

IDR Report for rtgarea

IETF 116 - Yokohama

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Meetings

- IDR met earlier Thursday morning.
- We will have an interim meeting 24 April to cover overflow topics.

Wiki Migration

- IDR wiki migration in progress, painfully so.
- Due to large number of documents in flight, IDR heavily uses its wiki to track state.
- It's also where our implementation reports have been going.
Migration means we no longer have stable references for such things.
(We no longer require implementation report RFCs.)

BGP Routes With Color

- Competing drafts: draft-ietf-idr-bgp-car / draft-ietf-idr-bgp-ct
- General idea is providing BGP transport nexthop endpoints that are differentiated by a “color” attribute. Where this color lives varies depending on the proposal.
- bgp-car uses a format more similar to BGP labeled unicast with forwarding information in new optional-NLRI field.
- bgp-ct uses format similar to existing BGP L3VPN format.
- No consensus on which solution to adopt. Both adopted as experimental. Each will progress separately for now.
- Interop procedures will be defined.

BGP YANG Model

- draft-ietf-idr-bgp-model-16 published and should be 99% done.
- Lots of changes, very large.
- Needs another set of Working Group review for a last all, and YANG doctor review.
- Provided a lot of interesting modeling challenges. Presenting some of those later.
- Hopefully progressing soon

Dealing With Blocked BGP Peering Sessions

- BGP uses TCP as its transport protocol.
- BGP has a holdtimer that is intended to deal with dropping peers that don't send PDUs. This is detected at the receive side of things.
- What happens if you block on the send side? (Typically, tcp zero-windowing.)
- Discussion/drafts:
 - draft-spaghetti-idr-bgp-sendholdtimer - A long duration timer that drops the session if you can't send PDUs for too long.
 - draft-chen-idr-tcp-user-timeout - Use the tcp user timeout feature, where it's implemented, to deal with unacknowledged tcp acks.
- More discussion at upcoming interim on 24 April.

Multi-AS Spanning Features

- One Administrative Domain (draft-uttaro-idr-bgp-oad)
- Idea similar to BGP Confederations (RFC 5065), but without using actual Confederation ASes.
- Addresses multi-AS features where multiple ASes are under control of single administrative entity, or perhaps multiple highly cooperating entities.
- To be discussed at 24 April interim.

What To Do About BGP-LS Documents?

- BGP-LS takes up a large amount of document traffic in IDR, but has different constituency interest.
- Majority of features are parity for IGP features specified in LSR.
- LSR isn't interested in doing the BGP-LS work in parallel in their WG.
- Three types of work:
 - IGP parity features
 - BGP-LS small features that don't change the protocol
 - Big changes to BGP-LS itself (keep in IDR?)
- Split into separate WG? Split work to different meetings and mailing lists? Discussion is underway with ADs.

Hiccups

- EVPN Interworking with IPVPN (draft-ietf-bess-evpn-ipvpn-internetworking) DPATH issue:
 - Changes fundamental route selection behavior for BGP
 - Can result in inconsistent route selection.
 - Accidentally applicable to Internet-scoped BGP routes
- Actions:
 - Working with authors to figure out how to scope the attribute in a backward compatible fashion.
 - Need better coordination with bess chairs to figure out how to avoid late-stage gotchas being caught.

Progressing Through Publication Process

- BGP Long Lived Graceful Restart (draft-ietf-idr-long-lived-gr) should be published soon.
- draft-ietf-idr-rfc7752bis - Long awaited update for BGP-link state (LS)
- draft-ietf-idr-bfd-subcode, trivial feature to tell BGP peer that session was dropped due to BFD timeout.

Other Drafts That Have Been Adopted or Getting Discussion

- draft-dong-idr-sr-policy-nrp
- draft-ietf-idr-rt-derived-community
- draft-sas-idr-maxprefix-inbound
- draft-zhou-idr-bgp-srmpls-elp
- draft-ietf-idr-ts-flowspec-srv6-policy
- draft-wang-idr-vpn-prefix-orf
- flowspec v2
- draft-abraitis-bgp-version-capability
- draft-ietf-idr-deprecate-as-set-confed-set
- draft-ietf-idr-bgpls-srv6-ext