

## GammaLib - Bug #2958

### Correct cfitsio library dependency

07/15/2019 09:36 AM - Knödlseider Jürgen

<b>Status:</b>	Closed	<b>Start date:</b>	07/15/2019
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assigned To:</b>	Knödlseider Jürgen	<b>% Done:</b>	100%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	1.6.2		
<b>Description</b> It turned out that with the latest conda the install breaks since by default a higher cfitsio version gets installed compared to the version against which gammalib was build.  It turned out that on Mac OS X, the conda build is built against the cfitsio and readline libraries installed in /usr/local/gamma/lib, which explains the dependency problems. On SL6 64, the conda build is built against the cfitsio library installed in /usr/lib64.			
<b>Related issues:</b> Related to ctools - Bug # 3619: conda install does not install latest version			
		<b>Closed</b>	<b>04/26/2021</b>

### History

#### #1 - 07/15/2019 09:43 AM - Knödlseider Jürgen

It is not true that the library is build against the installed cfitsio or readline versions, I looked at the wrong place. The library is well built against the libraries installed in the conda environment.

readline	7.0
ncurses	6.0
cfitsio	3.430

#### #2 - 07/15/2019 11:29 AM - Knödlseider Jürgen

- Status changed from New to In Progress

- % Done changed from 0 to 50

On SL6, Python 3.7 requires at least ncurses 6.1. I therefore dropped the version number of ncurses.

#### #3 - 07/15/2019 10:32 PM - Knödlseider Jürgen

- Status changed from In Progress to Closed

- % Done changed from 50 to 100

After creating an Anaconda release for gammalib, I tested the installation using the most recent Anaconda distribution on my Mac:

```
$ conda create -n gammalib-test python=3.7
Collecting package metadata (current_repodata.json): done
Solving environment: done
```

```
## Package Plan ##
```

```
environment location: /Users/jurgen/anaconda3/envs/gammalib-test
```

```
added / updated specs:
- python=3.7
```

The following NEW packages will be INSTALLED:

ca-certificates	pkgs/main/osx-64::ca-certificates-2019.5.15-0
certifi	pkgs/main/osx-64::certifi-2019.6.16-py37_0
libcxx	pkgs/main/osx-64::libcxx-4.0.1-hcfea43d_1
libcxxabi	pkgs/main/osx-64::libcxxabi-4.0.1-hcfea43d_1
libedit	pkgs/main/osx-64::libedit-3.1.20181209-hb402a30_0
libffi	pkgs/main/osx-64::libffi-3.2.1-h475c297_4
ncurses	pkgs/main/osx-64::ncurses-6.1-h0a44026_1
openssl	pkgs/main/osx-64::openssl-1.1.1c-h1de35cc_1
pip	pkgs/main/osx-64::pip-19.1.1-py37_0
python	pkgs/main/osx-64::python-3.7.3-h359304d_0
readline	pkgs/main/osx-64::readline-7.0-h1de35cc_5
setuptools	pkgs/main/osx-64::setuptools-41.0.1-py37_0
sqlite	pkgs/main/osx-64::sqlite-3.28.0-ha441bb4_0
tk	pkgs/main/osx-64::tk-8.6.8-ha441bb4_0
wheel	pkgs/main/osx-64::wheel-0.33.4-py37_0
xz	pkgs/main/osx-64::xz-5.2.4-h1de35cc_4
zlib	pkgs/main/osx-64::zlib-1.2.11-h1de35cc_3

Proceed ([y]/n)? y

Preparing transaction: done  
Verifying transaction: done  
Executing transaction: done  
#  
# To activate this environment, use:  
# > conda activate gammalib-test  
#  
# To deactivate an active environment, use:  
# > conda deactivate  
#  
\$ conda activate gammalib-test  
\$ conda install gammalib  
Collecting package metadata (current\_repodata.json): done  
Solving environment: done

## Package Plan ##

environment location: /Users/jurgen/anaconda3/envs/gammalib-test

added / updated specs:  
- gammalib

The following packages will be downloaded:

package	build	
gammalib-1.6.2	py37h0e1a375_1	25.7 MB cta-observatory
libgfortran-3.0.1	h93005f0_2	426 KB
Total:		26.1 MB

The following NEW packages will be INSTALLED:

cfitsio	conda-forge/osx-64::cfitsio-3.430-h50cca31_1002
curl	pkgs/main/osx-64::curl-7.64.1-ha441bb4_0
gammalib	cta-observatory/osx-64::gammalib-1.6.2-py37h0e1a375_1
krb5	pkgs/main/osx-64::krb5-1.16.1-hddcf347_7
libcurl	pkgs/main/osx-64::libcurl-7.64.1-h051b688_0
libgfortran	pkgs/main/osx-64::libgfortran-3.0.1-h93005f0_2
libssh2	pkgs/main/osx-64::libssh2-1.8.2-ha12b0ac_0

Proceed ([y]/n)? y

Downloading and Extracting Packages  
gammalib-1.6.2 | 25.7 MB | ##### | 100%  
libgfortran-3.0.1 | 426 KB | ##### | 100%  
Preparing transaction: done  
Verifying transaction: done  
Executing transaction: done  
\$ createfits  
\$ optimize  
Function value .....: 0.498902

Parameter value ....: 0.50055

Things seem to work as expected. Close the issue now.

**#4 - 04/26/2021 03:59 PM - Knödseder Jürgen**

- *Related to Bug #3619: conda install does not install latest version added*