ctools - Bug #2287

ctselect doesn't work with prefixes beginning with 'g' or 'z'

12/04/2017 11:23 AM - Cardenzana Josh

Status: Closed Start date: 12/04/2017

Priority: Normal Due date:

Assigned To: Cardenzana Josh % Done: 100%

Category: Estimated time: 0.00 hour

Target version: 1.5.0

Description

ctselect includes a step where it strips the trailing '.gz' from the output filename if it is present (ctselect.cpp line 1277):

// Strip any ".gz"
outname = gammalib::strip chars(outname, ".gz");

However, the 'gammalib::strip_chars()' method will strip any '.', 'g' or 'z' from both ends of the filename. This can cause ctselect to fail or alter the filename if the output prefix begins with one of these characters. For example:

- 'prefix=zselect ' will save to files beginning with '-select '.
- 'prefix=gdir/select ' will try to save to the sub-directory 'dir', which isn't the desired location and may not exist.

A quick search of the ctools code shows that the same method is also present in ctool.cpp (line 1151) for removing the trailing '.gz' from a filename. This can be fixed by using the 'gammalib::rstrip_chars()' method which only removes these characters if they occur at the *end* of the filename.

History

#1 - 12/04/2017 12:26 PM - Cardenzana Josh

- Status changed from New to Pull request
- % Done changed from 0 to 90

The above changes have been made to ctool::set_outfile_name() and ctselect::set_outfile_name() and work as expected (i.e. a leading 'g' or 'z' in the output filename of ctselect is no longer removed from the output filename).

It should be noted that if a filename that ends with any of 'g', 'z' or '.' is passed, it will still be trimmed even if it doesn't end in '.gz' (for example 'image.jpg' would be shorted to 'image.jp'). Since this hasn't been an issue so far, I assume the above solution is sufficient.

Pull Branch:

Josh Cardenzana / ctools (branch: 2287-gz_filename_strip)

#2 - 01/09/2018 09:42 AM - Knödlseder Jürgen

- Target version set to 1.5.0

The methods in ctools.cpp and ctselect.cpp were in fact identical, I therefore removed the ctselect::set_outfile_name() method to prevent code duplication.

Although the proposed fix works it seems cleaner to strip only .gz strings. This is done by adding the following code:

// Strip any ".gz" from the outname std::string strip = ".gz"; std::string::size_type i_start = outname.find(strip);

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```
if (i_start != std::string::npos) {
  outname.erase(i_start, strip.length());
}
```

#3 - 01/09/2018 10:44 AM - Knödlseder Jürgen

- Status changed from Pull request to Closed
- % Done changed from 90 to 100

Merged into devel.

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