IBPSA Project 1

Modelica Buildings library

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April 3, 2019

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Current activities

Spawn of EnergyPlus
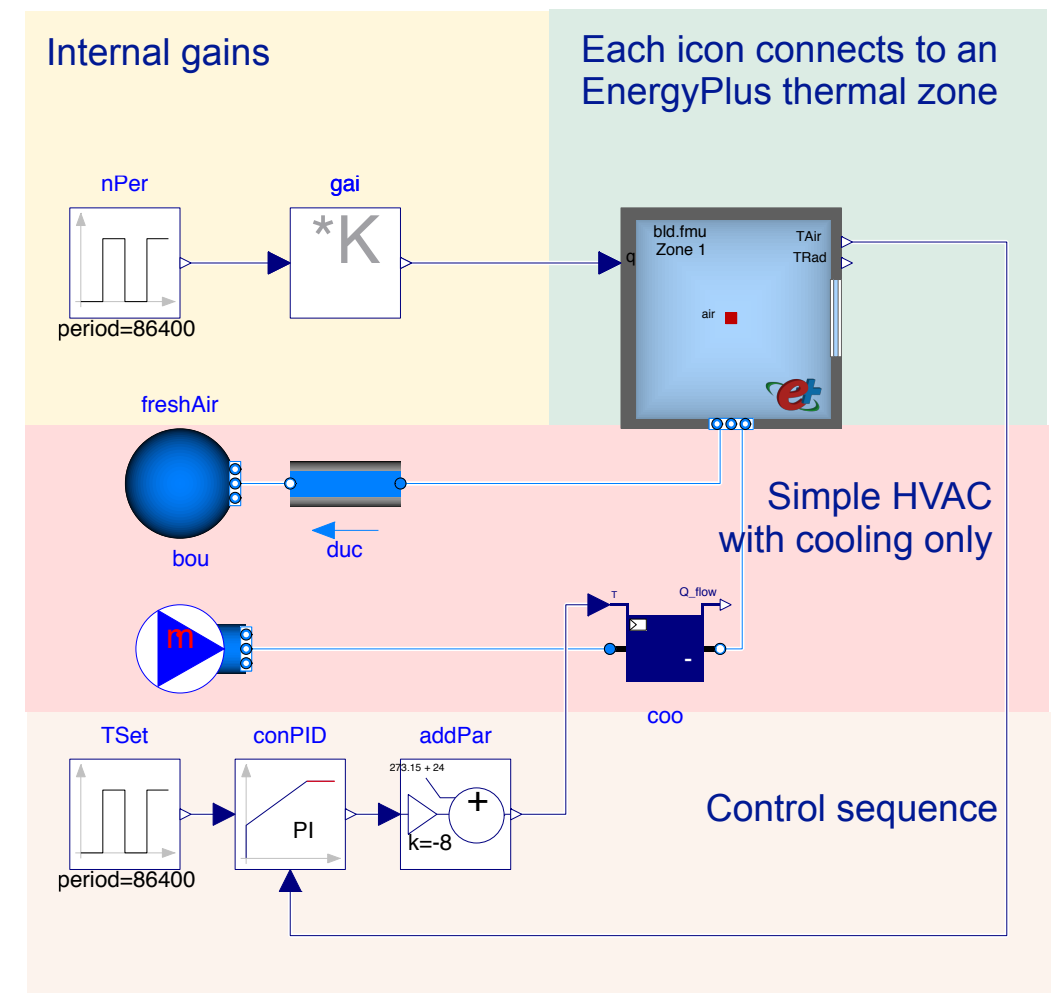
- Direct loading of EnergyPlus envelope model

Occupant modeling

- Release of `Buildings.Occupants`

OpenBuildingControl

- Control description language CDL

- Release of updated sequences for VAV models
  (ASHRAE Guideline 36 public review draft)

- Updated ASHRAE Guideline 36 to official guideline

- Implement chiller plant sequences from ASHRAE RP
  1711

Export to BRICK

Current activities

Building HVAC

- Cooling coil (not using finite differences)
- Heat pump model similar to EnergyPlus (in development)
- CHP model similar to EnergyPlus (in development)
- Templates for HVAC systems (including controls)

District heating and cooling systems

- New 3 year projects with NREL, CU Boulder and Engie Lab
- Component models
- Templates for district energy models

https://github.com/lbl-srg/funnel

https://github.com/lbl-srg/modelica-json

Models for potential addition to IBPSA

Python package (Utilities.IO.Python27 from master).

Buildings.Controls.OBC.{CDL,ASHRAE}

Buildings.Electrical (but have currently no project to develop it further).

Buildings.Occupants (from master)