

# **Benchmarking Methodology WG (bmwg)**

## **IETF 111**

- **Monday, July 26, 2021**
- **14:00-16:00 US CDT (UTC-0500) and  
1900-2100 UTC**
- **Chairs:**
  - Al Morton ([acm@research.att.com](mailto:acm@research.att.com))
  - Sarah Banks ([sbanks@encrypted.net](mailto:sbanks@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)**

- **Back-to-Back Frame (Update to RFC2544) => Published!**
- **EVPN - status: IESG processing**  
<https://tools.ietf.org/html/draft-ietf-bmwg-evpntest-09>

**WG Drafts:**

- **Multiple Loss Ratio Search**  
<draft-ietf-bmwg-mlrsearch-01.txt>  
<https://datatracker.ietf.org/doc/draft-ietf-bmwg-mlrsearch/>
- **Next Generation Firewall Benchmarking**  
<https://tools.ietf.org/html/draft-ietf-bmwg-ngfw-performance-09>

**Proposals:**

- **A YANG Data Model for Network Interconnect Tester Management**  
<https://tools.ietf.org/html/draft-vassilev-bmwg-network-interconnect-tester-06>
- **Benchmarking Methodology for Stateful NATxy Gateways using RFC 4814 Pseudorandom Port Numbers**  
<https://datatracker.ietf.org/doc/draft-lencse-bmwg-benchmarking-stateful-00>

**AOB:**

# Brief BMWG Status

- EVPN Draft In IESG Review
  - 5 DISCUSS ballots to resolve (Authors?)
- Next Gen Firewall Benchmarking
  - WGLC on 05, revised 06, confirmation LC
  - More Comments! Try to resolve in this session.
  - Intended Status: obsoletes [RFC3511], need sentence in the Abstract and status in header
- Proposals keep coming:
  - Shall we make-way for more new work?

# BMWG Activity

- **New RFCs:**
  - **RFC 9004 on Back to Back Frame Benchmark**  
**Update: published in May, 2021**
- **Charter Update**
  - (stable)
- **Supplementary BMWG Page**
  - <http://bmwg.encrypted.net/>

# Milestones (for Review)

- Aug 2020** - 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
- Dec 2020** - Draft on Selecting and Applying Model(s) for Benchmarking to IESG Review
- Dec 2020** - Draft on General VNF Benchmarking Automation to IESG Review
- Dec 2020** - Considerations for Benchmarking Network Virtualization Platforms 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 ><br>Criteria √        | EVPN &<br>PBB EVPN     | VNF<br>(was<br>VBaaS) | Virtualized<br>Platforms     | SFC              | Back-to-<br>back<br>Frame | Network<br>Service<br>Layer Abs<br>Model | Next-Gen<br>Firewalls |
|----------------------------------|------------------------|-----------------------|------------------------------|------------------|---------------------------|------------------------------------------|-----------------------|
| Proposal                         | Y                      | Y                     | Y                            | Y                | Y                         | Y                                        | Y                     |
| In Scope of<br>Charter?<br>(acm) | Y                      | Y                     | Y                            | Y                | Y                         | Y                                        | Y                     |
| Draft(s)                         | Y                      | Y                     | Y                            | Y                | Y                         | Y                                        | Y                     |
| Sig. Support<br>at meetings      | Y                      |                       | IETF-98,<br>many<br>comments | Revised<br>draft | Discuss @<br>IETF-103     |                                          | Y                     |
| Sig. Support<br>on List          | Y                      |                       |                              |                  | Comments<br>& Testing     |                                          | Y                     |
| Dependencie<br>s/Notes           | Reviewers<br>& charter |                       |                              | expired          |                           | expired                                  |                       |