bpf BoF @ IETF 116

Chairs: Suresh Krishnan and Lorenzo Colitti
Responsible AD: Erik Kline

This session is being recorded
Note Well

This is a reminder of IETF policies in effect on various topics such as patents or code of conduct. It is only meant to point you in the right direction. Exceptions may apply. The IETF's patent policy and the definition of an IETF "contribution" and "participation" are set forth in BCP 79; please read it carefully.

As a reminder:

- By participating in the IETF, you agree to follow IETF processes and policies.
- If you are aware that any IETF contribution is covered by patents or patent applications that are owned or controlled by you or your sponsor, you must disclose that fact, or not participate in the discussion.
- As a participant in or attendee to any IETF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public.
- Personal information that you provide to IETF will be handled in accordance with the IETF Privacy Statement.
- As a participant or attendee, you agree to work respectfully with other participants; please contact the ombudsteam (https://www.ietf.org/contact/ombudsteam/) if you have questions or concerns about this.

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)
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IETF 116 Meeting Tips

In-person participants
● Make sure to sign into the session using the Meetecho (usually the “Meet echo lite” client) from the Datatracker agenda
● Use Meetecho to join the mic queue
● Keep audio and video off if not using the onsite version
● Wear masks unless actively speaking at the microphone.

Remote participants
● Make sure your audio and video are off unless you are chairing or presenting during a session
● Use of a headset is strongly recommended
Resources for IETF 116 Yokohama

- **Agenda**
  https://datatracker.ietf.org/meeting/agenda
- **Meetecho and other information:**
  https://www.ietf.org/how/meetings/preparation
- **If you need technical assistance, see the Reporting Issues page:**
  http://www.ietf.org/how/meetings/issues/
Agenda

- Administrativia, Chairs, 5 mins
- Overview & Implementations, 60 mins
- eBPF Foundation Position, 5 mins
- Discussions and closing, 40 mins
Overview and Implementations

- eBPF Overview & Linux, Alexei Starovoitov [20 minutes]
- eBPF Implementations Overview and eBPF on Windows, Dave Thaler [15 minutes]
- eBPF for NVMe and Storage, Christoph Hellwig [10 minutes]
- eBPF on Android, Lorenzo [5 minutes]
Discussions and Closing

- Open Mic/Discussions, All [15 minutes]
- Charter Discussion, All [10 minutes]
- Conclusions and Next Steps: Chairs and AD [15 minutes]
Scoping

- We have seen some concerns raised about potential licensing and copyright issues.
- The IESG has discussed these concerns with IETF Legal counsel.

The IETF Legal Counsel has looked at the copyright situation surrounding eBPF and believes that licensing terms of the rst files in the Linux source tree are potentially compatible with BCP78 pending a deeper study into detailed mechanics.

- We would like to focus this BoF on determining the interest and scope of work in the IETF while the legal issues are worked out in parallel.
- The discussion of the legal issues is out of scope during this BoF meeting.
Related work in IETF (hackathons)

- IPv6 extension headers:
  - Extension header testing, PDMv2 (Performance and Diagnostic Metrics Version 2) V6ops WG Project to check if IPv6 extensions header can be used on the internet.
  - Use eBPF to append an IPv6 extension header to all packets going in and out of system

- DNS:
  - Implemented DNS Error reporting for authoritative server

- BMWG Containerized Infrastructure Benchmarking
  - Used for acceleration
Draft Charter

- Available at
BoF Goals

The goal of this BOF is to demonstrate that the community has agreement that:

- there is a problem that needs solving, and the IETF is the right group to attempt solving it.
- there is a critical mass of participants willing to work on the problem (e.g., write drafts, review drafts, etc.).
- the scope of the problem is well defined and understood, that is, people generally understand what the WG will work on (and what it won't) and what its actual deliverables will be.
- there is agreement that the specific deliverables (i.e., proposed documents) are the right set.
- it is believed that the WG has a reasonable probability of having success (i.e. in completing the deliverables in its charter in a timely fashion).
Pre-Questions

● Does the community think that the problem statement is
  ○ clear
  ○ well-scoped
  ○ solvable
  ○ useful to solve
Questions

- Who is willing to author/contribute/edit documents?
- Who is willing to review documents?
- Do we need a new working group to solve these problems?
- Is there support to form a WG with the proposed charter?
  - (assuming any discussed charter revisions will be discussed and made)
- Is there anyone who feels a WG should not be formed?
  - Please speak up