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RV and the deadline scheduler: how to verify your subsystem at runtime

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Runtime Verification (RV) was introduced in v6.0 of the Linux Kernel and regained some traction recently with the integration upstream of the scheduler and rtapp models.

RV was successfully employed to model and validate a subsystem like the scheduler. With the ongoing work on timed automata, RV monitors get the ability to verify timing requirements of a subsystem, let's use it to validate the deadline scheduler.

Join us in this interactive session where we are going to dig into the experience of supporting a new subsystem in RV from the peculiarities that only a subsystem maintainer can unveil to new capabilities and paradigms from an RV maintainer.

This work can highlight inconsistencies in the subsystem, improve its general understanding and documentation as well as make the RV infrastructure more robust.

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