

Syntax extensions for a constrained-object language via dynamic parser cooperation

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A modern feature of constraint languages is the ability of compiling a model into a set of solver languages. This allows one to model a problem in a single language and to execute it in a set of solver engines. The idea is to facilitate experimentation as well as model sharing. The common architecture to support this task is composed of three layers: an upper layer for the modeling language, a bottom layer for the solver language, and a middle one for performing the mapping process. However, this architecture has an important inconvenience: there is no mechanism for updating the modeling language. This paper addresses this concern by introducing a simple description language for extending the syntax of the modeling language. The goal is to make the architecture adaptable to further upgrades of the solver layer.

Constraint programming

Modeling languages

Programming languages