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time is at most twice the TTRT. Each property is treated first under the assumption that all overheads are negligibe, and second with certain sources of overhead taken into account explicitly. It is found that the proposed standard protocol can be improved for situations of practical interest by a slight modification.

Authors' Abstract

Dan Stroemberg and Peter Fritzson: Transfer of Programs from LISP to BCPL Environments: An Experiment, Informatics Laboratory, Linkoeping University, Linkoeping, March 1980.

Lisp programming systems provide a high level of support for program development, both directly by available libraries of programs that are used by the programmer for operating on the programs he develops, and indirectly by the flexibility of the system, e.g. the possibility to redefine functions dynamically. This programmer support is useful when a program is developed, but implies an overhead at production time. We would therefore like to transfer a program, after it has been developed in a Lisp-like environment, to a production environment where most of the overhead implied by programmer support has been eliminated.

This paper reports an experiment where the Lisp system has been used as a program generator, which generates machine-independent programs in BCPL. It also contains a comparative discussion of other approaches, and an analysis of specific problems that are involved in our approach.

Author's Abstract