RTGWG Status Update

Vienna , Austria & Online March 2022

Chairs: Jeff Tantsura (j<u>efftant.ietf@gmail.com</u>) Yingzhen Qu (<u>yingzhen.ietf@gmail.com</u>)

Internet Engineering Task Force © 2022 IETF Trust Production by Meetecho



Routing Area Working Group (RTGWG) Overview

Wiki: <u>Routing Area Working Group Wiki (ietf.org)</u>

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.

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.

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

WG Documents (1)

draft-ietf-rtgwg-bgp-pic: BGP Prefix Independent Convergence

Under AD review. This informational document is proposing a forwarding plane using multi-level forwarding chains with maximal sharing of forwarding objects. In case of failure, it can reroute a large number of destinations in a timeframe that does not depend on the number of BGP prefixes.

draft-ietf-rtgwg-segment-routing-ti-lfa: Topology Independent Fast Reroute Using Segment Routing

Addressing review comments. Topology Independent Loop-free Alternate Fast Re-route (TI-LFA) aims at providing protection of node and adjacency segments within the Segment Routing (SR) framework.

draft-ietf-rtgwg-atn-bgp: A Simple BGP-based Mobile Routing System for the Aeronautical Telecommunications Network

Received comments from several directorate reviews. Will start WGLC soon. Informational draft describes a mobile routing service based on BGP to address ATN with IP Service.

WG Documents (2)

draft-ietf-rtgwg-vrrp-p2mp-bfd: Applicability for Bidirectional Forwarding Detection (BFD) for Multi-Point Networks in Virtual Router Redundancy Protocol (VRRP)

Adopted in December 2021. This document discusses the applicability of Bidirectional Forwarding Detection (BFD) for multipoint networks to provide Virtual Router Redundancy Protocol (VRRP) with sub-second Active convergence and defines the extension to bootstrap point-to-multipoint BFD session.

draft-ietf-rtgwg-srv6-egress-protection: SRv6 Path Egress Protection

This document describes protocol extensions for protecting the egress node of a Segment Routing for IPv6 (SRv6) path or tunnel.

draft-ietf-rtgwg-net2cloud-problem-statement: Dynamic Networks to Hybrid Cloud DCs Problem Statement

This document describes the problems that enterprises face today when interconnecting their branch offices with dynamic workloads in third party data centers.



- RFC 9067: A YANG Data Model for Routing Policy
- *draft-ietf-rtgwg-yang-rib-extend* Ready for WGLC.
- draft-ietf-rtgwg-qos-model
 Addressing YANG doctor review comments.

Other Work in Progress

- RFC5798bis: Virtual Router Redundancy Protocol (VRRP) Version 3 for IPv4
 and IPv6 Will start WG adoption call
- Loop Avoidance Using Segment Routing
- SRv6 Midpoint Protection
- Egress Protection for Segment Routing Networks
- HPCC++: Enhanced High Precision Congestion Control
- Routing for Satellite Network

https://datatracker.ietf.org/doc/draft-kw-rtgwg-satellite-rtg-add-challanges/ https://datatracker.ietf.org/doc/draft-lhan-satellite-instructive-routing/ https://datatracker.ietf.org/doc/draft-lhan-problems-requirements-satellite-net/

Thanks!