

Bringing TSO/GRO and Jumbo frames to XDP

Tuesday, September 21, 2021 7:00 AM (40 minutes)

XDP is designed for maximum performance which is why certain driver use-cases are not supported (e.g. Jumbo frames or TSO/LRO). The single buffer per-packet design defines a simple and fast memory model and allows eBPF Direct Access (DA) to packet data. Both of them are essential for performance. However, it is the high time we fill the gap with the networking stack and enable non-linear frame support for XDP. There are multiple use-cases for XDP multi-buff like TSO/GRO, Jumbo frames or packet header split across multiple buffers. In this talk, we will present our design for non-linear frames in XDP with the objective to support TSO/GRO or Jumbo frames and, at the same time, to not slow down the single buffer per-packet use case.

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I agree

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