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The extensibility of Maude's module algebra. (English) [Zbl 0983.68522](#)

Rus, Teodor (ed.), Algebraic methodology and software technology. 8th international conference, AMAST 2000, Iowa City, IA, USA, May 20-27, 2000. Proceedings. Berlin: Springer. Lect. Notes Comput. Sci. 1816, 422-437 (2000).

Summary: The reflective capabilities of rewriting logic and their efficient implementation in the Maude language can be exploited to endow a reflective language like Maude with a module algebra in which structured modules can be combined and transformed by means of a rich collection of module operations. We have followed this approach to use the specification of such a module algebra as its implementation, including a user interface and an execution environment for it. The high level at which the specification of the module algebra has been given makes this approach particularly attractive when compared to conventional implementations, because of its shorter development time and the greater flexibility, maintainability, and extensibility that it affords. We explain the general principles of the reflective design of the module algebra, focusing in its extensibility, and illustrate some of the possibilities for defining new module operations.

For the entire collection see [\[Zbl 0939.00039\]](#).

MSC:

[68Q60](#) Specification and verification (program logics, model checking, etc.)

Cited in **7** Documents

Software:

[Maude](#); [LARCH](#)