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The ieee802154 and 6lowpan Kernel Subsystems

Monday, 9 September 2019 17:30 (30 minutes)

This talk will put the spotlight on the linux-wpan project, which brings IEEE 802.15.4 and 6LoWPAN support to the Linux Kernel. Designed for low-power devices these protocols are ideal for the use in some IoT applications. Over the last years IEEE 802.15.4 support has slowly found its way into the mainline kernel. The 6LoWPAN code is shared with the Bluetooth stack and the ieee802154 subsystem itself is growing in functionality.

The talk will give an overview of the implemented functionality in the ieee802154 and 6lowpan subsystems and their use from userspace for the data (socket) and control (netlink) planes. It will describe the current hardware support, header compression techniques used in 6lowpan and areas where the stack is currently limited. We will close with a comparison of linux-wpan against other IEEE 802.15.4 stacks (Zephyr, RIOT, OpenThread).

I agree to abide by the anti-harassment policy

Yes

I confirm that I am already registered for LPC 2019

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Session Classification: You, Me, and IoT MC