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XDP gaining access to NIC hardware hints via BTF

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The idea for XDP-hints, which is XDP gaining access HW offload hints, dates back to Nov 2017. We believe the main reason XDP-hints work have stalled are that upstream we couldn't get consensus on the layout of the XDP metadata. *BTF was not ready at that time.*

We believe the flexibility of BTF can resolve the layout issues, especially since BTF have evolved to include support for kernel modules.

This talk is for hashing out upstream XDP-hints discussions and listening to users/consumers of this facility.

There are multiple users of this facility that all needs to be satisfied:

1. **BPF-progs** first obvious consumer (either XDP or TC hooks)
2. **XDP to SKB** conversion (in veth and cpumap) for traditional HW offloads
3. **AF_XDP** can consume BTF info in userspace to decode metadata area
4. **Chained** BPF-progs can communicate state via metadata

I agree to abide by the anti-harassment policy

Yes

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