Ensō ⃝

Interpretation and Composition of Executable Specification Languages

Goals:

- don't design programs, program the design

- eliminate boilerplate
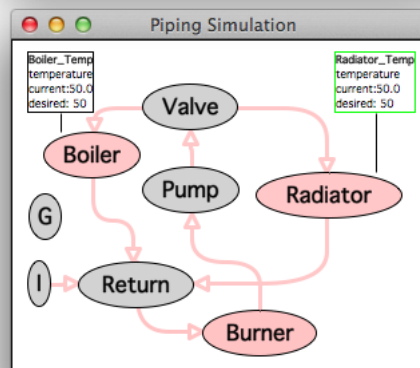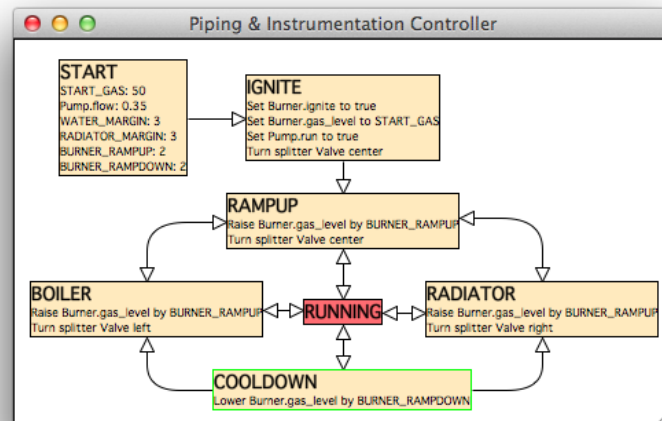
Challenges:

- modular language development

- compositional semantics

- self-hosting

Solution:

- languages for GUI, Web, security, data, syntax, diagram editors, ...

- integrated external DSLs

- interpretation with partial evaluation (no code generation)

Case-study: piping and instrumentation

- Interactive simulation of piping model and controller

- Lines of code:

  - Heating model: 53

  - DSL: 357

  - Simulator: 486

www.enso-lang.org