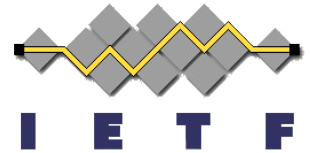


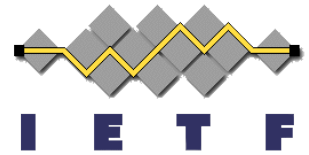
BMP BGP RIB Statistics

IETF 118, Prague

Author: Mukul Srivastava,
Juniper Networks

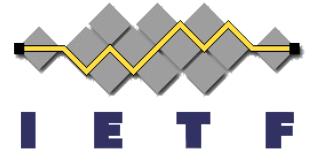
Presented By: Jeffrey Haas,
Juniper Networks





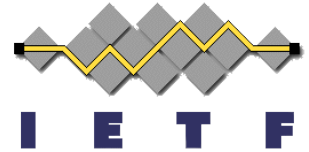
Agenda

- Introduction
- Proposal
- Summary & Next step



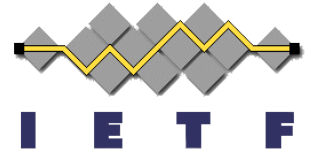
Introduction

- BMP RFC7854 defines several different BMP statistics types to observe interesting events that occur on the router.
- This draft defines new gauges for BMP statistics message.
- Motivation.
 - Statistics are cheap and efficient way to communicate network state.



Proposal

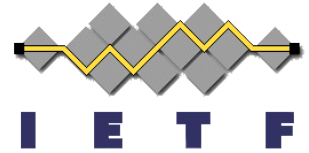
- New RIB-IN and RIB-OUT counters. Details in following slides.
- Commonality across all the proposed counters:
 - Current view at the router.
 - Per AFI/SAFI view.
 - All are 64-bit Gauge. (A non-negative integer that may increase or decrease, but shall never exceed a maximum value, nor fall below a minimum one).
 - The counter value will change based on network events or current configuration.
 - The value is structured as: 2-byte Address Family Identifier (AFI), 1-byte Subsequent Address Family Identifier (SAFI), followed by a 64-bit Gauge.



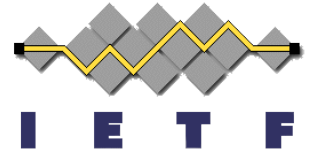
Proposal (RIB-IN)

- Type = TBD1: (64-bit Gauge) Current number of routes in per-AFI/ SAFI rejected by inbound policy.
- Type = TBD2: (64-bit Gauge) Current number of routes in per-AFI/SAFI accepted by inbound policy.
- Type = TBD3: (64-bit Gauge) Current number of routes in per-AFI/SAFI selected as active route.
- Type = TBD4: (64-bit Gauge) Current number of routes in per-AFI/SAFI damped by configured route damping policy.
- Type = TBD5: (64-bit Gauge) Current number of routes in per-AFI/SAFI marked as stale as part of BGP graceful restart (GR) [RFC4784] process.
- Type = TBD6: (64-bit Gauge) Current number of routes in per-AFI/SAFI marked as stale as part of long lived graceful restart (LLGR) process.

Proposal (RIB-OUT)

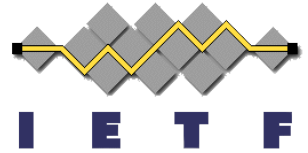


- Type = TBD7: (64-bit Gauge) Current number of routes in per-AFI/ SAFI rejected by outbound policy. These routes are active routes which should otherwise would have been advertised in absence of outbound policy which rejected them.



Summary & Next steps

- Proposal introduces new counters which can help provide insights about various events at a router.
- Request GROW to accept it as wg document.
- <https://datatracker.ietf.org/doc/draft-msri-grow-bmp-bgp-rib-stats/>
- Request to allocate code points.



Thank you