LINUX
PLUMBERS
CONFERENCE

August 24-28, 2020

Kernel Dependability and Assurance Microconference

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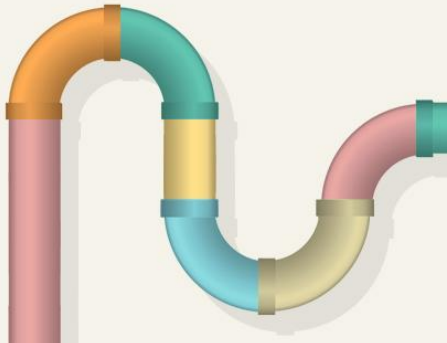

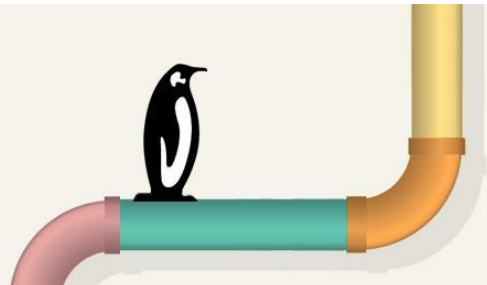

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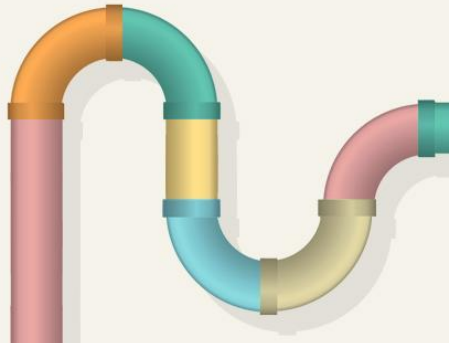
Dependability and Assurance

Dependability: *(our definition)*

- ensure a specific system property, i.e., availability, safety, security, reliability, integrity
- includes system analysis, engineering and argumentation

Assurance: *(our definition)*

- confidence in a system property or a quality property of the engineering process
- includes creation, exchange, review of trustable arguments and evidences to convey confidence



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Kernel Dependability and Assurance

In software, claims for distinct system properties (safety, security, availability) may rely on overlapping qualities of the software.

This MC is about Dependability and Assurance of basic operating system functionality, provided by the kernel and its basic user-space libraries (libc, ld.so, ...)

We want to discuss:

- how can ***we as Kernel Developers*** gain confidence that certain claims for the Linux kernel hold?
- how can ***we as Users*** gain confidence that certain claims for the Linux kernel hold?
- And how can ***we as Kernel Developers make Users*** gain confidence that certain claims for the Linux kernel hold?

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