

Security Engineering Sessional

State Machine With Gnat-Prove

Muhammad Faisal Imran Khan

Vishal Khanna

Ziri Pavela

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State Machine Flow Chart

According to the thread.ads, the states of a threads are none, ready, running, waiting, sleeping and stopped.

- When the thread is in none state, if we give it start command, then it will go to the ready state.
- When the thread is in ready state, if we give the resume command it will go to running state.
- When the thread is in running state, if we give it sleep/wait command it will go to waiting or sleeping state.
- When the thread is in waiting/sleeping state, if we give it notify command, it will be again in ready state.
- When the thread is in running state, if we give it stop command it will go to stopped state.
- For all other combinations of state and action commands, the thread will go to the none state.

Implementation:

We have used GPS application to implement this package. The attached with this projects are threads.gpr, thread.ads, thread.adb and gnatprove.out.

We ran both the examine file and prove file command in the gps/spark. And then did the gps/spark/show report command for generating this output file.