Guidelines/Constrains for modelling incidents and systems

In this document I describe the guidelines/constrains that one need to follow to model incidents and systems using the incident pattern meta-model and the system meta-model respectively.

# Modelling Systems

We model a system based on the system meta-model which is tailored to represent components and interactions of a smart building.

Modelling of a system has two parts:

* An instance of the system meta-model that represents the different components found and the actions of a smart building.
* A system analysis of the instance model that contains the states and their transitions.
  + Currently this is done using BRS. A tool used for BRS is Bigrapher.
  + Using Bigrapher we also include a keyword to define an action. Using this approach: an action can be given the ability to be performed more than one (by having an opposite action e.g., enter-exit connect-disconnect) or once (by having only the action keyword e.g., enter). You also can have mix.