

Persistence is Hard, Then You Die!
or
Compiler and Runtime Support for a Persistent
Common Lisp

J. H. Jacobs
M. R. Swanson
R. R. Kessler

UUCS-94-003

Department of Computer Science
University of Utah
Salt Lake City, UT 84112 USA

January 26, 1994

Abstract

Integrating persistence into an existing programming language is a serious undertaking. Preserving the essence of the existing language, adequately supporting persistence, and maintaining efficiency require low-level support from the compiler and runtime systems. Pervasive, low-level changes were made to a Lisp compiler and runtime system to introduce persistence. The result is an efficient language which is worthy of the name Persistent Lisp. ¹

¹This research was sponsored by the Advanced Research Projects Agency (DOD), monitored by the Department of the Navy, Office of the Chief of Naval Research, under Grant number N00014-91-J-4046. The views and conclusions contained in this document are those of the authors and should not be interpreted as representing official policies, either expressed or implied, of the Defense Advanced Research Projects Agency or the US Government.