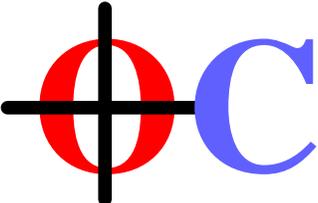

The

codaboot

Tool Manual

Object-oriented
programming in C 

Stephen M. Jones

Shell program: `codaboot` (Version 3.0 **2020-06-01**)

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www.coda-c.com

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CREATING COMMAND LINE TOOLS

The  App Store enforces security measures that prevents users from installing potentially unwanted programs, which prevents Apps from including unrestricted command line tools. The **Coda-C App** does not include any command line tools, but it does provide you with the resources to create the **Coda-C** tools for personal use on the computer where a licensed version of the **Coda-C App** is installed.

Before you bootstrap the command line tools you will need a copy of the **Xcode.app** installed and you will need to pick a folder to contain the command line tools. The `codaboot.sh` script defines three possible folders to pick or you can use a custom folder.

1. `/act/coda-c/bin`
2. `/usr/local/bin`
3. `$HOME/Library/Containers/com.actmac.ACTerm/Data/bin`

The first is simply a path name that I like. The second is standard location for **Unix** programs on the current machine. Even though the `/usr/local` folder may already exist, you may have difficulties creating the `/usr/local/bin` folder due to the enhanced security features of **OSX**. The third folder is a folder that will be created if you have the **ACTerm.app** and have used it. Finally if you choose to use a custom path, it should be writable by you and it is highly recommended that the last folder be named "bin", like `/Users/sally/bin`.

Once you have picked a path, it will normally need to be in you shell's search path so you can run the new commands without typing a full path name. The `/usr/local/bin` is normally automatically added to paths on OSX, the special **ACTerm** path is added if using the **ACTerm.app**, otherwise you may need to update a shell startup file like `~/.bash_profile` and set the **PATH** variable there.

A further consideration is that you may want to create a corresponding `.../lib` folder if you are planning to building static libraries. This is the default location of new libraries, for example `/usr/local/lib`.

To start the process, open Terminal.app or ACTerm.app and paste the following command in blue.

```
>>> /Applications/Coda-C.app/Contents/Resources/tools/codaboot.sh <<<
```

Once you have started the script and selected your path, you must type "go" to attempt to build the **codaboot** command line tool.

EXAMPLE SETTING PERMISSIONS

On my workstation, I was able to setup `/usr/local/bin` for login id **steve** with the following:

```
sudo chownste ve /usr/local/bin
sudo mkdir /usr/local/lib
sudo chownste ve /usr/local/lib
```

USING THE CODABOOT PROGRAM

If you have successfully built the first program and it's location is in your search path, just type **codaboot** to start the new program. The **codaboot** program will show it's version, the target folder to build the remaining programs, and show a table of programs that you can build. You can enter the number of the corresponding program to build a single program, enter 'ALL' to build all programs, or type 'HELP' to display this document. When you are finished, press <ESC> to exit.

The following tools are available for **Coda-C** version **3.0**:

#	Tool	Description
1.	<code>codaboot</code>	Coda-C bootstrap program
2.	<code>coda</code>	Coda-C Source Processor
3.	<code>codabuild</code>	Coda-C Build Settings Editor
4.	<code>codamake</code>	Coda-C Compiler Controller
5.	<code>codagrep</code>	Coda-C Source Searching Program
6.	<code>codall</code>	Coda-C Folder Listing Utility
7.	<code>codalist</code>	Coda-C Property List Utility
8.	<code>codacset</code>	Coda-C ACTerm Character Set Display

All of the **Coda-C** command line tools start with "coda" in order to limit the possibility of having name collisions when built in a location like `/usr/local/bin`. Some of these programs have recommended shorter names that can be implemented with simple shell scripts, for example `ll` contents: `'exec codall "$@"'`. The following table lists the alternate names for tools.

Aka	Tool	Description
<code>cb</code>	<code>codabuild</code>	Coda-C Build Settings Editor
<code>cfar</code>	<code>codamake</code>	Coda-C Fix Archives
<code>cgrep</code>	<code>codagrep</code>	C Source "grep"
<code>ll</code>	<code>codall</code>	C Folder Listing Utility
<code>clist</code>	<code>codalist</code>	Coda-C Property List Utility
<code>cset</code>	<code>codacset</code>	Character Set Display - ACTerm