# Routing Area WG (rtgwg)

IETF 91 - Hawaii

Chairs: Alvaro Retana (<u>aretana@cisco.com</u>)

Jeff Tantsura (<u>jeff.tantsura@ericsson.com</u>)



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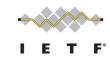
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- rtgwg Process
  - poll authors on their compliance with IETF IPR rules prior to moving a document to the next step in the WG process, e.g., before an individual draft becomes a WG document or a WG document goes to last call



#### Administrivia

- Note taker: Looking for a volunteer!
- Jabber Scribe: Looking for a volunteer!
- Blue sheets --- please sign them!
- Agenda Bashing
- WG Update



#### IETF 90 Routing Area WG Agenda

Administrivia

Chairs / 30 minutes

Use of BGP for routing in large-scale data centers

https://tools.ietf.org/html/draft-ietf-rtgwg-bgp-routing-large-dc

Jon Mitchell / 25 minutes

 Extended procedures and considerations for evaluating Loop-Free Alternates

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A YANG Data Model for Routing Management

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David Lamparter / 10 minutes

A Framework for Secure Routing Protocols

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IGP Multicast Architecture

http://tools.ietf.org/html/draft-yong-rtgwg-igp-multicast-arch Lucy Yong / 10 minutes



### **Charter Update**

The Routing Area working group (RTGWG) is chartered to provide a venue to <u>discuss</u>, <u>evaluate</u>, <u>support and develop proposals for new work in the Routing Area</u> and may work on specific small <u>topics that do not fit with an existing working group</u>.



## Charter Update (2)

RTGWG may also work on specific <u>small topics</u> that do not fit with an existing working group. An example of a small topic is a draft that might otherwise be AD-sponsored but which could benefit from the review and consensus that RTGWG can provide.



### Charter Update (3)

RTGWG may work on <u>larger topics</u>, but must be explicitly rechartered to add the topic. ...

- …fast-reroute and loop-free convergence…
- Routing-related YANG models that are not appropriate for other RTG working groups.



## Charter Update (4)

#### **Options for handling new work** include:

- Directing the work to an <u>existing WG</u> (including RTGWG)
- Developing a proposal for a <u>BoF</u>.
- Developing a charter and establishing consensus for a **new WG**. This option will primarily be used with fairly mature and/or well-defined efforts.
- Careful evaluation, leading to <u>deferring or rejecting</u> work.

It is expected that the proposals for new work will only include items which are <u>not aligned with</u> the work of other WGs or that may span multiple WGs. The Area Directors and WG Chairs can provide guidance if there is any doubt whether a topic should be discussed in RTGWG.

A major objective of the RTGWG is to provide <u>timely, clear dispositions</u> of new efforts. Where there is consensus to take on new work, the WG will strive to quickly find a home for it. Reconsideration of proposals which have failed to gather consensus will be prioritized behind proposals for new work which have not yet been considered. In general, requests for reconsideration should only be made once a proposal has been significantly revised.

If RTGWG decides that a particular topic should be addressed by a new WG, the chairs will recommend the work to the Routing Ads with a summary of the evaluation. The Routing ADs may then choose to follow the normal IETF chartering process (potential BoF, IETF-wide review of the proposed charter, etc.).

## Charter Update (5)

**Guiding principles** for evaluation of new work by RTGWG will include:

- 1. Providing a **clear problem statement** for proposed new work.
- 2. Prioritizing new efforts to <u>manage the trade-offs</u> between urgency, interest, and available resources in the Routing Area.
- 3. Looking for <u>commonalities</u> among ongoing efforts. Such commonalities may indicate the need to develop more general, reusable solutions.
- 4. Ensuring appropriate **cross-WG and cross-area review**.
- Protecting the architectural integrity of the protocols developed in the Routing Area and ensuring that work has <u>significant</u> <u>applicability</u>.



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#### **NWP Process**

- 1. A New Work Proposal (NWP)[1] is **submitted** for consideration.
- 2. The RTGWG Chairs conduct a <u>preliminary review</u> of the NWP. At this point the Chairs may direct the work to an existing WG. If clearly defined[1], the Chairs will ask for a <u>Proposal Shepherd</u> from the RTG Directorate to be assigned in order to help guide the NWP through the rest of the steps.
- **3.** <u>Time will be allocated at the next WG meeting</u>, assuming the NWP has been submitted in a timely manner. Given the additional requirements for the NWP[1], it is expected that they will be submitted with enough anticipation to request an agenda slot as needed and for proper discussion.
  - Discussion of the NWP during an in-person meeting is <u>not mandatory</u>.
  - It is strongly encouraged and expected that the <u>authors discuss their work in detail on the mailing list</u>, and that they request feedback for specific parts of their proposals in order to accelerate the process.
  - An <u>Interim meeting</u> may be used as well as a place for focused discussion.
- [1] The NWP MUST include the following: clear problem statement, applicability of the solution, expected outcome, and indication of its relationship to other efforts in RTG (or elsewhere). Ideally a draft will already exist to cover parts of these requirements.



### NWP Process (2)

- 4. As a result of the **WG discussions (rough consensus)**, the NWP may take one of several paths:
  - The work is <u>directed to an existing WG</u> (including RTGWG). The RTGWG Chairs (with the ADs) will coordinate with the receiving WG Chairs to verify that the work can be taken on. In either case, the NWP now becomes an item of discussion in the receiving WG. Directing a NWP to an existing WG doesn't guarantee consensus to adopt and develop in that WG (including RTGWG).
  - Develop a <u>proposal for a BOF</u>. The Proposal Shepherd and the authors will work on the
    details of a BOF proposal. The RTGWG mailing list can be used for discussion so that the
    process benefits from a larger community interaction, unless the WG Chairs and the ADs
    consider necessary to separate the discussions.
  - Develop a <u>charter for a new WG</u>. The Proposal Shepherd and the authors will work on the details of defining a charter for a new WG. Close coordination with the ADs will be necessary. A separate (non-WG) mailing list may be created to foster the discussion.
  - The NWP is <u>rejected or deferred</u>. In this case the discussion around the NWP will no longer be sponsored in the RTGWG mailing list. As explained in the charter, any proposal can be reconsidered. However, the priority of a resubmission will be much lower than that of a brand new NWP.



#### Milestones

#### Nov 2014

Submit Remote LFA (link protection) for publication as Proposed Standard (draft-ietf-rtgwg-remote-lfa)

#### Mar 2015

Submit Composite-Link Requirements to IESG for publication as Informational (<u>draft-ietf-rtgwg-cl-use-cases</u>)
Submit initial Internet Draft on Multicast IP Fast Reroute Architecture (<u>draft-ietf-rtgwg-mofrr</u>)
Submit Composite-Link Framework to IESG for publication as Informational (<u>draft-ietf-rtgwg-cl-framework</u>)
Submit Document on Operational Experience of using BGP in a Data Center for publication as Informational (<u>draft-ietf-rtgwg-bgp-routing-large-dc</u>)

#### Jul 2015

Submit specification on Advanced IP Fast Reroute mechanism to IESG for publication as Proposed Standard (<a href="https://draft-ietf-rtgwg-mrt-frr-architecture">draft-ietf-rtgwg-mrt-frr-algorithm</a> / <a href="https://draft-ietf-rtgwg-mrt-frr-architecture">draft-ietf-rtgwg-mrt-frr-architecture</a>)

Submit Operational Management for LFA for publication as Proposed Standard

(draft-ietf-rtgwg-lfa-manageability)

Submit Remote LFA (node protection) for publication as Proposed Standard (<u>draft-ietf-rtgwg-rlfa-node-protection</u>)

#### Nov 2015

Submit MIB for IP Fast-Reroute for publication as Proposed Standard (draft-ietf-rtgwg-ipfrr-ip-mib)

#### **Document Status**

- Publication Requested
  - Remote LFA FRR
    - <a href="http://tools.ietf.org/html/draft-ietf-rtgwg-remote-lfa">http://tools.ietf.org/html/draft-ietf-rtgwg-remote-lfa</a>
    - Shepherd = Alvaro



### Document Status (2)

#### WG Last Call

- Advanced Multipath Use Cases and Design Considerations
  - http://tools.ietf.org/html/draft-ietf-rtgwg-cl-use-cases
  - Passed WGLC.
  - Waiting for Shepherd Write-Up (Jeff)
- Multicast only Fast Re-Route
  - http://tools.ietf.org/html/draft-ietf-rtgwg-mofrr
  - Passed WGLC
  - Waiting for authors to settle author list.
- Operational management of Loop Free Alternates
  - draft-ietf-rtgwg-lfa-manageability
  - In WGLC until Nov/24
  - Shepherd = Jeff



### Document Status (3)

- WG Drafts
  - Advanced Multipath Framework in MPLS
    - <u>draft-ietf-rtgwg-cl-framework</u>
  - An Architecture for IP/LDP Fast-Reroute Using Maximally Redundant Trees
    - <u>draft-ietf-rtgwg-mrt-frr-architecture</u>
  - Algorithms for computing Maximally Redundant Trees for IP/LDP Fast-Reroute
    - <u>draft-ietf-rtgwg-mrt-frr-algorithm</u>
  - IP MIB for IP Fast-Reroute
    - <u>draft-ietf-rtgwg-ipfrr-ip-mib</u>
  - Remote-LFA Node Protection and Manageability
    - draft-ietf-rtgwg-rlfa-node-protection



#### Document Status (4)

- Call for Adoption
  - Microloop prevention by introducing a local convergence delay
    - draft-litkowski-rtgwg-uloop-delay
    - Call for adoption complete consensus to adopt.
    - Waiting for IPR clarification.
- Upcoming Calls for Adoption
  - Link State protocols SPF trigger and delay algorithm impact on IGP microloops
    - <u>draft-litkowski-rtgwg-spf-uloop-pb-statement</u>
  - Back-off SPF algorithm for link state IGP
    - draft-decraene-rtgwg-backoff-algo



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