

NEWS FROM ROB WITTY ABOUT SUN COMMON LISP

Here is some information on the current status of SUN Common Lisp and SPE. Note the comment at the end, when they explain that you need a minimum of 12M memory and 80M disk space (assuming you do not need to store any files).

SUN Common Lisp (SCLisp) 3.0 and Symbolic Programming Environment (SPE) 1.02

SUN will Beta test the Lisp 3.0 and SPE 1.0 products together at overlapping times. Lisp 3.0 will be shipped to the beta sites first (schedule for 12/16) with SPE 1.0 shipped approximately one month later. The sites will have both products together for at least six weeks of testing.

SCLisp 3.0 Summary

SCLisp 3.0, the next Common Lisp release from SUN, will offer the following enhancements:

- Generation Scavenger Garbage Collection, in pseudo real-time, replaces the Stop and Copy style collection algorithm used in prior releases. This algorithm, implemented in assembly language for performance, will use less virtual memory.
- The Debugger has a better backtrace display, access to local variables by name, and more command options.
- Multi-processing (Stack Groups) allows multiple Lisp processes in the same image. Variables can be either process-local or global. Process locks, events, and communication are included.
- Floating Point support is in-line for the 68881 and FPA on the SUN-3, and the Weitek chip set on the SUN-4.
- Window Manager, an implementation of Common Windows, is build on NeWs.

SPE 1.0 Summary

SPE 1.0 provides SUN workstations with sophisticated program development tools for artificial intelligence and symbolic programming. The tools facilitate rapid prototyping so programmers can maximise their productivity and reduce development time, all on a general purpose workstation. The key features include:

- A special Emacs-style editor includes a set of Lisp libraries and can handle several modes, such as running utilities as well as editing Lisp code.
- The Common Lisp Window Manager, based on NeWs, provides a toolkit of Lisp windowing functions.

- A runtime dynamic window based Debugger gives information on the state of the program.
- A window-based Data Inspector allows inspecting instances of Lisp data structures.
- A window-based Single Stepper allows line-by-line execution of Lisp Source code.
- A window-based Trace is a tool for monitoring the execution of a function or set of functions during runtime.
- The Source Code Analyser produces a set of relationships of the functions which users can use to follow the flow of control while editing the program.
- The Source Code Finder is a tool for locating specific source for any function.
- The Application Manager keeps track of the dependencies of source file and functions involved in an application.
- A set of library functions that create important interfaces between Lisp and UNIX so that the extensibility of the SUN workstation and its networking tools can be fully integrated with the symbolic application programs.

Beta Site Requirements

The beta site must be willing to sign a testing agreement, to do installs quickly (including updates and/or re-installs), and to provide solid feedback in weekly written reports.

Under the no charge beta policy, SUN Customer Service retains ownership of the product. The customer will not be allowed to purchase the product before FCS.

SCLisp 3.0/SPE 1.0 Beta Requirements are as follows:

1. Must be running at least 3.4 SUN OS on a SUN-3.
2. Must have 12 Megabytes of memory in the target machines.
3. Must have 40 Megabytes of disk space on the machines on which Lisp/SPE/NeWs will be installed.
4. Must have 40 Megabytes of disk swap space available to Lisp and SPE.