

CoCoA-5 - Design #83

C++11 compatibility questions

26 Jan 2012 14:59 - John Abbott

Status:	In Progress	Start date:	26 Jan 2012
Priority:	Normal	Due date:	
Assignee:		% Done:	40%
Category:	Portability	Estimated time:	0.00 hour
Target version:	CoCoA-5.4.2	Spent time:	0.95 hour
Description			
When the source code for CoCoA-5 is updated to C++11, several aspects will need to be reconsidered. The purpose of this task is to gather a list of those aspects.			
Related issues:			
Related to CoCoALib - Feature #82: C++11 compatibility questions		Closed	26 Jan 2012
Related to CoCoALib - Feature #357: Constructor for vectors? CoCoAVector		Rejected	24 May 2013
Related to CoCoALib - Feature #152: Replace bool3 by tribool		Closed	04 May 2012
Related to CoCoALib - Design #891: Replace auto_ptr in preparation for C++11?		Closed	17 Jun 2016
Related to CoCoALib - Design #894: strict enum types: C++11 extension		In Progress	21 Jun 2016
Related to CoCoALib - Feature #1010: C++11: Mario's Hilbert scheme code		New	20 Feb 2017
Related to CoCoALib - Design #710: Update normaliz interface?		In Progress	17 May 2015
Related to CoCoALib - Design #999: configuration: include -std=c++03 by default?		Closed	18 Jan 2017
Related to CoCoA-5 - Support #1240: John's visit Feb 2019		Closed	08 Feb 2019

History

#1 - 26 Jan 2012 15:02 - John Abbott

The BOOST class `shared_ptr` is used in the C5 interpreter (in files `AST`, `Interpreter`, `Parser`). The standard library of C++11 offers a very similar class; we should probably switch to using the standard class (if possible).

#2 - 23 Jan 2013 12:33 - Anna Maria Bigatti

- *Category set to Portability*

#3 - 29 May 2013 12:12 - John Abbott

C++11 offers some convenient ways of creating a `std::vector` containing explicitly given elements. Right now I do not recall how simple/readable the syntax is.

This may let us simplify some fn interfaces (e.g. the function `ideal` which accepts 1,2,3,4 args so that users do not have to go through the tedious hassle of creating a `std::vector`).

#4 - 08 Jul 2013 14:27 - John Abbott

C++11 has a more flexible exception mechanism than the one in C++. Reconsider the design of CoCoALib exceptions (see also [#385](#)).

#5 - 02 Apr 2014 17:34 - Anna Maria Bigatti

- *Target version set to CoCoA-5.1.0 Easter14*

#6 - 09 Apr 2014 17:31 - John Abbott

- *Target version changed from CoCoA-5.1.0 Easter14 to CoCoA-5.1.1 Seoul14*

#7 - 01 Sep 2014 13:57 - John Abbott

- Target version changed from CoCoA-5.1.1 Seoul14 to CoCoA-5.?.?

#8 - 17 Jun 2016 14:37 - John Abbott

- Related to Feature #357: Constructor for vectors? CoCoAVector added

#9 - 17 Jun 2016 14:37 - John Abbott

- Related to Feature #152: Replace bool3 by tribool added

#10 - 17 Jun 2016 14:39 - John Abbott

What is the difference between issues [#82](#) and [#83](#) (this one)?

#11 - 17 Jun 2016 22:17 - John Abbott

- Related to Design #891: Replace auto_ptr in preparation for C++11? added

#12 - 21 Jun 2016 14:47 - John Abbott

- Related to Design #894: strict enum types: C++11 extension added

#13 - 20 Feb 2017 13:22 - John Abbott

- Related to Feature #1010: C++11: Mario's Hilbert scheme code added

#14 - 06 Nov 2017 13:43 - John Abbott

- Related to Design #710: Update normaliz interface? added

#15 - 08 Nov 2017 17:08 - John Abbott

- Related to Design #999: configuration: include -std=c++03 by default? added

#16 - 04 Mar 2019 13:40 - Anna Maria Bigatti

- Related to Support #1240: John's visit Feb 2019 added

#17 - 07 Mar 2019 09:49 - Anna Maria Bigatti

- Tracker changed from Feature to Design

- Status changed from New to In Progress

- Target version changed from CoCoA-5.?.? to CoCoA-5.3.0

- % Done changed from 0 to 10

#18 - 01 Oct 2019 14:40 - John Abbott

- Target version changed from CoCoA-5.3.0 to CoCoA-5.4.0

#19 - 22 Jan 2021 10:54 - John Abbott

- % Done changed from 10 to 40

#20 - 03 Feb 2022 19:59 - John Abbott

- Target version changed from CoCoA-5.4.0 to CoCoA-5.4.2