

CoCoA-5 - Design #1697

Specifying BOOST in configure

18 Aug 2022 14:37 - John Abbott

Status:	Closed	Start date:	18 Aug 2022
Priority:	Normal	Due date:	
Assignee:	John Abbott	% Done:	100%
Category:	Cleaning	Estimated time:	4.49 hours
Target version:	CoCoA-5.4.2	Spent time:	4.45 hours
Description			
The code handling the BOOST libraries in configure is an "unholy mess".			
If the user specifies no BOOST option then configure tries to search for BOOST.			
I am now inclined to simplify this:			
<ul style="list-style-type: none">• if no BOOST option is specified then compilation is without BOOST• new configure option --with-boost which assumes a standard system installation.• the old option to specify where the BOOST libraries are remains (in case not a standard system installation)			
This new approach should allow me to simplify the configure script... I hope!			
Related issues:			
Related to CoCoA-5 - Bug #1695: boost-find-lib.sh		Closed	16 Aug 2022
Related to CoCoA-5 - Design #1696: Which BOOST libs are actually needed?		Closed	18 Aug 2022
Related to CoCoALib - Support #1700: boost_1_80_0		Closed	14 Oct 2022
Related to CoCoALib - Feature #1360: configure script: add flags for "only co...		Closed	01 Nov 2019

History

#1 - 18 Aug 2022 14:38 - John Abbott

- Related to Bug #1695: boost-find-lib.sh added

#2 - 18 Aug 2022 14:38 - John Abbott

- Related to Design #1696: Which BOOST libs are actually needed? added

#3 - 22 Aug 2022 16:59 - John Abbott

- Status changed from New to In Progress

- % Done changed from 0 to 10

In a sense there is no difference between **--with-boost** and **--also-build-CoCoA5** (except that one is clearly boolean, while the other can specify where to find the lib)

Mmmm.

#4 - 15 Sep 2022 14:55 - John Abbott

- Assignee set to John Abbott

- % Done changed from 10 to 50

After discussions with Anna, we will try a new configure option **--only-cocoalib** (which supplants **--no-boost**).
If **--only-cocoalib** is not specified then BOOST is assumed to be system-wide installed unless **--with-boost=XXX** is specified.

Specifying **--only-cocoalib** and a BOOST or READLINE option will give an error (currently)
[maybe a warning would be better? This would allow easier testing perhaps?]

I have modified configure; it seems fine on my Linux box.

#5 - 14 Oct 2022 10:18 - Anna Maria Bigatti

- *Related to Support #1700: boost_1_80_0 added*

#6 - 14 Oct 2022 10:26 - Anna Maria Bigatti

I would change --with-boost with --with-boost-hdrs or --with-boost-incdir (or similar) to highlight that for boost we point to the include dir, instead of passing the library file (as it is for all other external libraries)

```
"--with-boost-hdrs=/Users/XXXXXXXXXX/boost_1_80_0/include/"
```

[I use a minimal personal installation of boost for experimental purposes]

#7 - 14 Oct 2022 10:31 - Anna Maria Bigatti

It seems that -Bstatic works only for linux

```
CoCoAInterpreter: linking everything together
ld: unknown option: -Bstatic
clang: error: linker command failed with exit code 1 (use -v to see invocation)
make[2]: *** [CoCoAInterpreter] Error 1
```

I changed BOOST_LDLIBS=-Wl,-Bstatic -lboost_filesystem -Wl,-Bdynamic into BOOST_LDLIBS=-lboost_filesystem and my compilation goes a little further

#8 - 23 Nov 2022 17:25 - John Abbott

- *Status changed from In Progress to Feedback*
- *% Done changed from 50 to 90*
- *Estimated time set to 2.99 h*

Anna: I think this issue no longer exists with the new/revised configuration system (scripts).
Correct? If so, please close.

#9 - 23 Nov 2022 17:33 - John Abbott

- *Related to Feature #1360: configure script: add flags for "only cocoa5" or "both cocoa5 and cocoa5" (for boost) added*

#10 - 14 Dec 2022 22:33 - John Abbott

- *Status changed from Feedback to Closed*

- % Done changed from 90 to 100

- Estimated time changed from 2.99 h to 4.49 h

I have made a major revision to doc/txt/ExternalLibs-BOOST.txt
I think it is now up-to-date.

Closing.