San Diego Supercomputer Center

Utility Library

Release Notes

Binary Release 2.0
October 1991

1. Introduction

These notes describe binary release 2.0 of the San Diego Supercomputer Center (SDSC) Utility Library.

Release 2.0 includes the object library **libsdsc.a**, its include files, and its manual pages. Source code for the library is not included.

The SDSC Utility Library is used in a number of our tools, including the SDSC Image Tools. The SDSC Image Tools include tools to manipulate images, and read and write a wide variety of image file formats. The SDSC Image and their documentation may be separately uploaded via anonymous ftp from **sdsc.edu** (132.249.20.22).

2. Binary Release

This is a binary release. Host architectures supported in this release include the following:

alliantfx2800	Alliant Computer Systems	FX/2800 minisupercomputers
cray2	Cray Research Inc.	Cray-2 supercomputers
crayy	Cray Research Inc.	Y-MP supercomputers
decstation	Digital Equipment Corp.	DECStation workstations
decvax	Digital Equipment Corp.	DEC VAX and VAXStation workstations
ibmrs6000	International Business Machines	RS/6000 workstations
next	NeXT Computers	NeXTStation workstations
sgi4d	Silicon Graphics Inc.	4D workstations
stardent	Stardent Computer Systems	Stardent GS1000/2000 workstations
sun3	Sun Microsystems Inc.	Sun3 workstations
sun4	Sun Microsystems Inc.	Sun4 and SPARC workstations

Additional architectures are expected in the near future.

A separate release **tar** or **cpio** file is generated for each architecture.

3. Documentation

Man pages describe each of the library routines. **nroff** source is provided in files with **.n** filename suffixes and should be processed through **tbl** and **nroff**. For instance:

tbl tagintro.n | nroff -man > tagintro.3l
or
tbl argintro.n | nroff -man > argintro.3l
or
tbl binintro.n | nroff -man > binintro.3l

A **Makefile** is provided to build man pages using **nroff** and **tbl**.

For sites without access to **nroff** and **tbl**, post-processed text versions of all man pages are included in files with **.1l** and **.3l** filename suffixes.

For sites with PostScript laserprinters, PostScript versions of the manual pages are provided in files with **.ps** filename suffixes.

4. Changes since the last release

This is the first public release of the SDSC Utility Library.

5. Items that may cause confusion

The following features of the SDSC Utility Library may confuse some users:

- No source code examples on the use of the library are included. However, the introductory man pages **argintro**, **binintro**, and **tagintro** include sample source on the use of common features.
- When reading and writing floating point values using the binary I/O package, remember that floating point formats differ in their accuracy down in the lowest bits of the mantissa. Conversion to or from differing formats often looses mantissa precision. This cannot be helped.

6. Known Problems

There are no known problems at this time.

7. Future Directions

This is an ongoing project at SDSC. Plans for expansion include adding to the argument parsing package the ability to parse arguments from files, instead of just the command-line. Binary I/O package expansions include optimizing it, and adding additional floating point formats.A Input from SDSC Utility Library users would be quite helpful in optimially directing our future efforts.

8. Bug Reports and User Registration

This software is supported by the San Diego Supercomputer Center, and we want to hear from you. If you find bugs (heaven forbid), or want to be put on our mailing list for future software releases, please fill out and send us a bug report and/or user registration form. These forms may be obtained by executing one of our tools with the **-feedback** or **-register** options.

For instance, to generate a bug report feedback form for **imconv** (separate SDSC Image Tools distribution), type:

% **imconv -feedback**

The feedback (bug report) form is written to a file named **imconv.fbk.0** in the current directory. When generating a feedback form, the tool dumps the form and exits without doing anything else.

To generate a user registration form for **imconv**, type:

% **imconv -register**

Like the feedback form, the registration form is written to a file named **imconv.reg.0** in the current directory. When generating a registration form, the tool dumps the form and exits without doing anything else.

User registration is not required, but we'd like to hear from you anyway. We'll put you on a mailing list for notification of future releases of SDSC software tools, and read with interest who you are and what you are doing with our software.

After you have filled out the form, please send the form, and any accompanying data, source fragments, sample output, or whatever, to SDSC:

E-mail: info@sdsc.edu

Surface mail: Software Products Information
San Diego Supercomputer Center
P.O. Box 85608
San Diego, CA 92186-9784

FAX: (619) 534-5113

If you have questions about this form or any of our software products, please contact us via any of the above methods or call us at:

(619) 534-5100 M-F, 8am-5pm, Pacific time

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We ask that the following message be included in all derived works: *Portions developed at the San Diego Supercomputer Center*.

Please do not redistribute this software. We would prefer that interested parties upload the software directly from our anonymous ftp account. This guarantees that they get the latest release, and helps us to keep track of roughly how many sites out there are using our software.

10. Conclusion

Please use these tools and send us feedback: let us know what you like and what you don't like about this software. Tell us how you are using the SDSC Utility Library and what you would like to see in the future, both as enhancements to this product, and as additional products from SDSC.

We encourage you to cite in your publications the use of the SDSC Utility Library, and any other SDSC software you have used. Your publication references and your feedback support are what makes this project work, and what gives us the opportunity to continue to develop portable free tools like the SDSC Utility Library, and our other products. We look forward to hearing from you!