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May 1996

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Before using your Paragon™ System Source Code Product:

- **Read this letter completely.**
- **Verify the contents of this package.**
- **Read the *Paragon™ System Source Code Product Release 1.4 Release Notes.***

Package Contents

Please verify that your package includes the items listed in Table 1 (Media) and Table 2 (Documentation). If any items are missing, or if you have any questions, please contact Intel Scalable Systems Division as described in the "Comments and Assistance" section.

Table 1. Media

Description	Order Number
One cartridge tape labeled "Paragon™ System Source Code Release 1.4"	658862-001

Table 2. Documentation

Description	Order Number
Paragon™ System Source Code Product Release 1.4 User's Guide	312853-006
Paragon™ System Source Code Product Release 1.4 Release Notes	658861-001

Restrictions and Limitations

Every effort has been taken to ensure the quality of this release. Please refer to the *Paragon™ System Source Code Product Release 1.4 Release Notes* for known limitations and workarounds.

Installation

Refer to Chapter 1 of the *Paragon™ System Source Code Product Release 1.4 User's Guide* for installation instructions.

Comments and Assistance

Intel Scalable Systems Division is eager to hear of your experiences with our products. Please call us if you need assistance, have questions, or otherwise want to comment on your Paragon™ system.

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If you have comments about our manuals, please fill out and mail the enclosed Comment Card. You can also send your comments electronically to the following address:

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Sincerely,

Peter Wolochow

Product Marketing Manager
Intel Scalable Systems Division

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May 1996
Order Number: 658861-001

Paragon™ System
Source Code Product
Release 1.4
Release Notes

Intel® Corporation

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WARNING

Some of the circuitry inside this system operates at hazardous energy and electric shock voltage levels. To avoid the risk of personal injury due to contact with an energy hazard, or risk of electric shock, do not enter any portion of this system unless it is intended to be accessible without the use of a tool. The areas that are considered accessible are the outer enclosure and the area just inside the front door when all of the front panels are installed, and the front of the diagnostic station. There are no user serviceable areas inside the system. Refer any need for such access only to technical personnel that have been qualified by Intel Corporation.

CAUTION

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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Preface

These release notes provide the latest information about limitations and workarounds for Release 1.4 of the Paragon™ System Source Code Product (PSCP).

Information on installing the PSCP, and its features, may be found in the *Paragon™ System Source Code Product Release 1.4 User's Guide.*

Organization

Chapter 1	Provides general information about the PSCP.
Chapter 2	Discusses known build and installation problems.

Notational Conventions

This manual uses the following notational conventions:

Bold	Identifies command names and switches, system call names, reserved words, and other items that must be used exactly as shown.
Italic	Identifies variables, filenames, directories, processes, user names, and writer annotations in examples. Italic type style is also occasionally used to emphasize a word or phrase.
`Plain-Monospace`	Identifies computer output (prompts and messages), examples, and values of variables. Some examples contain annotations that describe specific parts of the example. These annotations (which are not part of the example code or session) appear in *italic* type style and flush with the right margin.

Bold-Italic-Monospace
Identifies user input (what you enter in response to some prompt).

`%` At the start of a line, indicates input typed by a non-privileged user.

`#` At the start of a line, indicates input typed by user *root* (a privileged user) on a Paragon.

`DS#` At the start of a line, indicates input typed by user *root* (a privileged user) on a diagnostics station.

Applicable Documents

For more information, refer to the following manuals:

- *Paragon™ System Source Code Product Release 1.4 User's Guide*
- *Paragon™ System Technical Documentation Guide*

Comments and Assistance

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General Information 1

Patch Level

This release of the PSCP contains source for Release 1.4. No patches are included.

ANSI C and the Microkernel

The C preprocessor used to build the microkernel is not fully ANSI compliant. Therefore, some ANSI C constructs can not be used when modifying kernel source code.

Limitations 2

This chapter describes known problems you may encounter while using the PSCP and describes actions to correct them and allow the build to successfully complete.

Compiler Warnings

Several warnings from the compiler are to be expected and are not cause for alarm. These warnings will not cause a build to fail and will not be found by **geterrs**. Any output line from the compiler that starts with `PGC-W` is such a warning, for example:

```
PGC-W-0134-Duplicate struct or union member ip_v
(/home/PBE/cmds/obj/ipsc860/usr/include/netinet/ip.h: 109)
```

Out of Disk Space

The entire process of building the PSCP software, populating the release trees, and creating installable archives takes a large amount of disk space (see Table 1-1 in the *Paragon™ Source Code Product Release 1.4 User's Guide*). If at least 498M bytes of writable file space is not available in the file system where the PSCP software is installed (*$PBE*), parts of this procedure may exhaust available space and fail.

If this happens or seems likely to happen, consider installing the PSCP software on a larger filesystem. If you do not build as *root*, using links for one or more of the PSCP components is an option. For example, copy the *$PBE/kernels* directory to another filesystem, remove the directory from *$PBE*, and create a link in *$PBE* named *kernels* that points to the directory you created. The following example depicts providing a softlink to *kernels* as *root* in a local filesystem. For NFS mounted filesystems, build and link as a non-root user.

```
% su
# cd $PBE
# cp -r kernels /bigfs
# rm -rf kernels
# ln -s /bigfs/kernels kernels
```

This scheme allows the sources to be written directly to the NFS mounted file system, thus conserving valuable space on the *$PBE* file system.

Be aware, however, that some parts of the PSCP file hierarchy are not good choices for NFS mounted file systems. For example, the release tree (*$PBE/Release*) should be local, because it must be writable by user *root*, and NFS mounts usually are not.

Spell Database

The word list for the *spell* database installed by the PSCP may be incomplete.

Dummy *libpm.o*

The */usr/ccs/lib/libpm.o* file installed by the PSCP build contains no symbols. If you will be installing a completely rebuilt operating system on a system, the *libpm.o* on that system should be saved prior to installation and restored after installation.

geterrs Tool Misses Some Errors

It is possible that during the build of the commands and libraries, some source files will not be found by **cmake**. This does not normally happen. If it does, however, individual commands may fail to build. The error message in the log file will be something like the following:

```
Don't know how to make ctools.msg
```

The **geterrs** tool will not find these errors. If such errors are suspected, you can use **grep** to find them.