

Michael Wetter LBNL

October 13, 2020



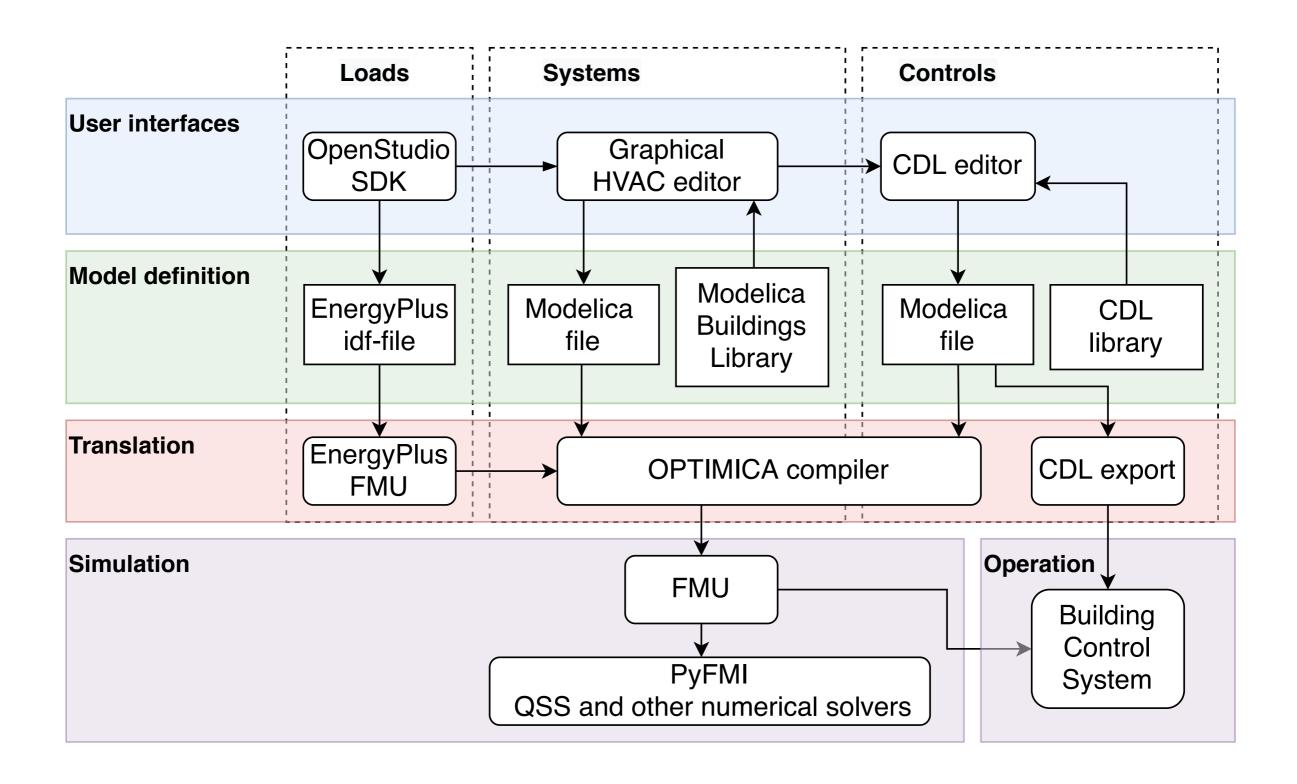




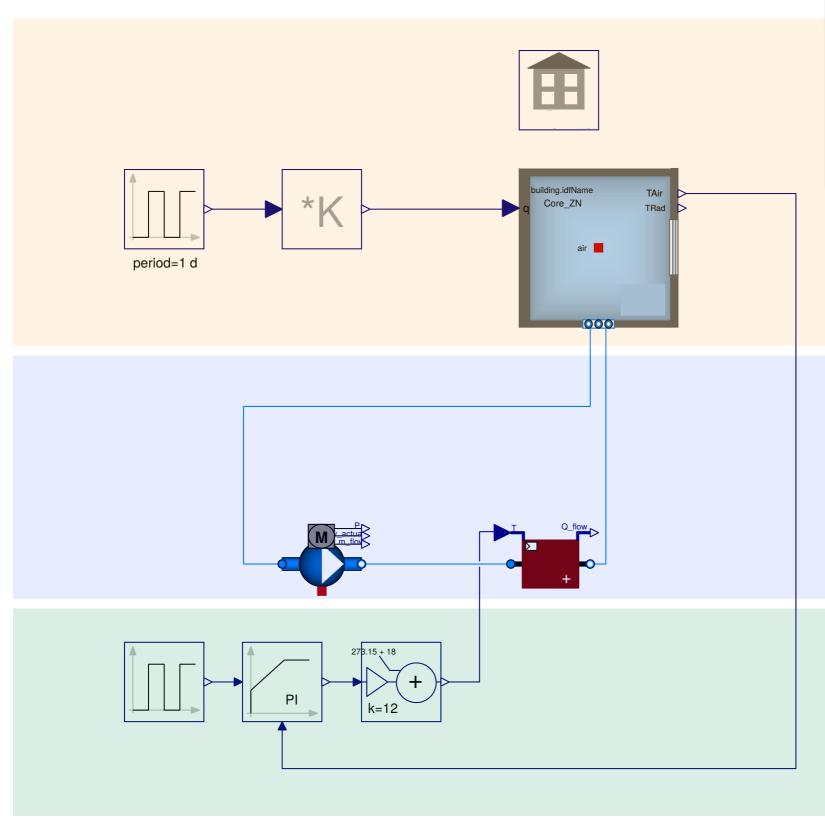


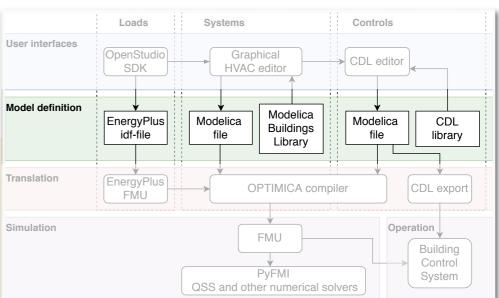


Spawn architecture



Model development



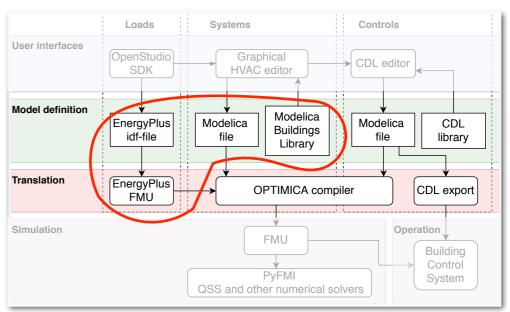


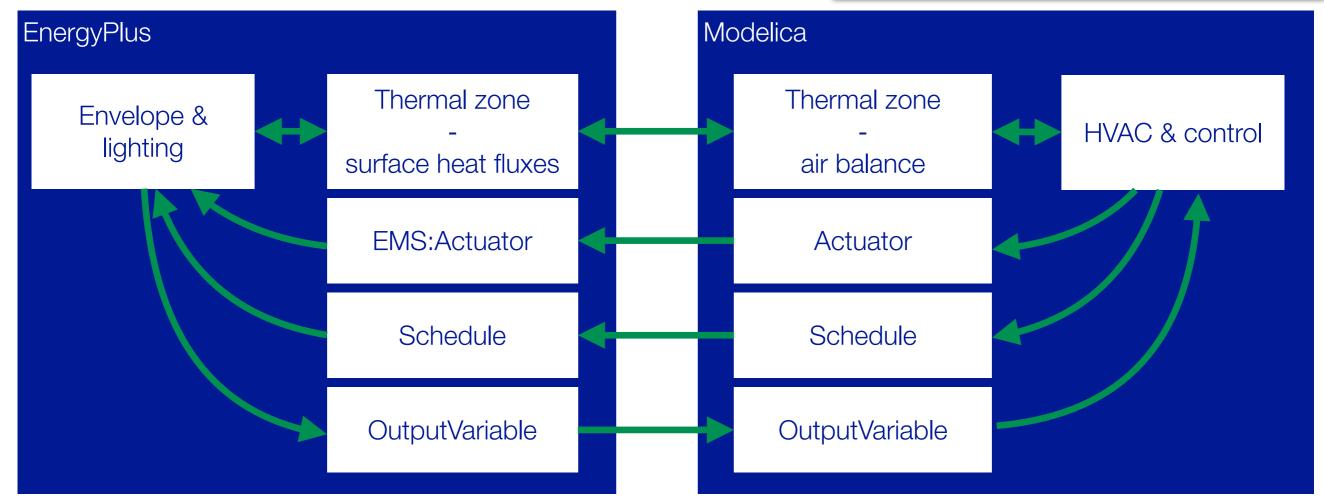
Building model from EnergyPlus

Simple HVAC system from Modelica Buildings Library

Control sequence in Control Description Language

EnergyPlus — Modelica run-time coupling





- EnergyPlus based HVAC and control system calculations are avoided.
- EnergyPlus and Modelica communicate on time-step basis.
- No need for user to setup co-simulation.

Access, information, and current developments

Development access: https://github.com/lbl-srg/soep

Tested with Dymola, Optimica, and JModelica (OpenModelica upcoming).

