SPARCompiler and SPARCworks Product Notes

SPARCworks 2.0.1
C 2.0.1
C++ 3.0.1
FORTRAN 2.0.1
Pascal 3.0.1

A Sun Microsystems, Inc. Business

Sun Microsystems, Inc.
2550 Garcia Avenue
Mountain View, CA 94043-1100
U.S.A.

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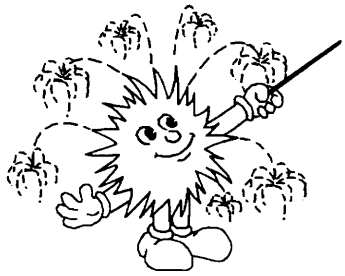
Contents

Product Notes for SPARCworks 2.0.1 and SPARCompilers

These notes provide information for SPARCworks 2.0.1 and for the SPARCompiler products C 2.0.1, C++ 3.0.1, FORTRAN 2.0.1, and Pascal 3.0.1.

Note – SPARCworks is not supported on machines without floating-point hardware.

Please Read the On-line README Files



On-line `README` files contain useful information about the product that is not documented elsewhere. *Be sure to read the README files before using the product.* The `README` categories that are of primary importance are:

- Known problems with the software and workarounds
- New features and enhancements

Note – These product notes contain only product information that was not available in time for inclusion in the `README` files.

Obtaining a License Password

Information and exact instructions for acquiring license passwords are described in Chapter 6, "Licensing SunPro Software," in *Installing SunPro Software on Solaris*.

An Important Message to Upgrade Customers

If you received this product as part of a support agreement with the Sun Microsystems Worldwide Customer Support Organization, then please read the following paragraphs.

This product incorporates a floating license which controls the number of Users who may simultaneously use the software. You will need to obtain a password in order to use this product. You can find complete information on floating licensing, including how to install your license server and how to obtain your password, in the Installation manual included with this product.

Note – You may not need a separate Right To Use (RTU) agreement for each User- just the maximum number of concurrent Users of this product.

Inside this kit, you will find an embossed certificate that entitles you to a single password. When you contact the Sun license distributor to obtain your password, you will need to supply the information on this certificate as well as information on your desired configuration. If you have more than one User on a support contract, you will receive additional certificates for the balance of your RTU agreements in a separate package. Each certificate may be redeemed for a password for additional Users at your convenience. Please keep these certificates in a safe location.

If you do not receive the number of certificates indicated by your support contract for this product, please notify Sun Customer Service immediately. In the US, call:

1-800-872-4-SUN

In Canada, call:

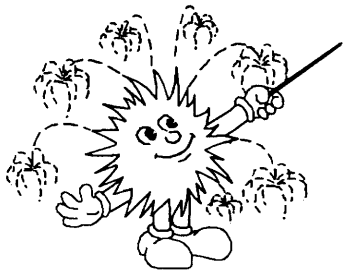
1-800-722-4-SUN

At the main voice mail menu, press 1 to access the software and hardware menu, then press 1 again to contact a Software Assistance representative.

In other countries, contact your Customer Service Administrator.

Note – Please have your software contract available when you contact SUN.

Compatibility



These product notes describe the SPARCompiler and SPARCworks products running in the Solaris® 1.x or 2.x operating environment.

Requirements for Solaris 2.x:

- SunOS™ 5.x operating system
- A SPARC® computer, either a server or a workstation
- The OpenWindows™ 3.0 (or later) application development platform

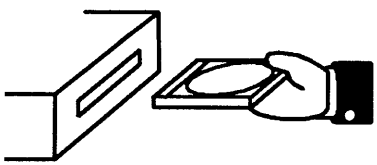
Requirements for Solaris 1.x:

- SunOS 4.x operating system
- A SPARC computer, either a server or a workstation
- The OpenWindows 3.0 application development platform

SunOS 4.x implies one of the following:

- SunOS 4.1.1 with optional patches
- SunOS 4.1.2 with optional patches
- SunOS 4.1.3 with optional patches

Installation

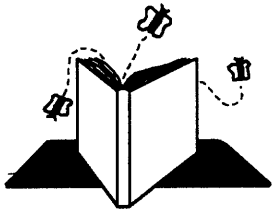


You can install each software product from the single CD-ROM provided. Do a separate installation for each product.

The manual *Installing SunPro Software on Solaris* tells you how to perform the software package installation, including how to use:

- The `spro_install` and `pkgrm` facilities (SunOS 5.x)
- The `cdm` and `cdmanager` facilities (SunOS 4.x)

Installation Documentation Bugs



After these files were put onto the CD-ROM, we found the following errors:

- On page 6, Chapter 1 of *Installing SunPro Software on Solaris*, step 7 should read:

```
# mount -r remote_machinename:/cdrom /cdrom
```

  Remember to use the `-r` option.

- On page 17, Chapter 1 of *Installing SunPro Software on Solaris*, the bottom of the screen should read:

  Please enter a number or q for the main menu: 3.

- On page 54, Chapter 3 of *Installing SunPro Software on Solaris*, step 6 should read:

```
# mount -r remote_machinename:/cdrom /cdrom
```

  Remember to use the `-r` option.

- On page 71 and 72, Chapter 4 of *Installing SunPro Software on Solaris*, the first bullet should read:

  Type the command `pkg... SPROab`*spl*.

  where *spl* is a variable for the product that you are trying to display.

- On page 88, Chapter 6 of *Installing SunPro Software on Solaris*, the second code line should read:

```
DAEMON suntechd /your_location/SUNWspro/bin/suntechd
```

- On page 84, Chapter 6 of *Installing SunPro Software on Solaris*, the first two paragraphs of the Section "Installing the Licensing Software" have been rewritten as follows:

The instructions in this chapter use the programs `Install_License`, `lmgrd`, `suntechd`, `lmreread`, `lm_check`, `lmhostid`, and `lmdown`. On machines running SunOS 5.x, these programs are physically located in *license_location*`/bin`. On machines running SunOS 4.*x*, the programs are in *license_location*`/bin4`.

In the rest of this chapter, the place where you have installed `SunTech_License` is called *license_location*. On 4.*x*, the default location is `/usr/lang/SunTech_License`. On 5.x, the default location is `/opt/SUNWspro/SunTech_License`.

- On page 94, Chapter 6 of *Installing SunPro Software on Solaris*, the second paragraph of the Section, "Copying the License Daemons" has been rewritten as follows:

  Binaries for both SunOS 5.x and SunOS 4.*x* are included in `SunTech_License`. The files in *license_bin* are actually links to a shell script that invokes the binary version of the program for the operating system you are using. You must copy the version of the daemons for the operating system that the licensing server is running. Binaries for SunOS 5.x are in *license_location*`/bin`; binaries for SunOS 4.*x* are in *license_location*`/bin4`. In this section, the location of the binary file you use is called *daemon_bin*.

- On page 104, Chapter 6 of *Installing SunPro Software on Solaris*, step two should read:

  Type the pathname for the license data file or files in the router file.

- On page 104, Chapter 6 of *Installing SunPro Software on Solaris*, the new paths in Table 6-3 are:

  SunOS 4.x

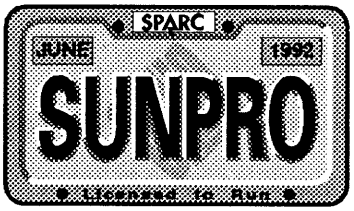
SPARCompilers:	`/usr/lang/SC_LICENSE_FILE`
TeamWare:	`/opt/SUNWspro/lib/LICENSE_FILE`

- On page 92, Chapter 6 of *Installing SunPro Software on Solaris*, Table 6-2 has the following new version numbers:

Feature Names and Version Numbers

Product Name	Feature Name	Version (as used by Install_License)
SPARCworks 2.0.1	sunpro.sparcworks.tools	2.01
SPARCompiler C 2.0.1	sunpro.c	2.01
SPARCompiler C++ 3.0.1	sunpro.cc	3.01
SPARCompiler FORTRAN 2.0.1	sunpro.f77	2.01
SPARCompiler Pascal 3.0.1	sunpro.pc	3.01
TeamWare 1.0	sunpro.sw_teamware	1.0

Licensing



SPARCworks and SPARCompilers use network licensing, as described in the manual *Installing SunPro Software on Solaris*. If a license is available, the product simply starts when invoked. If you are using a SPARCompiler and no license is available, your request for a license is put on a queue, and your compile continues when a license becomes available. A single license can be used for any number of simultaneous compiles by a single user on a single machine.

For information on how to get a license, see the manual *Installing SunPro Software on Solaris*.

Follow these steps to set up licensing:

1. **Collect the information described in "Collecting Information for a License Data File."**
2. **Get your passwords, as described in "Getting Passwords."**

   Give the license distribution center the "Proof of License" authorization code you received in the box with the software and documentation.

- When you are adding a new SunPro product license to an existing license file, both the new and the existing licenses must be for the same server: they must have the same server name on their `SERVER` line. If using redundant servers, the licenses must have the same server names and the same number of servers specified (either three or five).

Note – There can be only a single license file (containing licenses for one or more products) active at one time for a given server or set of servers if using redundant servers.

- If you already have a license for a given product on a given server and would like to purchase more licenses for the same server, it is important to inform the password center of your existing licenses so that they can issue a combined license.

  For example, suppose your existing license-file for FORTRAN for `host lang` looked like the following, and that you have a License Certificate for five more FORTRAN licenses:

```
SERVER lang 12345678 1710
DAEMON suntechd /usr/lang/suntechd
FEATURE sunpro.f77 suntechd 2.000 01-apr-94 20 CBB850112504BBA44A4B " "
# Serial number FX123-456-78
```

  Once you have your License Certificate for the new FORTRAN licenses, call the password center and let them know that you already have licenses for FORTRAN 2.0 on `host lang` and that you would like to add more. You do not have to do this if your host is not `lang`.

  The password center can locate your existing record quickly if you provide them with the *Serial number* that came with your license-file.

  The password center will issue a combined license for you (for 25 users) and deliver it to you. You should then replace the old `FEATURE` line with the new one for 25 users.

3. **Run `Install_License` to create the license data file, as described below.**

Note the following updates or corrections to Chapter 6 "Licensing SunPro Software," in the *Installing SunPro Software on Solaris* manual.

- The `make_license` script is no longer used. Use `Install_License` to install your license. The `Install_License` script will walk you through the steps required to install licenses for all products on your license server(s).

  The first screen of the `Install_License` script is shown below:

```
                    Install_License 1.0

The License Install script will walk you through the steps
required to install a license (regular or DEMO) for:

SPARCworks           2.0, 2.01 SPARCompiler C       2.0, 2.01
SPARCompiler Fortran 2.0, 2.01 SPARCompiler Pascal  3.0, 3.01
SPARCompiler C++     3.0, 3.01

Install_License should be run only on the machine which will act
as the license-server.

It is recommended that a System Administrator perform the license
installation.

For information on how to use the various license administration
utilities (lmstat, lmgrd, lmreread, lmdown, etc.) directly,
please see the Licensing chapter in the 'Installing SunPro
Software on Solaris' manual.

Install_License will work best if your window has enough room to
display 30-40 lines.

The input to all the prompts (wherever applicable) are:

              y ==> Yes              n ==> No
              q ==> Quit             h ==> Help
              c ==> Continue   <return> ==> <default>
```

  The `Install_License` script is used to install licenses received through Email, FAX, or by telephone. The `Install_License` script will:

  - Create a license file (if all you have is the password).
  - Merge your new license file with an existing license file.
  - Copy your license file to the default location or another location of your choice.

- Update the router files.
- Start up the licensing daemon.

Note – The script starts up the licensing daemons for non-redundant servers only. For redundant servers, the script does not start up the licensing daemons. Instead, it informs the users to manually invoke the daemons.

- Install commands in boot startup files to activate the licensing daemon each time the machine is booted.

- The `-xlicinfo` option gives information about license usage. This option is not supported for DEMO licenses.

Licensing Help

If you have any problems installing or using any of the SunPro software, please contact your local service representative.

In the U.S. and Canada, do one of the following to contact your license distribution center:

- **Email**: Send email to `license@sun.com`. Include the information listed on the fax form in your email message.
- **Phone**: For the USA, call 1-800-872-4-SUN. For Canada, call 1-800-722-4-SUN. At the main voice mail menu, please follow the directions for licensing.
- **Fax**: Fill out the form at the end of chapter 6 in *Installing SunPro Software on Solaris*, and fax it to (317) 364-7220.

In other countries, do one of the following:

- **Email**: Send email to `license@sun.com`. Include the information listed on the fax form in your email message.
- **Phone:** When calling from the following countries in Europe, use these free phone numbers:
  - Belgium: 078 11 21 03
  - Finland: 9800 14406
  - France: 05 90 83 41
  - Germany: 0130 81 47 33
  - Italy: 1678 77252

- Netherlands: 06 0224198
- Spain: 900 97 4448
- Sweden: 020 793154
- Switzerland: 155 8096
- U.K.: 0800 929 112

In all other European countries, or if you have problems with any of the phone numbers, call +44 937 541511.

In all other countries, call your local service provider.

Fax: Fill out the form at the end of chapter 6 in *Installing SunPro Software on Solaris*, and fax it to + 44 937 541194

Be prepared to give the dispatcher this information about your system:

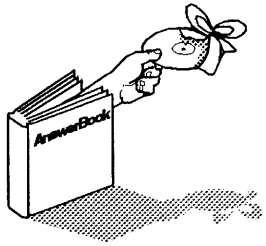
- Model number (such as Sun-4/75 or Sun-4/600)
- Serial number
- SunOS release number (such as 5.0)
- SunPro product release number

To find the SunOS release number, enter the `uname` command as follows:

```
demo$ uname -a
```

If you have questions about Sun support services or your shipment, call your sales representative.

AnswerBook System



The AnswerBook system is an on-line tool that contains documentation for all language products. If AnswerBook is available on your workstation or server, then you can read manuals on-line and take advantage of dynamically linked headings, cross-references, and table of contents entries.

To install the AnswerBook system, see the manual *Installing SunPro Software on Solaris*.

Note the following updates or corrections to that manual.

- On page 34, Chapter 2, *Installing SPARCworks and SPARCompilers AnswerBook for SunOS* 4.x, under the heading, "Location for AnswerBook Home Directory," it is stated that `ab_home` is used to represent the directory

in which the AnswerBook configuration file will be stored. This should read ABHOME. You should replace ab_home with ABHOME throughout the installation manual.

- On page 13, Chapter 4, *Installing SPARCworks and SPARCompilers AnswerBook for SunOS 5.0*, the disk space requirements for the **medium** and **heavy** options shown in Table 4-1 differ from what is displayed by the on-line messages. The on-line messages are:

```
3.  medium:  10 Megabytes disk space required [faster performance].
4.  heavy:   65 Megabytes disk space required [best performance].
```

- On page 75, Chapter 5, *Merging AnswerBook Products*, the AnswerBook version number is incorrect. The correct version number is:

  SUNWab_11_1

- On page 76, Chapter 5, *Merging AnswerBook Products*, the first four lines in the screen box are given only as an example. The last three lines are the actual lines that you enter.

- On page 78, Chapter 5, *Merging AnswerBook Products*, the description of the -m option for the abunmerge command is incorrect. You should use abunmerge with the merged ab_dir as an argument, or use abunmerge alone and supply the argument at the prompt.

Documents in Hard Copy and on the AnswerBook System

The following documents are on-line and in hard copy, as shown:

Title	Part Number	Hard Copy	On-line
SPARCompiler Pascal 3.0 User's Guide	800-6719-10	x	x
SPARCompiler Pascal 3.0 Reference Manual	800-6720-10	x	x
SPARCompiler C 2.0.1 Programmer's Guide	800-6578-11	x	x
SPARCompiler C 2.0.1 Library Reference Manual	800-7091-11		x
SPARCompiler C 2.0.1 Transition Guide	800-6579-11	x	x
SPARCompiler FORTRAN 2.0.1 User's Guide	800-6552-11	x	x
SPARCompiler FORTRAN 2.0.1 Reference Manual	800-6554-11	x	x
SPARCompiler C++ 3.0.1 Programmer's Guide	800-6986-11	x	x
SPARCompiler C++ 3.0.1 Language System Library Manual	800-6987-11		x
SPARCompiler C++ 3.0.1 Language System Product Reference Manual	800-7025-11	x	x
SPARCompiler C++ 3.0.1 Language System Selected Readings	800-7024-11		x
SPARCompiler C++ 3.0.1 Language System Release Notes	800-6988-11	x	x
Floating-Point White Paper[1]			x
Numerical Computation Guide[2]	800-7097-11		x
Installing SunPro Software for Solaris	800-7333-11	x	x
Profiling Tools	800-6549-11		x

1. *What Every Computer Scientist Should Know About Floating-Point Arithmetic,* by David Goldberg, is included as a postscript file called `floating-point.ps`, and is in the directory `/opt/sunwspro/README`

2. This is provided in hard copy only for FORTRAN.

Issues Common to SPARCompiler Products

This section covers items that apply to the C, C++, FORTRAN, and Pascal compilers.

README files for all Operating System Patches

Each operating system patch has a `README` file that explains the patch in detail, including what it is fixing.

On SunOS 4.x, the `README` file is located in the same directory where the patch is located:

```
/usr/lang/SC2.0.1/patch_dir/<patch_number>
```

For SunOS 5.0, the README and the lock daemon patch are located on the CD in the directory:

```
patch-100075-08
```

This directory is located in the same place as the packages. The Patch directory does not get installed with the package.

Linking modules: (for SunOS 5.x only)

If you use `cc` to link C++, FORTRAN, or Pascal modules, it will link with C++, FORTRAN, or Pascal static libraries. There are two solutions to link their dynamic libraries:

1. **Link modules with `cc` (C++), `f77` (FORTRAN), or `pc` (Pascal) instead of `cc`.**
2. **Add the following options to the link line:**

```
-L /opt/SUNWspro/lib -R /opt/SUNWspro/lib
```

`-cg92` *option (for SunOS 4.x only)*

Programs compiled with `-cg92` on SunOS 4.1.2 will require patch #100376-04. The patch is located in `/usr/lang/SC2.0.1/patch_dir/100376-04`. See the README file at this location for instructions on how to install the patch. The `install_patch` script will not install this patch.

If you applied either of the earlier patches (100376-02 or 100376-03) to SunOS 4.1.1, then you must apply this new patch.

Behavior Change: Debugging Optimized Code

You can now compile using both the `-g` and the `-O` option. There are some side effects:

- The `next` and `step` commands do not work, but the `cont` command does.
- If you have `make` files that rely on `-g` overriding `-O`, then you will have to revise those `make` files.
- If you have `make` files that check for a warning message that `-g` overrides `-O`, you must revise those `make` files.

Special Case: `-O4 -g`

The combination `-O4 -g` (or "`-g -O4`") turns off the in-lining that you usually get with `-O4`.

`-time` *Option (for SunOS 5.x only)*

- The `-time` option does not work. There is no output.

`-time` *Option (for SunOS 4.x only)*

- On very small programs, the `-time` option may crash the computer.

Linker Overlays Data with Library Function (Solaris 2.x)

- The linker sometimes overlays data with a library function.

C, C++, Pascal —Uninitialized Global Variable

If a global variable is declared and the program is linked with a library that has a function with the same name as the variable, then the linker may put the function where the variable should be. If the program tries to store a value into the variable, then there is a segmentation fault as the program tries to write into the function.

Workarounds: You can use any one of the following:

- Change the name in your source document.
- Initialize at least one item of the data.

Debugger

- The Collector item is not offered in the debugger on SunOS 4.x or Solaris 1.x.

  Workaround: None.

Dbx

- Due to a flaw in the SunOS 4.x kernel implementation of `PTRACE_ATTACH`, shells may hang when running the following scenario:

1. From within a shell, run a program `a.out`.
2. From a different shell, run dbx and attach it to `a.out`.
3. Continue debugging so that the process exits normally. At this point, the original shell in which `a.out` was run will hang.

   To recover: Quit the window in which the shell was running. The dbx debugger will also hang, but entering `^C` will return you to the dbx prompt.

   Workaround: To avoid this, do not let the process exit normally; you must detach from it or kill it before it exits normally.

   The above is a common scenario. In general under 4.x, while a debugger has attached to a process, the original parent of the process is in some sense "childless" and `wait()` will hang, or it will return `ECHILD` if used in polling mode.

SPARCompiler C 2.0.1

C 2.0.1 for SunOS 4.x is invoked with `acc`. There is no `cc` command for C 2.0.1 on SunOS 4.x

On SunOS 4.x, you can specify which functions to in-line. This works for `-O3` or `-O4` only.

For example:

```
acc -O3 -Qoption iropt -I<function, function...> test.c
```

On SunOS 5.x, the `-xinline` option does not work for this release.

Note – Be sure to check the section "Installation" on page 3 for any software bugs common to every SPARCompiler.

Software Bugs

Software bugs are normally listed in the following on-line files:

For SunOS 5.x: `/opt/SUNWspro/SC2.0.1/README/c_software`
For SunOS 4.x: `/usr/lang/SC2.0.1/README/c_software`

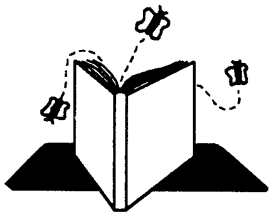
If you install into a nonstandard directory, such as */your_dir*, then the bugs will be listed in the following files:

For SunOS 5.x: */your_dir*`/SUNWspro/SC2.0.1/README/c_software`
For SunOS 4.x: */your_dir*`/SC2.0.1/README/c_software`

`-Xs` *and* `-xsb` *Flags are Mutually Exclusive*

- `-Xs` and `-xsb` flags are not compatible and will not generate any SourceBrowser database information.

C 2.0.1 Documentation Bugs



Documentation errata, addenda, and clarifications are normally listed on-line in the following files :

For SunOS 5.x:`/opt/SUNWspro/SC2.0.1/README/c_docs`
For SunOS 4.x: `/usr/lang/SC2.0.1/README/c_docs`

Again, if you install into a nonstandard directory, such as */your_dir*, then the bugs will be listed in the following files:

For SunOS 5.x: */your_dir*`/SUNWspro/SC2.0.1/README/c_docs`
For SunOS 4.x: */your_dir*`/SC2.0.1/README/c_docs`

SPARCompiler C++ 3.0.1

Note – Be sure to check the section "Installation" on page 3 for any software bugs common to every SPARCompiler.

Software Bugs

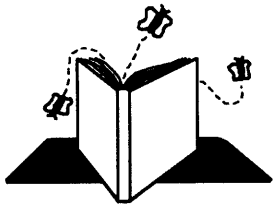
Software bugs are normally listed in the following on-line files:

For SunOS 5.x: `/opt/SUNWspro/SC2.0.1/README/c++_software`
For SunOS 4.x: `/usr/lang/SC2.0.1/README/c++_software`

If you install into a nonstandard directory, such as */your_dir*, then the bugs will be listed in the file:

For SunOS 5.x: */your_dir*`/SUNWspro/SC2.0.1/README/c++_software`
For SunOS 4.x: */your_dir*`/SC2.0.1/README/c++_software`

C++ 3.0.1 Documentation Bugs



Documentation errata, addenda, and clarifications are normally listed on-line in the file:

For SunOS 5.x: `/opt/SUNWspro/SC2.0.1/README/c++_docs`
For SunOS 4.x: `/usr/lang/SC2.0.1/README/c++_docs`

Again, if you install into a nonstandard directory, such as */your_dir*, then the bugs will be listed in the file:

For SunOS 5.x: */your_dir*`/SUNWspro/SC2.0.1/README/c++_docs`
For SunOS 4.x: */your_dir*`/SC2.0.1/README/c++_docs`

SPARCompiler FORTRAN 2.0.1

The following changes are for SunOS 5.x and SunOS 4.*x*.

On SunOS 4.x, you can specify which functions to in-line. This works for `-03` or `-04` only.

For example:

```
f77 -03 -Qoption iropt -I<function, function...> test.f
```

Note – Be sure to check the section "Installation" on page 3 for any software bugs common to every SPARCompiler.

FORTRAN 2.0 and 2.0.1 Incompatibility with FORTRAN 1.4 Binaries

Executables, libraries, and `.o` files compiled and linked in FORTRAN 1.4 or earlier are not compatible with FORTRAN 2.0 or 2.0.1.

SunOS 4.x Executables under SunOS 5.x (Binary Compatibility)

In general, you can run SunOS 4.x executables under SunOS 5.0 if both of these apply:

- You have a program compiled under SunOS 4.x
- You linked it dynamically

You may want to verify the presence of the SC1.0 shared libraries in the `/usr/4lib` directory on your SunOS 5.x system. You should have these:

- `libF77.so.1.4.1` (FORTRAN 1.4 only)
- `libV77.so.1.1` (FORTRAN 1.4 only)

Software Bugs

Software bugs are normally listed in the following on-line files:

For SunOS 5.x: `/opt/SUNWspro/SC2.0.1/README/fortran_software`
For SunOS 4.x: `/usr/lang/SC2.0.1/README/fortran_software`

If you install into a nonstandard directory, such as */your_dir*, then the file is:

For SunOS 5.x:
/your_dir`/SUNWspro/SC2.0.1/README/fortran_software`
For SunOS 4.x: */your_dir*`/SC2.0.1/README/fortran_software`

After the files were put onto the CD-ROM, we found the following errors:

- Localization of compile-time error messages files fails in SunOS 4.1.1.

  Under SunOS 4.1.1 you cannot reliably change the compile-time error messages file to be in some other language.

  Workaround: Upgrade to any release later than SunOS 4.1.1.

Debugging Entries

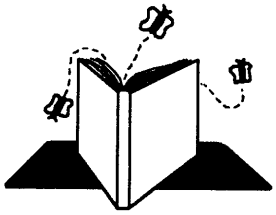
In general, you can do some debugging of entries, including the following:

- Set a break point in the entry
- Use `next`, or `step`, or `cont` to get into an entry
- Print arguments passed to the entry
- Print local or common variables from the entry

If you are already in an entry:

- The `where` command names the subprogram, not the entry. If you are debugging *optimized* code, the `where` command correctly names the entry.
- The `where` command shows the correct line number.
- The `dump` command is unreliable.

FORTRAN 2.0.1 Documentation Bugs



Documentation errata, addenda, and clarifications are normally listed on-line in the following files :

For SunOS 5.x: `/opt/SUNWspro/SC2.0.1/README/fortran_docs`
For SunOS 4.x: `/usr/lang/SC2.0.1/README/fortran_docs`

Again, if you install into a nonstandard directory, such as */your_dir*, then the bugs will be listed in the file

For SunOS 5.x: */your_dir*`/SUNWspro/SC2.0.1/README/fortran_docs`
For SunOS 4.x: */your_dir*`/SC2.0.1/README/fortran_docs`

After these files were put onto the CD-ROM, we found the following errors:

- FORTRAN User's Guide

  On page 4, the part number for the *Product Notes* should be 801-3206-10.

  On page 21, delete the last sentence.

SPARCompiler Pascal 3.0.1

The documentation set that accompanies the current release includes the *Pascal User's Guide* and *Pascal 3.0 Reference Manual*. You can refer to the AnswerBook version of these books, including a table at the beginning of the preface that lists the updated part numbers for other documents included in the current release of Pascal.

Note - Be sure to check the section "Installation" on page 3 for any software bugs common to every SPARCompiler.

Software Bugs

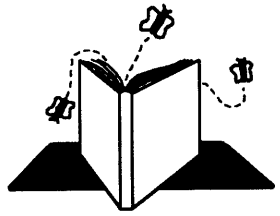
Software bugs are normally listed in the following on-line files:

For SunOS 5.x: `/opt/SUNWspro/SC2.0.1/README/pascal_software`
For SunOS 4.x: `/usr/lang/SC2.0.1/README/pascal_software`

If you install into a nonstandard directory, such as */your_dir*, then the file is:

For SunOS 5.x:
/your_dir`/SUNWspro/SC2.0.1/README/pascal_software`
For SunOS 4.x:
/your_dir`/SC2.0.1/README/pascal_software`

Pascal 3.0.1 Documentation Bugs



Documentation errata, addenda, and clarifications are normally listed on-line in the following files :

For SunOS 5.x: `/opt/SUNWspro/SC2.0.1/README/pascal_docs`
For SunOS 4.x: `/usr/lang/SC2.0.1/README/pascal_docs`

Again, if you install into a nonstandard directory, such as */your_dir*, then the bugs will be listed in the file

For SunOS 5.x: */your_dir*`/SUNWspro/SC2.0.1/README/pascal_docs`
For SunOS 4.x: */your_dir*`/SC2.0.1/README/pascal_docs`

SPARCworks 2.0.1

This section contains any last minute information about SPARCworks 2.0.1 that could not be included in the on-line README files.

Note – SPARCworks is not supported on machines without floating-point hardware.

New Features

For a list on new features and enhancements in SPARCworks 2.0.1, see the on-line README file.

Software Bugs

Known software bugs and their workarounds are listed in the on-line README file. If you install SPARCworks 2.0.1 into a directory such as */your_dir*, then you can locate the on-line README file in:

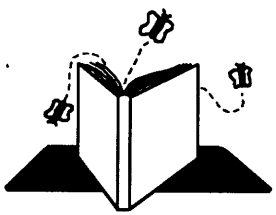
4.x systems:

/your_dir/SW2.0.1/README

5.0 systems:

/your_dir/SUNWspro/SW2.0.1/README

SPARCworks 2.0.1 Documentation Bugs



This section contains documentation bugs for the following documents:

- *Installing SunPro Software on Solaris*
- *Debugging a Program*

Installing SunPro Software on Solaris

For documentation bugs for the manual *Installing SunPro Software on Solaris,* see the section "Installation Documentation Bugs" on page 31.

Debugging a Program

The following items report errors and an omission in the SPARCworks manual, *Debugging a Program*.

1. The Debugger `language` command is missing from Appendix A, "Debugging Commands."

   `language` [*lang*]

   Set the *current language* manually, where *lang* may be one of the following: `c`, `c++`, `fortran`, `pascal`. With no argument, language displays the current language that the Debugger is using. By default, Debugger switches grammars automatically to match the language of the current function. Use the language command to overwrite the default current language. Setting language manually disables auto-switching for the remainder of the current debugging session.

2. Page 111. The example of how to make a button in conjunction with using the `alias` command does not work. Ignore the example.

3. Page 102: The picture of the Debugger Environment Attributes menu is incorrect. The third item should read, "Source/Object File Search Path. Also, the text does not discuss this item. This item lets you set a search path for Debugger to use to locate source or object files. It is the GUI equivalent of the Debugger `use` command.