

IETF 121 RTGWG Status Update

Dublin & Online
November 2024

Chairs:

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Note Well



This is a reminder of IETF policies in effect on various topics such as patents or code of conduct. It is only meant to point you in the right direction. Exceptions may apply. The IETF's patent policy and the definition of an IETF "contribution" and "participation" are set forth in BCP 79; please read it carefully.

As a reminder:

- By participating in the IETF, you agree to follow IETF processes and policies.
- If you are aware that any IETF contribution is covered by patents or patent applications that are owned or controlled by you or your sponsor, you must disclose that fact, or not participate in the discussion.
- As a participant in or attendee to any IETF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public.
- Personal information that you provide to IETF will be handled in accordance with the IETF Privacy Statement.
- As a participant or attendee, you agree to work respectfully with other participants; please contact the ombudsteam (<https://www.ietf.org/contact/ombudsteam/>) if you have questions or concerns about this.

Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- [BCP 9](#) (Internet Standards Process)
- [BCP 25](#) (Working Group processes)
- [BCP 25](#) (Anti-Harassment Procedures)
- [BCP 54](#) (Code of Conduct)
- [BCP 78](#) (Copyright)
- [BCP 79](#) (Patents, Participation)
- <https://www.ietf.org/privacy-policy/> (Privacy Policy)

RFCs since IETF 120

- None

Drafts Adopted since IETF 120

- draft-ietf-rtgwg-vrrp-rfc8347bis

Drafts Submitted for Publication

- ***draft-ietf-rtgwg-segment-routing-ti-lfa*** – Revised I–D needed. Pending approval from the IESG. On agenda today.
- ***draft-ietf-rtgwg-net2cloud-problem-statement*** – Returned to working group. IESG review comments to be addressed.

WG Document Status

- ***draft-ietf-rtgwg-bgp-pic***

More work needs to be done before the 2nd WGLC. On agenda today.

- ***draft-ietf-rtgwg-qos-model***

Expired. Directorate review comments to be addressed.

- ***draft-ietf-rtgwg-vrrp-p2mp-bfd***

The authors believe it's ready for WGLC.

Agenda

1. 9:30

Meeting Administrivia and WG Update

RTGWG Charter Update

Chairs (15 mins)

2. 9:45 TI-LFA, BGP-PIC and SR ULoop

Ahmed Bashandy (15 mins)

3. 10:00 SR based Loop-free implementation

Lijie Deng (10 mins)

4. 10:10. Path-aware Remote Protection Framework

Yisong Liu / Changwang Lin (10 min)

5. 10:20. Destination/Source Routing

Shu Yang (5 mins)

6. 10:25 Deep Collaboration between Application and Network

Xinxin Yi (10 mins)

7. 10:35. The Challenges and Requirements for Routing in

Computing Cluster network

Yizhou Li or Fengkai Li (10 mins)

8. 10:45. In-Network Congestion Notification

Zongpeng Du (10 mins)

9. 10:55 Adaptive Routing Framework

Changwang Lin/Rui Zhuang

10. 11:05. Generalized IPv6 Tunnel (GIP6)

Xinxin Yi/Zhenbin Lin/Qiangzhou Gao (10 mins)

11. 11:15. Advertising Router Information

Jeffrey Zhang (5 mins)

If time permits:

Hybrid Function Chain Framework

Yuan Dongyu

Kademlia-directed ID-based Routing Architecture (KIRA)

Roland Bless

RTGWG Recharter

The following text is added as one of the large topics:

- Incubation of routing-related new technologies, particularly focusing on problem statements, prior to achieving consensus for creating a new working group. This includes, but not limited to, the following topics: satellite routing, routing in data centers, and networking for AI clusters.

Charter_o.txt

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

Options for handling new work include:

Directing the work to an existing WG (including RTGWG)
Developing a proposal for a BoF.
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 deferring or rejecting work.
It is expected that the proposals for new work will only include items which are not aligned with 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 timely, clear dispositions 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.).

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

Providing a clear problem statement for proposed new work.

Prioritizing new efforts to manage the trade-offs between urgency, interest, and available resources in the Routing Area.

Looking for commonalities among ongoing efforts. Such commonalities may indicate the need to develop more general, reusable solutions.

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 significant applicability.

RTGWG may also work on specific small topics 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.

RTGWG may work on larger topics, but must be explicitly rechartered to add the topic. The specific larger topics that RTGWG is currently chartered to work on:

Enhancements to hop-by-hop distributed routing (e.g., multicast, LDP-MPLS, unicast routing) related to fast-reroute and loop-free convergence. A specific goal of fast-reroute mechanisms is to provide up to complete coverage when the potential failure would not partition the network. All work in this area should be specifically evaluated by the WG in terms of practicality and applicability to deployed networks.

Routing-related YANG models that are not appropriate for other RTG working groups.

The working group milestones will be updated as needed to reflect the

charter.txt

The Routing Area Working Group (RTGWG) is chartered to provide a venue to discuss, evaluate, support and develop proposals for new work in the Routing Area. It may also work on specific small topics that do not fit within any existing working groups. An example of such 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.

Options for handling new work include:

Directing the work to an existing WG (including RTGWG)
Developing a proposal for a BoF.
Developing a charter and establishing consensus for a new WG. This option will primarily be used for fairly mature and/or well-defined efforts. Conducting a careful evaluation, which may lead to deferring or rejecting work.
It is expected that the proposals for new work will only include items which are not aligned with 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 timely and clear dispositions of new efforts. Where there is consensus to take on new work, the WG will strive to quickly find a suitable 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.

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

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

RTGWG may also work on specific small topics that do not fit within an existing working group. An example of such 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.

RTGWG may work on larger topics, but must be explicitly rechartered to add it. The specific larger topics that RTGWG is currently chartered to work on include:

- Enhancements to hop-by-hop distributed routing (e.g., unicast and multicast routing, LDP/MPLS, Segment Routing) related to fast convergence with a goal of fast-reroute mechanisms to provide up to complete coverage when the potential failure would not partition the network. All work in this area should be specifically evaluated by the WG in terms of practicality and applicability to deployed networks.
- Routing related YANG models that are not within the scope of other RTG working groups.
- Incubation of routing-related new technologies, particularly focusing on problem statements, prior to achieving consensus for creating a new working group. This includes, but not limited to, the following topics: satellite routing, routing in data centers, and networking for AI clusters.

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About the AIDC Side Meeting

- AIDC side meeting will be on Thursday (11/7) 15:00-17:00 at Wicklow Meeting Room 4.
- Meeting materials can be found:
 - <https://github.com/Yingzhen-ietf/AIDC-117>
 - <https://github.com/Yingzhen-ietf/AIDC-118>
 - <https://github.com/Yingzhen-ietf/AIDC-120>
 - <https://github.com/Yingzhen-ietf/AIDC-121>
- ***Mailing list: aidc@ietf.org***



RTGWG wiki:

<https://wiki.ietf.org/group/rtgwg>

Thanks!