HEIG-VD HAUTE ÉCOLE D'INGÉNIERIE ET DE GESTION DU CANTON DE VAUD

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Formal verification
Engines
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Engines

Choosing the right engine makes sense to reduce the processing time, especially for continuous integration.
Try autotune on the counter example, by launching the following command :

```
sby --autotune --yosys "yosys -m ghdl" -f counter.sby
```

— What is the result ?
— What engine should you use for bmc and prove ?

Go to your previous elevator/v2, and run the same autotune.

— What is the result ?
— What engine should you use for bmc and prove ?

Reset vs finding a bug

Go back to the counter, and modify the scripts part of the `.sby` :

```
ghdl --std=08 -gSIZE=32 -gERRNO=4 -fpsl counter.vhd counter.psl -e counter
```

When running the script, does it detect and error ?
Now, modify the `counter.psl` file, by adding an `assume rst_i;`, and rerun the script.
What happens ?

Depth of BMC

For the various exercises you had the opportunity to work on, what depth would you choose for bounded model checking ?

— Counter
— Timer
— Elevator v1
— Elevator v2
— Elevator v3
— AXI module