

# Uppaal. The Model Checker.

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## 1 Intro

- Quick look
- History

## 2 The tool

Uppaal is a model checker for real-time systems. What we can with it?

- 1 Modeling
- 2 Simulation
- 3 Verification

Internal representation of model consists of:

- Network of timed automata
- Extended with data types

Uppaal was started by Uppsala University, Sweden and Aalborg University, Denmark.

Timeline of development:

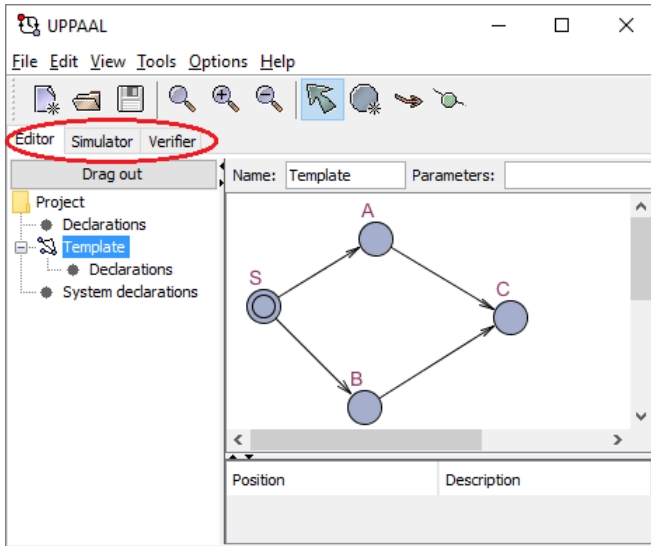
- 1995 - project started
- 1999 - first beta
- 1999/2000 - first stable release (v 3.0.X)
- September 27, 2010 - latest stable release (v 4.0.13)
- July 1, 2014 - preview release (v 4.1.19)

Versions: Windows, Mac, Linux, 32/64 bits

Available licenses:

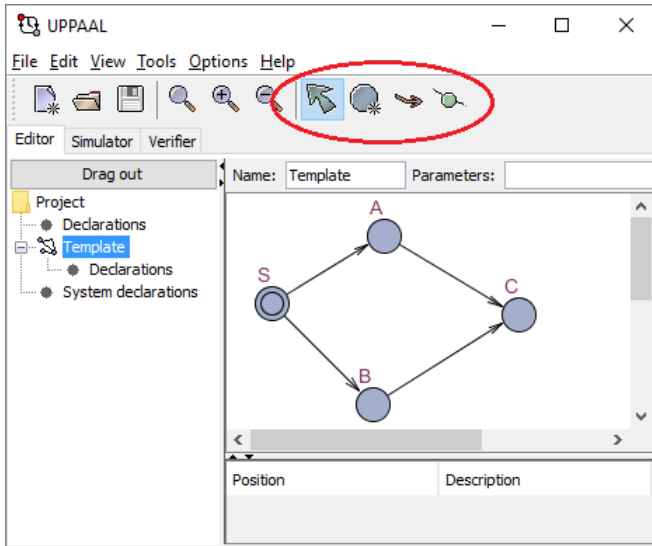
- Academic use (more info: <http://www.uppaal.org/>)
- Commercial use (more info: <http://www.uppaal.com/>)

# Uppaal GUI - Main parts



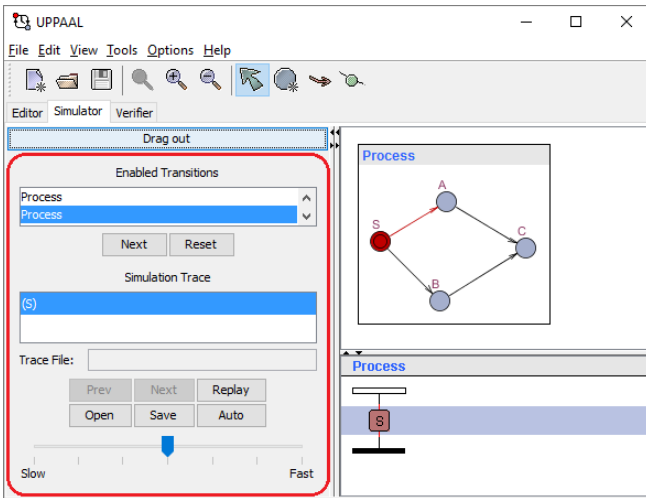
- System editor
- Simulator
- Verifier

# Uppaal GUI - Editor control



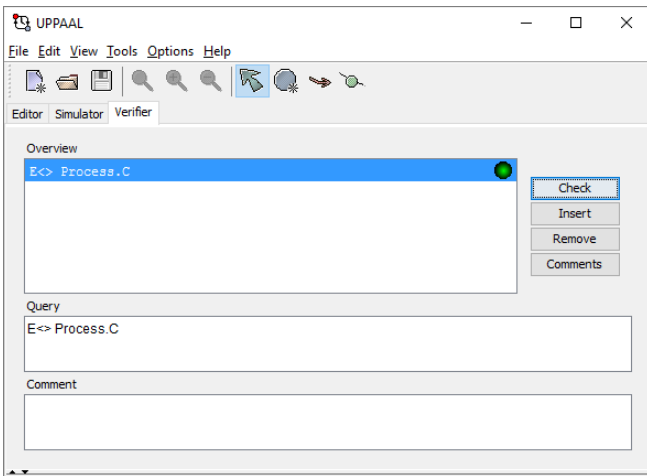
- Name: Template (default)
- Select
- Add location
- Add edge
- Add nail

# Uppaal GUI - Simulation control



- Select transition
- Track simulation
- Control  
(Prev/Next/Auto)
- Visualization

# Uppaal GUI - Verification



- Query editor
- Check query
- Overview
- Save/load