Linux Plumbers Conference 2025



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vfio, iommufd: Enabling user space drivers to vend more granular access to client processes

Hello, I'm planning to attend LPC in person this year, and am interested in presenting our learnings related to running user space drivers built on top of VFIO in production, specifically related to orchestrating access to VFIO-bound devices from multiple processes.

The presentation would cover

- Our current usage patterns.
- Benefits of being able to deploy updates to device policy by shipping user space binaries.
- Proposals for how to augment kernel interfaces to enable our class of use case more securely.
- How the proposals could intersect with ongoing VFIO and IOMMUFD work streams.

Some of the core topics are already being discussed in the tech topic thread [1] that I started. I think a presentation which summarizes the main points could be a useful catalyst for further in-person discussions at the conference.

[1] https://lore.kernel.org/all/20250918214425.2677057-1-amastro@fb.com/

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