

BMWG Session (IETF-108)  
Monday Session III  
14:10-15:50 UTC, July 27, 2020 (Room 4)  
<https://datatracker.ietf.org/meeting/108/agenda/>

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PLEASE READ THE DRAFTS !!!!  
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1. Agenda

WG Status

- Milestones updated (Jul 25), aiming for August 2020 for draft updates to AD Review

WG Drafts:

2. EVPN

<https://tools.ietf.org/html/draft-ietf-bmwg-evpntest-05>

Status:

- Returned to WG for proof reading
- Completed Sec 1+2 proof reading plus suggestions for automated tools:  
[https://mailarchive.ietf.org/arch/msg/bmwg/pjk2lv4z3e1tnxDV7kIELIkl\\_I/](https://mailarchive.ietf.org/arch/msg/bmwg/pjk2lv4z3e1tnxDV7kIELIkl_I/)
- Draft was not updated by July 13

Al Morton: Authors unable to join, some additional editorial help needed. Call out to BMWG if you are able to review, please do!

Timothy Carlin: What is the best way to sending edits to this draft?

Al Morton: Not using github, communications have been via email list

Sarah Banks: Could provide an updated version of the draft and allow the authors to diff and merge.

3. Next Generation Firewall Benchmarking

<https://tools.ietf.org/html/draft-ietf-bmwg-ngfw-performance-03>

Status:

- Security Features Text:

AI: Question about scheduling on planned updates

Timothy: About the work list items - should we add them to this draft, or to a new draft? We're leaning towards adding them to this draft

Sarah: Could put it in this draft, but IPS is a huge feature, tend to agree with AI, having a separate draft might be a good idea.

Brian: Split out into another draft, the security effectiveness items (including Network IPS bits)?

AI: This is a good option too

Brian: Tim/I will take this back to NetSecOpen and discuss with them

AI: We'll leave the split of topics to author recommendation

4. <https://mailarchive.ietf.org/arch/msg/bmwg/0I3vIw67G9cqHDDJ9OuHZp8K1cM/>

- Extensive list discussion of using 50% of maximum connection rate in some tests:  
[https://mailarchive.ietf.org/arch/msg/bmwg/8RhzbBgii\\_ePnLVkt88AEBsSTY/](https://mailarchive.ietf.org/arch/msg/bmwg/8RhzbBgii_ePnLVkt88AEBsSTY/)
- Draft was not updated by July 13

5. Back-to-Back Frame (Update to RFC2544)

<https://tools.ietf.org/rfcdiff?url2=draft-ietf-bmwg-b2b-frame-01.txt>

Status:

- Reminder of Nov 2019 comments and additional comments on-list:  
<https://mailarchive.ietf.org/arch/msg/bmwg/FNOWgx5FjFgubYNBI3bOwOciDh0/>
- All November and May 2020 comments/clarifications addressed on-list.
- Comments resulted from use of the Benchmark over last year
- Draft was updated post-Interim meeting, no further comments.

AI (as Author): Updates have been made, based on input from list and from use

AI (as Author): Asking for WG LC and concluding reviews

Sarah (as Chair): Well written, been reviewed, has feedback, would like to have draft enter WG LC

Sarah: Asked but did not hear any objections today

AI: Asked for, but no other comments heard today.

Sarah: Action Item: **Will bring WG LC to list.**

Proposals:

6. An Upgrade to Benchmarking Methodology for Network Interconnect Devices

<https://datatracker.ietf.org/doc/html/draft-lencse-bmwg-rfc2544-bis-00>

Status:

- Several discussion threads related to this draft on list:
- Many other RFC2544 updates:  
<https://mailarchive.ietf.org/arch/msg/bmwg/yEzFCign03ZveEUkvXsEevm8dDU/>
- strict packet time-outs for PDV and the siitperf implementation/tool  
<https://mailarchive.ietf.org/arch/msg/bmwg/50qoL0gxTEKGU6CkUwPif8FO-hc/>
- different source and destination port numbers  
[https://mailarchive.ietf.org/arch/msg/bmwg/Y3XlIteCBVMScSolsaqPH\\_FNoiE/](https://mailarchive.ietf.org/arch/msg/bmwg/Y3XlIteCBVMScSolsaqPH_FNoiE/)

AI: Non-zero frame loss acceptance criterion. Capacity measured at X% loss as alternative to “throughput”. Other drafts might call this “partial loss ratio” (PLR) measurements, also “no drop ratio” (NDR).

Sarah: Is concern around conformance testing?

AI: A lot of concerns. There is a solid definition, MLR authors keep throughput as zero loss. “Time to allow a little bit of loss?” Scott: No (founding chair of bmwg) Try to avoid transient effects before measuring throughput. Binary search to try to distinguish steady state (“normal” interrupts) to other loss events.

Robert (Individual, not wearing hats): Agree with AI, packet forwarding goes through hardware when possible. Different classes of devices. Don’t optimize for general CPU with ones that are implementing hardware forwarding. Some nuance in definitions may be useful.

Sarah (participant): Wouldn’t argue against any points, liked that it was an optional criteria. Should defer to history, unless we decide we want to change these as a WG. The need to require 0% loss may be overstated.

AI: separating metrics with different names may be way to solve problem

AI: Re: Statistically relevant # of tests, looks good, no issue there

AI: Re: Timeout for throughput, if you can measure delays with tool, you can report classic throughput, can calculate delays per distribution. So, Replacing weak latency measurement procedure with a better one is a good idea. HW generators do this today, but instead of 1%/99%, they report min/avg/max. But also fine with this. Use existing PDV/IPDV definitions (RFC 5481, ippmwg), gives applicability statements for different forms

Gabor: How was 20 tests selected?

AI: Marius might have this answer, but if not, the general rule seems to be 20 tests, but the truth is really based on variation, and a consistent result, which is tough to codify.

Gabor: Through testing, 10 tests has an outlier, 20 seems to be a good number, but not clear why!

AI: An update could have text for why.

AI: How fast can siitperf go?

Gabor: 10gbps, 84 byte packets for v4/v6 distinction. 7mm pps. DPDK with UDP. 1 flow, single stream. Up to 256 different flows/networks, 1 port (RFC 2544). Multiple flows and use of more cores show performance increases.

Gabor: Plan to implement multi-core tests in coming months and will report back

AI: Looking for thoughts on way forward, will go to list

## 7. Multiple Loss Ratio Search

<https://tools.ietf.org/html/draft-vpolak-mkonstan-bmwg-mlrsearch-03>

Status:

- Comments (many questions) on the list:  
<https://mailarchive.ietf.org/arch/msg/bmwg/DdEqW8kT54-PNtiXFNv3FYHh8go/>

AI: Authors not in attendance. Some questions on list for this draft.

----- no one claiming these agenda items -----

## 8. Network Function Service Density

draft-mkonstan-nf-service-density (expired),  
revisit the overall problem space, explore tighter collaboration options

Status:

- sent e-mail with questions, set-up a chance to explore with many Orgs.

AI: Email sent, awaiting response. Containers allow for many options

## 9. Probabilistic Loss Ratio Search

<https://tools.ietf.org/html/draft-vpolak-bmwg-plrsearch-03>

Status:

AI: No updates here. Still experimental

10. Benchmarking Methodology for EVPN VPWS

<https://tools.ietf.org/html/draft-kishjac-bmwg-evpnpwstest-04>

Status:

AI: Sudhin holding these while current EVPN draft works through IESG process

11. Benchmarking Methodology for EVPN Multi-casting

<https://tools.ietf.org/html/draft-vikjac-bmwg-evpnmultest-04>

Status:

AI: Sudhin holding these while current EVPN draft works through IESG process

AOB: