Characterization and Benchmarking Methodology for Power in Networking Devices

draft-cprjgf-bmwg-powerbench-05

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IETF123 BMWG meeting

Document History and Recap

- The benchmarking methodology provides the tools which help vendors to test energy efficiency of their devices

- It was first introduced in the IAB E-impact workshop and side meetings (Feb 2024)

- Presented in BMWG starting from IETF119
  - This draft focuses on two objectives:
    - Assessing “which system performs best” over a set of well defined scenarios.
    - Measuring the contribution of sub-systems to the overall system’s energy efficiency performance (micro-benchmark).
  - Several comments and suggestions received and addressed

Changes from -04 to -05

- The latest update includes some clarifications to address the comments from Gabor:
  - the test report should not only "describe the packet sizes and inter-arrival distributions" but, rather, should be very explicit about what traffic is being sent, such that it is easier to be replayed.
  - the device's temperature change MUST be known. It is useful to know whether device's heat management plays a role in the observed differences in energy efficiency.

Next Step

- The latest version is a good basis and now ready for adoption.
- Once adopted, the authors agreed an alignment with GREEN WG as well

- Your additional comments and input are welcome!