

This "README" file accompanies the seventeenth release of Wraith Scheme as a 64-bit application -- Wraith Scheme 2.28.

Wraith Scheme is an implementation of the "R5" version of the Scheme programming language for the Apple Macintosh (trademark). Wraith Scheme was written by me, Jay Reynolds Freeman, and is copyright (c) Jay Reynolds Freeman, 1988-2023.

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Copies of the source code for this software may be downloaded from <http://JayReynoldsFreeman.com/My/Software.html>. If you cannot find that site or have difficulty using it, contact me at

E-Mail: Jay_Reynolds_Freeman@mac.com
Web Site: <http://JayReynoldsFreeman.com>

A copy of the GNU General Public License is available while running the program, via the Warranty and Redistribution menu item of the Wraith Scheme menu. You can also find the license on line at <http://www.gnu.org/licenses/>.

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System Requirements:

Wraith Scheme 2.28 requires an Apple Macintosh running macOS 11.6 ("Big Sur") or later. The application takes up less than 100 MByte of storage on disk, and can run usefully in as little as 200 MByte of memory. Wraith Scheme 2.28 runs both on Macintosh computers with Intel processors and on Macintosh computers with Apple's proprietary processors, sometimes called "Apple silicon".

Earlier versions of Wraith Scheme, that can run on older Macintosh computers with older versions of macOS, are also available. You may download some of them from the "Software" page of my website, whose home page URL is given above. None

of the earlier versions will run on "Apple silicon", even using Apple's "Rosetta 2" emulation system.

Weasel Scheme (see below) requires a Raspberry Pi 400. It may possibly run on other 64-bit versions of the Raspberry Pi.

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Contents:

The distribution includes copies of both this "README" file and the Wraith Scheme application, "Wraith Scheme.app". (Depending on your Finder preferences settings, you may not see the ".app" extension, but you will probably see the little gray cat-face icon.)

Several other files of interest, including another copy of this "README" document, a great deal of documentation and explanatory material, and some examples of Scheme source code, are embedded within the application. You can open them from the Wraith Scheme Help Menu, in the application.

The distribution also includes an executable version of a derivative program, "Weasel Scheme", which runs on the well-known "Raspberry Pi 400" small personal computer, as well as the world file required for Weasel Scheme to run.

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Installation:

To install Wraith Scheme, drag the application to wherever you would like it to put it -- perhaps your "Applications" folder.

To install Weasel Scheme on a Raspberry Pi 400, move both the Linux executable, "WeaselScheme", and the corresponding world file "WeaselScheme.64.world" into one folder (your choice) of a Raspberry Pi 400.

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Running Wraith Scheme:

Click on the application icon, and away you go. Wraith Scheme starts by running a short demonstration program to introduce Scheme to newcomers. When you are tired of looking at the demonstration every time the program starts, you can disable it from the "Preferences" window, which is opened by an item in the "Wraith Scheme" menu.

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Running Weasel Scheme:

Weasel Scheme is invoked by typing its name in the command line of a Raspberry Pi 400 terminal window, possibly prefixed by "./", that is:

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$ cd <folder where the program and world are located>
$ ./WeaselScheme
```

For help, try

\$./WeaselScheme -h

and look for information about Weasel Scheme in the Wraith Scheme Help file.

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Notes for this Release:

Release 2.28 incorporates substantial rewrites of number parsing, of number printing, and of many mathematical operations, and a few bug fixes and speed enhancements. It also incorporates new fast procedures for operations on real-valued matrices, and includes the first release of an experimental derivative program, "Weasel Scheme", which runs on the well-known "Raspberry Pi 400" small personal computer.

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Bug Reporting:

It all too likely that someone will do things with Wraith Scheme that I didn't think to test, or tested incorrectly, and encounter a bug in the first five minutes. Or it may happen that you encounter a system-dependent bug of some kind, that does not occur on any Macintosh that I used for testing Wraith Scheme. If either of those things happens to you, or if you encounter any other bug or problem, do let me hear from you. Contact information for me is a few lines down. Seriously, bug reports from users are ENORMOUSLY valuable: Please, please send them in.

Weasel Scheme is brand new as of release 2.28, and I am sure it will contain plenty of bugs. Let me hear about them.

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User Privacy:

Wraith Scheme collects no information about you or what you do, sends nothing to its author or to anyone else, and does not present any advertising.

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Contact Information:

E-Mail: Jay_Reynolds_Freeman@mac.com

Web Site: <http://JayReynoldsFreeman.com>

Check the "Software" page of my web site from time to time for newer releases and additional information.

I would love to hear from anyone using Wraith Scheme.

-- Jay Reynolds Freeman