Implementation Summaries

I have received only two new descriptions of Lisp implementations, and no updates of old descriptions. Now there's always a delay in getting feedback from readers, and I suppose the pipeline stall is particularly bad at the start, so this paucity of information is understandable. But it would be to everyone's benefit if you could send your descriptions as soon as possible, so that they can be included in the next issue. And if your Lisp is already on the list, be sure to send me updates so this information is as complete and correct as possible.

In a future issue I will reprint all the summaries.

This list represents the descriptions I have received between 20 February 1987 and 29 March 1987.

Name POPLOG

Features .

> Integrated language combining PROLOG, COMMON LISP and POP11.
> Several incremental compilers.
> POPLOG Virtual Machine allows new compilers to be added easily and provides portability and integration with utilities.
> Logic programming
> List and array processing
> Pattern matching
> Co-routines
> Active variables
> "Exit actions" (unwind-protect)
> Indefinite precision arithmetic, ratios, complex numbers
> Dynamic and lexical scoping of variables
> File-local global lexicals
> Section mechanism
> Garbage collector
> External load mechanism for calling programs written in C, Pascal, FORTRAN, Ada
> Screen editor, VED, is language sensitive and user extensible.
> Extensible HELP system
> Cross reference mechanism
> Can save and share program images
> Program library with many demo and utility programs

Support Sussex University cannot offer a full support and maintenance licence. However, updates are available.

Hardware/Software VAX VMS, VAX UNIX 4.2bsd, HP 9000/200 and 9000/300, SUN-2, SUN-3, Apollo, GEC Series 63 UNIX System V.

Contact Systems Designers International, Pembroke House, Pembroke Broadway, Camberley, Surrey, GU15 3XH (0276)686200

> Systems Designers International, Suite 407, 444 Washington Street, Woburn, MA 01801 (617)935-8009

> For educational institutions:

Ms. A. Mudd, Cognitive Studies Programme, Arts E, University of Sussex, Brighton, BN1 9QN, (0273)606755 ext 2404

Robin Popplestone, Computer Science Dept. University of Massachusetts, Amherst, MA 01003

Name Scheme84

Standard Scheme

Additional Features .

> Scheme 84 compiles source to an intermediate s-expression code, which is then interpreted
> by a Virtual Scheme Machine (VSM) written in compiled Franz Lisp.
> Easy to modify, enabling fast implementation of new features.
> Engines
> Extend-syntax
> Composable continuations

Missing Features Some minor naming differences from RRRS

Support unsupported, but it is free and sources are included

Hardware/Software runs on any system that runs Franz Lisp

Contact available via anonymous ftp on arpanet as directory pub/scheme84 on iucs.cs.indiana.edu, or
send a tape to:

Nancy Garrett, Lindley Hall, Bloomington, IN 47405.

It will be returned with Scheme 84 in Unix tar format, with an Indiana University Computer Science
Department Technical Report that documents the language.

EDITORIAL POLICY

All submissions to Lisp Pointers, with the exception of technical articles, should be made in camera-ready text and sent to the appropriate department head. Technical articles may be submitted to the Technical Articles Editor in either hard copy or in TEX source files by Arpanet link, tar format cartridge tape, or tar format reel-to-reel. All submissions should be single-spaced with no page numbers. Without a special waiver from the appropriate department head, submissions will be limited to ten pages. This can be achieved by printing longer articles two-up. Camera-ready text is defined to be no more than 7 1/2 X 10 inches or 19 X 25 centimeters, centered on an 8 1/2 X 11 inch page. Articles that contain too much blank space will be rejected. It is the author's responsibility to retain a working copy of the submission, as contributions will not be returned to authors. Authors not fluent in writing English are requested to have their work reviewed and corrected for style and syntax prior to submission.

Although Lisp Pointers is not refereed, acceptance is subject to the discretion of the appropriate department head. The scope of topics for Lisp Pointers includes all dialects of Lisp and Scheme. We encourage research articles, tutorials, and summarizations of discussions in other forums. Lisp Pointers is not a forum for detailed discussions on proposed changes to the Common Lisp standard.

Lisp Pointers is a non-profit publication sponsored by companies interested in the Lisp topic. No company has directed or controlled its publication. The opinions expressed herein are solely those of the authors, editors, and other contributors. These opinions do not necessarily reflect the opinions of either the companies affiliated with these individuals or the company sponsoring this newsletter. There is no cost for a subscription to Lisp Pointers for either an individual or a library. Lisp Pointers is published six times per year. Submission deadlines are the first of every even numbered month.

Free Subscription to Lisp Pointers (postal mail only)

```
LISP POINTERS
Mary S. Van Deusen, Editor
IBM Watson Research
PO Box 704
Yorktown Heights, NY   10598
```

Name:_____ _____

Mailing Address:_____

_____

_____

_____

If the mailing list for Lisp Pointers is ever made available for commercial use, please do not make my name available.

CURRENT AND PREVIOUS SPONSORS OF LISP POINTERS

IBM Thomas J. Watson Research
Institut National De Recherche En Informatique Et En Automatique
Xerox PARC