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Energy Efficient Ethernet in the Linux Kernel: Taming the Wild West of Implementations

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Energy Efficient Ethernet (EEE) promises a greener future for networking, but its implementation within the Linux kernel has been a bit of a wild west. Inconsistent interpretations of the IEEE 802.3 standard have led to a patchwork of EEE implementations, often riddled with errors or simply blacklisted due to complexity.

This presentation takes you on a journey through the EEE landscape, shedding light on the common pitfalls and misconceptions that have plagued its adoption. The speaker, a seasoned wrangler of network drivers, will unveil the recently enhanced PHY framework, a powerful tool designed to tame the EEE wilderness and bring order to the chaos.

Discover how this framework streamlines EEE initialization, minimizes errors, and paves the way for a more energy-efficient future. Learn from the mistakes of others as the speaker highlights common implementation blunders and provides expert guidance on how to avoid them. Whether you're a seasoned kernel hacker or a curious network enthusiast, this presentation promises to equip you with the knowledge and tools needed to conquer the EEE frontier and build a more sustainable network ecosystem.

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