

## ctools - Bug #1993

### on making ctools, 'extname\_energies' is not a member of 'gammalib' error

04/06/2017 06:28 PM - Kelley-Hoskins Nathan

<b>Status:</b>	Rejected	<b>Start date:</b>	04/06/2017
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assigned To:</b>		<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>			
<b>Description</b>			
<p>I fetched, rebased and merged my nkelhos/gammalib fork and re-cloned the general ctools/ctools, but when I go to make the ctools, I get this error. I'm not sure why extname_ebounds isn't in the gammalib namespace, or if its a gammalib or ctools error.</p>			
<pre>\$ cd \$CTOOLS \$ ./autogen.sh \$ make clean \$ ./configure --prefix=\$PWD LDFLAGS=-L\$FITSSYS/lib CPPFLAGS=-I\$FITSSYS \$ make clean \$ make -j 4 ... make[3]: Entering directory `/nv/pc1/nkelleyh3/software/ctools/src/support' /bin/sh ../libtool --tag=CXX --mode=compile g++ -DHAVE_CONFIG_H -I. -I../.. -I/nv/hp11/nkelleyh3/data/software/cfitsio -I/nv/hp11/nkelleyh3/data/software/gammalib/include/gammalib -g -O2 -fopenmp -MT support.lo -MD -MP -MF .deps/support.Tpo -c -o support.lo support.cpp /bin/sh ../libtool --tag=CXX --mode=compile g++ -DHAVE_CONFIG_H -I. -I../.. -I/nv/hp11/nkelleyh3/data/software/cfitsio -I/nv/hp11/nkelleyh3/data/software/gammalib/include/gammalib -g -O2 -fopenmp -MT ctool.lo -MD -MP -MF .deps/ctool.Tpo -c -o ctool.lo ctool.cpp /bin/sh ../libtool --tag=CXX --mode=compile g++ -DHAVE_CONFIG_H -I. -I../.. -I/nv/hp11/nkelleyh3/data/software/cfitsio -I/nv/hp11/nkelleyh3/data/software/gammalib/include/gammalib -g -O2 -fopenmp -MT ctobservation.lo -MD -MP -MF .deps/ctobservation.Tpo -c -o ctobservation.lo ctobservation.cpp /bin/sh ../libtool --tag=CXX --mode=compile g++ -DHAVE_CONFIG_H -I. -I../.. -I/nv/hp11/nkelleyh3/data/software/cfitsio -I/nv/hp11/nkelleyh3/data/software/gammalib/include/gammalib -g -O2 -fopenmp -MT ctlikelihood.lo -MD -MP -MF .deps/ctlikelihood.Tpo -c -o ctlikelihood.lo ctlikelihood.cpp libtool: compile: g++ -DHAVE_CONFIG_H -I. -I../.. -I/nv/hp11/nkelleyh3/data/software/cfitsio -I/nv/hp11/nkelleyh3/data/software/gammalib/include/gammalib -g -O2 -fopenmp -MT ctobservation.lo -MD -MP -MF .deps/ctobservation.Tpo -c ctobservation.cpp -fPIC -DPIC -o .libs/ctobservation.o libtool: compile: g++ -DHAVE_CONFIG_H -I. -I../.. -I/nv/hp11/nkelleyh3/data/software/cfitsio -I/nv/hp11/nkelleyh3/data/software/gammalib/include/gammalib -g -O2 -fopenmp -MT ctool.lo -MD -MP -MF .deps/ctool.Tpo -c ctool.cpp -fPIC -DPIC -o .libs/ctool.o libtool: compile: g++ -DHAVE_CONFIG_H -I. -I../.. -I/nv/hp11/nkelleyh3/data/software/cfitsio -I/nv/hp11/nkelleyh3/data/software/gammalib/include/gammalib -g -O2 -fopenmp -MT ctlikelihood.lo -MD -MP -MF .deps/ctlikelihood.Tpo -c ctlikelihood.cpp -fPIC -DPIC -o .libs/ctlikelihood.o libtool: compile: g++ -DHAVE_CONFIG_H -I. -I../.. -I/nv/hp11/nkelleyh3/data/software/cfitsio -I/nv/hp11/nkelleyh3/data/software/gammalib/include/gammalib -g -O2 -fopenmp -MT support.lo -MD -MP -MF .deps/support.Tpo -c support.cpp -fPIC -DPIC -o .libs/support.o ctool.cpp: In member function 'GEbounds ctool::create_ebounds()': ctool.cpp:545:31: error: 'extname_ebounds' is not a member of 'gammalib'     if (file.contains(gammalib::extname_ebounds)) {         ^ ctool.cpp:554:36: error: 'extname_energies' is not a member of 'gammalib'     else if (file.contains(gammalib::extname_energies)) {         ^ ctool.cpp:556:25: error: 'class GEbounds' has no member named 'set'     ebounds.set(GEnergies(ebinfile));         ^ ctool.cpp:561:35: error: 'extname_ebounds' is not a member of 'gammalib'     gammalib::extname_ebounds+"\n", "         ^ ctool.cpp:563:35: error: 'extname_energies' is not a member of 'gammalib'     gammalib::extname_energies+"\n" found in FITS "         ^ ctool.cpp:594:25: error: 'class GEbounds' has no member named 'set'</pre>			

```
ebounds.set(GEnergies(ebinfile));
^
make[3]: *** [ctool.lo] Error 1
```

## History

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### #1 - 04/06/2017 09:20 PM - Knödlseeder Jürgen

- Status changed from New to In Progress
- Assigned To set to Knödlseeder Jürgen
- % Done changed from 0 to 10

It seems that GammaLib has not been updated, the things that are missing are things I added very recently. Try to update GammaLib first.

### #2 - 04/07/2017 02:57 AM - Kelley-Hoskins Nathan

I updated it from my fork, and I have different problems when I switch over to devel instead of 1520-dm-profiles (I don't know why I didn't mention it earlier). I think I've just been messing up the merges and rebases or something, since git seems to think everything's intact:

```
$ git remote -v
origin https://cta-gitlab.irap.omp.eu/nkelhos/gammalib.git (fetch)
origin https://cta-gitlab.irap.omp.eu/nkelhos/gammalib.git (push)
```

```
$ git fetch origin
```

```
$ git status
On branch devel
Your branch is up-to-date with 'origin/devel'.
Untracked files:
  (use "git add <file>..." to include in what will be committed)
```

```
bin/
include/gammalib/
lib/
share/
```

nothing added to commit but untracked files present (use "git add" to track)

```
$ git branch -a
 1520-dm-profiles
* devel
remotes/origin/1111-implement-GSkyRegionRing
remotes/origin/1113-implement-altaz-pointing
remotes/origin/1121-implement-GSkyRegionMap
remotes/origin/1327-VERITAS-Support
remotes/origin/1432-fix_psf_king_zero_params
remotes/origin/1508-support-config-file-analysis
remotes/origin/1520-dm-profiles
remotes/origin/1876-correct-containment-radius
remotes/origin/HEAD -> origin/devel
remotes/origin/devel
remotes/origin/integration
remotes/origin/master
remotes/origin/release
remotes/origin/spi
```

I'm thinking it's not a good practice for me to keep a branch out for this long (months). I'm not sure what to do. Can we merge nkelhos/gammalib/1520-dm-profiles into gammalib/gammalib/1520-dm-profiles, then I can delete my fork nkelhos/gammalib and refork gammalib/gammalib again?

### #3 - 04/07/2017 06:20 PM - Kelley-Hoskins Nathan

For the moment, I've switched to just using gammalib/gammalib, which works without problems, so I think something went wrong with my rebasing/merging of nkelhos/gammalib. I'm not even sure there were any changes in nkelhos/gammalib/1520-dm-profiles, so I may just throw it away and start with a fresh fork of gammalib/gammalib.

### #4 - 04/09/2017 12:22 AM - Knödlseeder Jürgen

- Status changed from In Progress to Feedback
- Assigned To deleted (Knödlseeder Jürgen)

I switch the status to Feedback. Please let me know if you have still problems.

### #5 - 04/11/2017 02:29 AM - Kelley-Hoskins Nathan

Alright, something's still not working right. I do:

```
$ git clone https://cta-gitlab.irap.omp.eu/ctools/ctools.git .
$ ./autogen.sh
$ make distclean
$ ./configure --prefix=$PWD LDFLAGS=-L$FITSSYS/lib/ CPPFLAGS=-I$FITSSYS
$ make -j 4
...
ctool.cpp: In member function 'GEbounds ctool::create_ebounds()':
ctool.cpp:545:31: error: 'extname_ebounds' is not a member of 'gammalib'
      if (file.contains(gammalib::extname_ebounds)) {
                          ^
ctool.cpp:554:36: error: 'extname_energies' is not a member of 'gammalib'
      else if (file.contains(gammalib::extname_energies)) {
                              ^
ctool.cpp:556:25: error: 'class GEbounds' has no member named 'set'
      ebounds.set(GEnergies(ebinfile));
                      ^
ctool.cpp:561:35: error: 'extname_ebounds' is not a member of 'gammalib'
      gammalib::extname_ebounds+"", "
                          ^
ctool.cpp:563:35: error: 'extname_energies' is not a member of 'gammalib'
      gammalib::extname_energies+" found in FITS "
                          ^
ctool.cpp:594:25: error: 'class GEbounds' has no member named 'set'
      ebounds.set(GEnergies(ebinfile));
                      ^
make[3]: *** [ctool.lo] Error 1
```

But I still run into the same problems. The gammalib I'm using is gammalib/nkelhos/1520-dm-profiles.

#### #6 - 04/11/2017 10:42 AM - Knödseder Jürgen

The problem is that your GammaLib needs an update. The things that are missing are things that are new in GammaLib, here specifically

```
gammalib::extname_ebounds
```

#### #7 - 04/11/2017 10:49 PM - Kelley-Hoskins Nathan

Did those changes get merged to gammalib/gammalib/1520-dm-profiles? I just made a clean fork (deleted my old fork) of 1520-dm-profiles today, and I still have the same missing ebounds error.

#### #8 - 04/11/2017 11:08 PM - Knödseder Jürgen

No, I have not touched this branch since a long time. You have to rebase the branch on devel.

#### #9 - 04/12/2017 03:33 AM - Kelley-Hoskins Nathan

Ah, alright. its sometimes hard to keep track of what code is where. I've rebased gammalib, but ctools is now erroring out about a missing GCTAEventList::has\_phase() function.

Making all in ctpphase

```
make[3]: Entering directory `/nv/pc1/nkelleyh3/software/ctools/src/ctphase'
/bin/sh ../libtool --tag=CXX --mode=compile g++ -DHAVE_CONFIG_H -I. -I../src/support -I/nv/hp11/nkelleyh3/data/software/cfitsio
-I/nv/hp11/nkelleyh3/data/software/gammalib-nkelhos/include/gammalib -g -O2 -fopenmp -MT ctpphase.lo -MD -MP -MF .deps/ctphase.Tpo -c -o
ctphase.lo ctpphase.cpp
g++ -DHAVE_CONFIG_H -I. -I../src/support -I/nv/hp11/nkelleyh3/data/software/cfitsio
-I/nv/hp11/nkelleyh3/data/software/gammalib-nkelhos/include/gammalib -I/nv/hp11/nkelleyh3/data/software/cfitsio
-I/nv/hp11/nkelleyh3/data/software/gammalib-nkelhos/include/gammalib -g -O2 -fopenmp -MT ctpphase-main.o -MD -MP -MF
.deps/ctphase-main.Tpo -c -o ctpphase-main.o `test -f 'main.cpp' || echo './'` main.cpp
libtool: compile: g++ -DHAVE_CONFIG_H -I. -I../src/support -I/nv/hp11/nkelleyh3/data/software/cfitsio
-I/nv/hp11/nkelleyh3/data/software/gammalib-nkelhos/include/gammalib -g -O2 -fopenmp -MT ctpphase.lo -MD -MP -MF .deps/ctphase.Tpo -c
ctphase.cpp -fPIC -DPIC -o .libs/ctphase.o
ctphase.cpp: In member function 'void ctpphase::phase_events(GCTAObservation*)':
ctphase.cpp:561:13: error: 'class GCTAEventList' has no member named 'has_phase'
    events->has_phase(true);
            ^
make[3]: *** [ctphase.lo] Error 1
```

Any ideas what pack of code has this has\_phase() function?

**#10 - 04/12/2017 09:20 AM - Knödlseeder Jürgen**

I merged in the has\_phase() method yesterday, so I guess you need again to rebase gammalib on devel.

**#11 - 04/12/2017 08:59 PM - Kelley-Hoskins Nathan**

- *Status changed from Feedback to Resolved*

Alright, I think I've gotten everything updated now. The ebounds and has\_phase errors are both gone (whew).

**#12 - 04/13/2017 10:03 AM - Knödlseeder Jürgen**

- *Status changed from Resolved to Rejected*

- *% Done changed from 10 to 0*

Great !