Benchmarking Methodology WG (BMWG)
IETF 117 – San Francisco

- Wednesday July 26, 2023
- 09:30 – 11:30 Local Time (San Francisco, UTC-7)

  Alternate start times: 0430 UTC, 12:30 EST
- Chairs:
  - In Memoriam: Al Morton (acm(at)research.att.com)
  - Sarah Banks (sbanks(at)encrypted.net

If you are not subscribed to the BMWG mailing list and would like to be, please visit ***https://www.ietf.org/mailman/listinfo/bmwg/***

Note Well

We work as individuals, and try to be nice to each other

(as of March 2018)
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.

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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)

In Memoriam - Al Morton

Alfred Channon Morton, Jr., died on Friday, June 9, 2023, in Chicago, IL. Al was a long time resident of the Jersey Shore, the son of Alfred Channon Morton Sr. and Margaret Cox Morton. He grew up in Sea Girt, lived in Oceanport for 40 years, before moving to Chicago with his wife in 2020.

A 1973 graduate of Manasquan High School, Al received both his BSEE and MSEE from Monmouth College. He worked for Computer Sciences Corporation at Fort Monmouth's Satellite Communications Agency and then went to work directly with SATCOMA before beginning an almost 40 year career at Bell Labs/AT&T. In that capacity, Al was a proud contributor to many important internet standards through the IETF and ITU. He was the author of more than 32 IETF RFCs, several Linux Foundation projects, and the holder of several patents.

In his private life, Al loved traveling, movies, and making and enjoying music with his many friends and family in New Jersey, Chicago, and wherever he traveled. He was a particular fan of the many young singer/songwriters who performed in summer concerts every year at the shore.

Al is survived by his wife Louise Dewar, his daughter Margaret, his twin brother John Morton and John's wife Altha, and cousin Jennifer Cox. In addition, he will be missed by sisters and brothers by marriage, nieces and nephews, great nieces and nephews, and hundreds of friends from all over the world who thought of him as a brother.

In Memoriam - Al Morton

A career spent in service at the IETF

[Data tracker profile]

[Obituary/Memory Board]

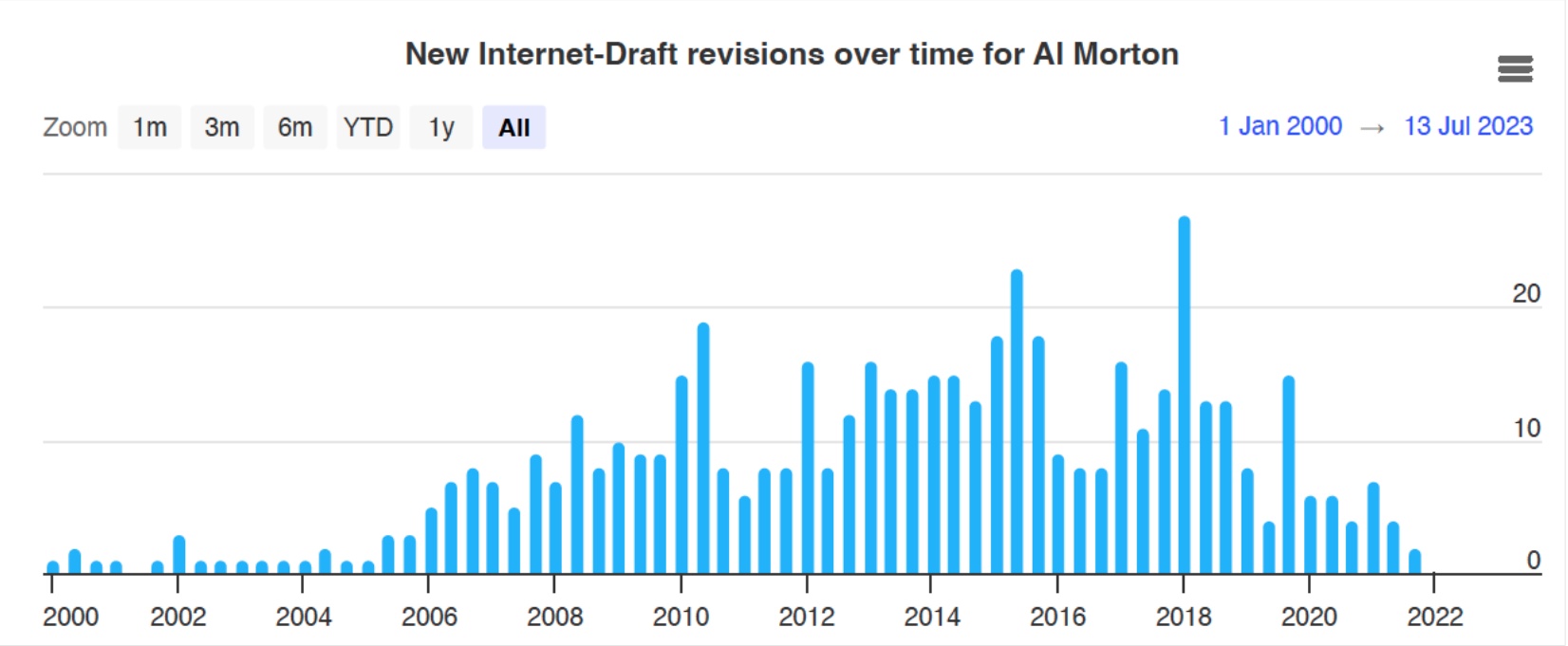
Chair: BMWG, perfmetrdr

Liason: ITU-T SG 12

RFCs: 42

- RFC3432 (Dec 2002)
- RFC5357 (TWAMP)
- RFC9198 (May 2022)

Expired Drafts: 56



He contributed outside the IETF…

- ITU
- IEEE
- Linux Foundation
- BBF

BMWG Agenda

(any bashing needed?)

- Note taker(s), Jabber, IPR
- WG Status (Chairs)
  - RFC: 9411, Benchmarking Methodology for Network Security Device Performance
  - WG Adoptions and proposals
- WG Drafts:
  - *Multiple Loss Ratio Search and YANG Model (new draft) (Vratko presenting)*
  - Benchmarking Methodology for Stateful NATxy Gateways using RFC 4814 Pseudorandom Port Numbers (Gabor presenting)
- Proposals
  - Considerations for Benchmarking Network Performance in Containerized Infrastructures (Ming-Ngoc presenting)
  - Benchmarking methodology for MPLS Segment Routing (Paolo presenting)
  - Benchmarking methodology for IPv6 Segment Routing (Eduard presenting)
  - Problems and requirements of evaluation methodology for integrated space and terrestrial networks (Zeqi Li presenting)
- Presentations: YANG model for management of Network Tester (Vladimir presenting)

BMWG Status

- Reviewers needed!
  - Work is adopted, completed, and published as an RFC when the participants of the Working Group read other documents and share their feedback on the list and at meetings.
  - It’s a two-way street – your proposals become WG adopted when others review, express interest, and share feedback
- We have several well written, interesting proposals that need reviews:
  - Benchmarking methodology for MPLS Segment Routing
  - Benchmarking methodology for IPv6 Segment Routing
  - Considerations for benchmarking network performance in containerized infrastructures
- Proposals keep coming…

BMWG Activity

- New RFCs:
  - RFC 9411 (March)
- Updated milestone (Stateful NATxy, next slide)
- Charter Update
  - Stable
- New chair – welcome Giuseppe Fioccolo
- Supplementary BMWG Page
  - http://bmwg.encrypted.net/

Milestones (Revised)

DONE	Methodology for Next-gen Firewall Benchmarking to IESG Review
DONE	Update to RFC2544 Back-to-back Frame Benchmarking to IESG Review
DONE	Methodology for EVPN Benchmarking to IESG Review
Aug 2023	Draft on Selecting and Applying Model(s) for Benchmarking to IESG Review
~~*Dec 2022*~~	~~*Draft on General VNF Benchmarking Automation to IESG Review*~~
Dec 2023	Considerations for Benchmarking Network Virtualization Platforms to IESG Review
Mar 2024	Benchmarking for Stateful NATxy Gateways using RFC 4814 Pseudorandom Port Numbers to IESG Review

BACKUP

Standard “Paragraph” (intro/security)

Benchmarking activities as described in this memo are limited to technology characterization using controlled stimuli in a laboratory environment, with dedicateda address space and the constraints specified in the sections above.

The benchmarking network topology will be an independent test setup and MUST NOT be connected to devices that may forward the test traffic into a production network, or misroute traffic to the test management network.

Further, benchmarking is performed on a “black-box” basis, relying solely on measurements observable external to the DUT/SUT.

Special capabilities SHOULD NOT exist in the DUT/SUT specifically for benchmarking purposes. Any implications for network security arising from the DUT/SUT SHOULD be identical in the lab and in production networks.

Work Proposal Summary Matrix

Work Area > Criteria	EVPN & PBB EVPN	VNF (was VBaaS)	Virtualized Platforms	SFC	Back-to-back Frame	Network Service Layer Abs Model	Next-Gen Firewalls
Proposal	Y	Y	Y	Y	Y	Y	Y
In scope of charter?	Y	Y	Y	Y	Y	Y	Y
Draft(s)	Y	Y	Y	Y	Y	Y	Y
Sig. support at meetings	Y		IETF98, many comments	Revised draft	Discuss @ IETF103		Y
Sig. support on list	Y				Comments & Testing		Y
Dependencies/Notes	Reviewers & charter			Expired		Expired	