+8/-7 since last meeting)
- **17 other WG drafts** (+4/-9 since last meeting incl. -2 expired)
  - One suggests MPLS labels in ARP
- **Other WG Business**
  - Chair and AD presentations on
    - Criteria for getting agenda slots
    - MPLS WG processes
    - How to write a good RFC
  - TSVAREA
    - Since we have draft-ietf-mpls-in-udp-05 chairs alerted WG of TSVAREA session about tunneling foo over UDP
    - Thursday, March 6, 09:00 am to 11:30 am
  - MIBs
    - Benoit Claise will explain the IESG statement on R/W MIBs
    - Followed by a discussion MIBs in MPLS and specifically on draft-ietf-mpls-tp-te-mib

NVO3 Highlights – IETF 89

- No RFCs since last IETF
- One draft in RFC editor's queue: Problem Statement
- One draft with IESG and awaiting update: NVO3 Framework
- Almost done WG LC: Data Plane Requirements
- Gap Analysis:
    - draft-ietf-nvo3-gap-analysis-01
    - Key to analysing whether existing solutions meet NVO3 requirements
- Architecture:
    - draft-ietf-nvo3-arch-01
    - Product of design team
    - Required to provide detailed structure to see where solutions fit
- Many solutions on agenda, cannot be adopted yet, but discussion needed to help gap analysis and architecture.
- Working group is looking for input to Gap Analysis and Architecture to help scope solution set and drive rechartering
    - Potential to address relevant protocols that have no home elsewhere.

- OSPF

PCE Status

- New RFC 7150: vendor constraints in PCEP

- On the way
  - Inter-domain P2MP procedures
  - WDM requirements on PCEP

- In our last call queue (or *almost*)
  - PCEP MIB
  - *Questions about PCE*
  - *GMPLS extensions in PCEP*
  - Inter-layer extensions
  - WDM-specific extensions

- Stateful PCE
  - 1st set of I-Ds progressing well
- extensions, PCE-initiated, applicability...
  - GMPLS is catching up
- extensions, poll in progress on PCE-initiated
  - poll on enhanced LSP-DB synchronization
  - proposals on P2MP, switchover & balancing...
- Other items
  - poll in progress on TLS in PCEP
- – DNS-based discovery, path profiles, diversity...

- PIM

PWE3 Report – IETF 89

- One RFCs since last IETF: RFC7079
  - VCCV Implementation Survey
- One draft in RFC editor's queue:
  - VCCV capablity advertisement for MPLS-TP BFD (draft-ietf-pwe3-mpls-tp-cv-adv-06)
- Three drafts with IESG:
  - Dynamic MS-PW (draft-ietf-pwe3-dynamic-ms-pw-21)
  - P2MP PW Requirements (draft-ietf-pwe3-p2mp-pw-requirements-07)
  - ICCP for L2VPN PE redundancy (draft-ietf-pwe3-iccp-14)
- Agenda highlights:
  - New ICCP applications e.g. PON
  - MAC address withdrawal for static PWs
  - Discussion on completing some outstanding milestones: VCCV for GAL, RFC4447bis, congestion considerations

ROLL

- Chairs can't make the rtgarea
- ROLL meets Thursday p.m.

- Status at
  http://tools.ietf.org/agenda/89/slides/slides-89-roll-1.pdf slide 5
  - 1 new RFC.
  - 1 enqueue.
  - 1 WG LC (with issues)
  - updates to all active documents

rtgwg Summary (IETF 89)

- Meeting will be on Friday morning.

- Jeff Tantsura is the new co-chair replacing Alia Atlas.

- Advanced Multipath
  - 'Requirements' in RFC Editor's Queue
  - 'Use Cases' completed WGLC
  - Authors have a solid plan to wrap up the 'Framework'

- Meeting Agenda:
  - 2/7 WG items (FRR focus)
  - New Work:
    - Dynamic Path Selection (DPS) Based on Application
    - Generic Fault-avoidance Routing Protocol for Data Center Networks

SFC IETF 89 Summary

- Service Function Chaining (SFC) WG; chairs: Guichard/Narten
- 1st meeting as a WG
- 300+ attendees, full agenda
- 2 x as many drafts as presentation slots
- draft-ietf-sfc-problem-statement-02.txt appears largely done: start WGLC then IESG
- Use cases: many drafts, need to whittle down to useful set
- Architecture: two "comprehensive" IDs, plus others; strong desire for a merge, have one document to adopt
- Metadata header: initial discussions started on needs/motivations
- Have already received liaison statement from BBF, they are working on use cases for SFC – no conflicts anticipated
- TODO: no progress on understanding management/config direction
  - Unlikely to meet charter milestone of syncing with Ops Ads in April

SIDR

SIDR met Tuesday morning.

We had two discussions that will result in bis versions of two RFCs. One is removal of a limitation in an RFC (single publication point -> multiple publication points), the other is correction of an error (where the change is a technical change and so an errata is not appropriate). Another discussion suggested a removal of a (uniqueness) limitation in another draft that might ease deployment.

There was an energetic discussion of a change to a central definition of the semantics of the work. This work, if adopted, will have a large impact on the technology. The intent is to make the technology less fragile in case of errors. It is not yet clear if the wg wants to work on this.

There were presentations of two new protocols that might be used to ease concerns about use.

An analysis of the mandated choice of underlying transport protocol (rsync) has reinforced the wg opinion that we will eventually need to revisit that choice.

- SPRING

Homenet Routing Update

- WG consensus on preceding with work on Home Network Control Protocol (HNCP)
  - Minimal state protocol used to bootstrap the home network (which may be broader than only home networks) based on Trickle (RFC 6206).
  - Would be used for providing initial configuration including distributed prefix assignment.

Homenet Routing Update (Continued)

- WG Consensus on recommending single IGP for routing – not chosen just yet.

- OSPFv3 Autoconfiguration moving forward.

- ISIS Autoconfiguration under consideration.

AOB

- IESG statement on writeable MIB modules
  - This is *guidance*
  - https://www.ietf.org/iesg/statement/writable-mib-module.html
- TSVAREA session about tunneling foo over UDP
  - Thursday, March 6, 09:00 am to 11:30 am
- VPN scaling
  - Proposed BoF fizzled
  - There *are* issues, but not enough (any) discussion
  - There is a draft https://datatracker.ietf.org/doc/draft-gs-vpn-scaling/
  - The mailing list remains open
    https://www.ietf.org/mailman/listinfo/scale
- Open Mic…

KARP