

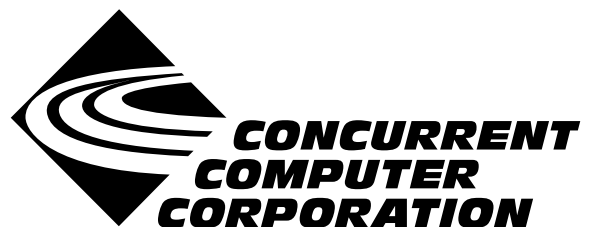
# PowerMAX OS hc C

## Version 4.3 Release Notes

Operating System: PowerMAX OS

March 1999

0891019-4.3



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# About These Notes

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## Scope

These notes provide an overview of release 4.3 of PowerMAX OS **hc**, the Concurrent ANSI C compiler. The compiler accepts the C language as defined by Kernighan and Ritchie, nearly all of the traditional UNIX extensions to this definition, and all of the features of the ANSI C standard. The **hc** compiler is also known as **cc**.

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## Audience

These notes are for the person installing the software, and for any user seeking a summary of new features, revised features, and known problems.

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## Using the notes

Release Notes are generally divided into several major sections; you should read all sections before attempting to install the software (note that not all sections listed here may be provided in your specific release notes).

- ◆ a checklist of the contents of the package;
- ◆ an overview of the package, describing in general terms its usage and capabilities. If this package is an update of an earlier version, the section also summarises the differences from that version;
- ◆ an explanation of how this package is related to other software;
- ◆ the installation process, described either explicitly or by reference to that manual where installation is handled;
- ◆ licensing of the software, if applicable;
- ◆ any known problems, limitations or incompatibilities of this release.

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## What's in the package?

The PowerMAX OS hc C Version 4.3 package comprises both software and documentation.

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### Software

The software is supplied on DAT tape.

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### Documentation

There are three items of documentation:

- ◆ *Concurrent C Reference Manual (0891019-110)*
- ◆ *These Release Notes (0891019-4.3)*
- ◆ *C: A Reference Manual (0890378-010)*

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## Pre- and co-requisite software/hardware

Pre-requisites for PowerMAX OS hc C Version 4.3 are as follows:

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### Pre-requisite software

PowerMAX OS 4.3 or later.

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### Pre-requisite hardware

Any of the following hardware:

- ◆ Concurrent computer system using the PowerPC™ CPU.
- ◆ Motorola MCP750 Single Board Computer (SBC).

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# Installation

To install the software follow the sequence of steps below. The package name for this product is **hc**.

(Note: For more information on installing additional software packages, refer to manual pages **pkgadd(1M)** and **putdev(1M)**.)

- 1 Check that any pre-requisite software/hardware is installed on the system.
- 2 Login as `root`.
- 3 Insert the installation media in the appropriate drive.
- 4 If the software is to be installed from DAT tape, type:  

```
# pkgadd -qld tape1
```

where `-l` specifies that error messages are logged to `/var/sadm/install/logs/package.log`, and `-q` selects quiet mode.
- 5 You are prompted to insert the distribution media; just type:  

```
go
```
- 6 You are shown a menu listing all the sets and packages on the distribution media. Enter the option numbers for the software you want to install (for example, type `1` or `2` to select the first, or second items listed), or type `all` to select all items.
- 7 Give appropriate answers to any questions asked by the installation process.
- 8 At the end of the installation process you are prompted to install further software. Unless you wish to do so, type:  

```
q (for quit)
```

## Cautions

The extent to which the **hc** compiler accepts the C language as defined by the ANSI C standard or the first edition of Kernighan and Ritchie is controlled by command-line options. See the discussion of the **-x[actob]** option in the **hc(1)** manual page for an explanation of how **hc** treats specific C-language features in its different compilation modes. The *Concurrent C Reference Manual* contains more specifics on the differences between compilation modes.

Users are encouraged to retain the source for their applications. Major releases may provide new object-file formats which will require the re-compilation of programs.



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## Changes from Previous Release

The following options have changed:

**-Qtarget=machine** - select the target architecture for compilation. *machine* may be one of **ppc**, **ppc604**, **ppc604e**, or **ppc750**. The default is **ppc604**, which generates code specifically for the PowerPC 604 CPU, used in Series 6000 systems. **ppc604e** and **ppc750** generate code for the PowerPC 604e and MCP750, respectively. The more general **ppc** target produces code that can run on any PowerPC system running PowerMAX OS and optimizes for the PowerPC 604. With the exception of some instructions that can only be generated by special intrinsics, the 604, 604e, and 750 have the same instruction sets. Thus, the selection of machine effects optimization only, that is, a program built with **target=ppc750** will run faster on a MCP750 than the same program built with **target=ppc604**.

See the **hc (1)** manual page for more details.

## Direct Software Support

Software support is available from a central source. If you need assistance or information about your system, please contact the Concurrent Software Support Center at our toll free number (1-800-245-6453). Our customers outside the continental United States can contact us directly at 1-954-977-5554. The Software Support Center operates Monday through Friday from 8 a.m. to 7 p.m., Eastern Standard time.

Calling the Software Support Center gives you immediate access to a broad range of skilled personnel and guarantees you a prompt response from the person most qualified to assist you. If you have a question requiring on-site assistance or consultation, the Software Support Center staff will arrange for a field analyst to return your call and schedule a visit.

Concurrent provides a Software Action Request (SAR) form which our customers can fill out and submit to their local field analyst or the Software Support Center. This procedure ensures that your request is entered into our SAR database for follow-up and action.

To obtain copies of SAR forms, call the Software Support Center and request form number CSD1833B.



