

# Benchmarking Methodology WG (bmwg) IETF 115

- **Thursday, November 10, 2022**
- **0930 - 1130 Local Time (London, UTC-0000)**  
Alternate Start Times: 0430 US EST, 0330 US CST, 0130 US PST
- **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)

- IESG Comment Resolution, WG Adoptions, and Proposals

WG Drafts:

- Multiple Loss Ratio Search – email update  
<https://datatracker.ietf.org/doc/html/draft-ietf-bmwg-mlrsearch-02>
- Next Generation Firewall Benchmarking  
<https://tools.ietf.org/html/draft-ietf-bmwg-ngfw-performance-15> DISCUSS Resolved!
- A YANG Data Model for Network Interconnect Tester Management  
<https://datatracker.ietf.org/doc/html/draft-ietf-bmwg-network-tester-cfg-00>
- Benchmarking Methodology for Stateful NATxy Gateways using RFC 4814 Pseudorandom Port Numbers  
<https://datatracker.ietf.org/doc/draft-ietf-bmwg-benchmarking-stateful-01>

Proposals:

- Considerations for Benchmarking Network Performance in Containerized Infrastructures
- Benchmarking Methodology for MPLS Segment Routing
- Benchmarking Methodology for IPv6 Segment Routing

If time allows:

- Problems and Requirements of Evaluation Methodology for Integrated Space and Terrestrial Networks

# Brief BMWG Status

- Next Gen Firewall Benchmarking
  - IESG DISCUSS ballots have been resolved!
- Multiple Loss Ratio Search: Large Re-write
- WG Adoption: YANG Model
- WG Adoption: Stateful NATxy Gateways
- Proposals keep coming...

# BMWG Activity

- **New RFCs:**
  - none
- **Charter Update**
  - (stable)
- **Supplementary BMWG Page**
  - <http://bmwg.encrypted.net/>

# Milestones (Revised)

- DONE (IESG)** - 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:

Benchmarking for Stateful NATxy Gateways using RFC 4814 Pseudorandom Port Numbers

# 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	