

Benchmarking Methodology WG (bmwg) IETF 116

- **Tuesday, March 28, 2022**
- **1300-1500 Local Time (Yokohama, UTC+0900)**
Alternate Start Times: 0400 UTC 0000 US EDT, 2300 US CDT, 2100 US PDT
- **Chairs:**
 - Al Morton ([acm\(at\)research.att.com](mailto:acm(at)research.att.com))
 - Sarah Banks ([sbanks\(at\)encrypted.net](mailto:sbanks(at)encrypted.net))
- *If you are not subscribed to the BMWG mailing list and would like to be, please go to <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)

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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)

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) – brief updates**
- **Benchmarking Methodology for Stateful NATxy Gateways using RFC 4814 Pseudorandom Port Numbers**

<https://datatracker.ietf.org/doc/draft-ietf-bmwg-benchmarking-stateful-02>

Proposals:

- **Considerations for Benchmarking Network Performance in Containerized Infrastructures**
- **Benchmarking Methodology for MPLS Segment Routing**
- **Benchmarking Methodology for IPv6 Segment Routing**
- **Problems and Requirements of Evaluation Methodology for Integrated Space and Terrestrial Networks**

Brief BMWG Status

- Next Gen Firewall Benchmarking
 - Published!
- Multiple Loss Ratio Search: Large Re-write
- YANG Model – new draft
- Stateful NATxy Gateways: WGLC?
- Adoption: Containerized? SR draft(s)?
- Proposals keep coming...

BMWG Activity

- **New RFCs:**
 - **RFC 9411**
- **Charter Update**
 - (stable)
- **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

Need to add a milestone:

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 dedicated 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? (acm)	Y	Y	Y	Y	Y	Y	Y
Draft(s)	Y	Y	Y	Y	Y	Y	Y
Sig. Support at meetings	Y		IETF-98, many comments	Revised draft	Discuss @ IETF-103		Y
Sig. Support on List	Y				Comments & Testing		Y
Dependencies/Notes	Reviewers & charter			expired		expired	