

## Linux Plumbers Conference 2024



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# Runtime Verification, where to go from here

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The runtime verification utility has been in the kernel for a few years now. It is a way to actively verify that the system is acting as it expects to be by the use of creating a formal model, compiling it, and adding it to the kernel. Then it attaches to tracepoints and when one of those tracepoints is triggered, it moves the model state to the next node. If it tries to move to a state that is not allowed, it then will set off a trigger. A trigger could simply post a warning or it can panic the system. This is used by safety critical Linux. But there's more work to do on this. This discussion will be about how to take it further, as the main author is no longer with us.

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