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Configuring a kernel for safety critical applications

Monday, August 24, 2020 8:00 AM (45 minutes)

For security there are various projects which provide guidelines on how to configure a secure kernel - e.g., Linux Self Protection Project. In addition there are security enhancements which have been added to the Linux kernel by various groups - e.g., grsecurity or PAX security patch.

We are looking to define appropriate guidelines for safety enhancements to the Linux kernel. The session will focus on the following:

- 1. Define the use cases (primarily in automotive domain) and the need for safety features.
- 2. Define criteria for safe kernel configurations.
- 3. Define a preliminary proposal for a serious workgroup to define requirements for relevant safety enhancements.

Note that the emphasis is 100% technical, and not related in any way to safety assessment processes. I will come with an initial set of proposals, to be discussed and for follow up.

I agree to abide by the anti-harassment policy

I agree

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