
Subject: Re: defining structure after ascii template
Posted by [spluque](#) on Mon, 16 Sep 2013 17:51:20 GMT
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On Monday, September 16, 2013 12:24:29 PM UTC-5, David Fanning wrote:

> spluque@gmail.com writes:

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>> On Monday, September 16, 2013 11:02:11 AM UTC-5, David Fanning wrote:

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>>> spluque@gmail.com writes:

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>>>> As far as I can see, it is not possible to define a structure using a template as the one built via `ascii_template()`. Essentially, extract a sub-structure from the template returned by `ascii_template`, containing the column names as tags and the field type. What is the proper way to do this?

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>>> I honestly have no idea what this question means. Why don't you explain

>

>>>

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>>> to us what you are trying to do.

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>> Sorry for the terse initial post. Here is what I am trying to do:

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>> 1. I've prepared a template with `ascii_template()` for reading in an ASCII file via `read_ascii()`.

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```

>> 2. Before reading the data with read_ascii(), I need to prepare an *array* of structures, where
each element is a record (row) in a number of files to be read with the template in (1).
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>
>> 3. read_ascii() creates a structure that looks like this:
>
>>
>
>> help, data, /structures
>
>> ** Structure <57e3008>, 23 tags, length=7800864, data length=7800864, refs=1:
>
>>  FIELD01      LONG   Array[84792]
>
>>  FIELD02      FLOAT  Array[84792]
>
>>  FIELD03      LONG   Array[84792]
>
>> ...[many more fields]
>
>>
>
>> So the array of structures to be created would like this (abbreviating the number of fields for
brevity here):
>
>>
>
>> p={'foo', FIELD01:0L, FIELD02:0.0, FIELD03:0L}
>
>> replicate(p, n_recs)
>
>>
>
>> where n_recs is the total number of records expected.
>
>>
>
>> So the question is how can p be created from the information already there in the template
created in (1)?
>
>
>
> Well, p *is* the structure you obtained. I guess I don't see the
>
> problem:
>
>
>

```

```

>
> IDL> struct = ascii_template()
>
> IDL> help, struct
>
> ** Structure <701c24d0>, 10 tags, length=320, data length=313, refs=1:
>
>  VERSION      FLOAT      1.00000
>
>  DATASTART   LONG       0
>
>  DELIMITER    BYTE      32
>
>  MISSINGVALUE FLOAT      NaN
>
>  COMMENTSYMBOL STRING    "
>
>  FIELDCOUNT  LONG      10
>
>  FIELDTYPES   LONG      Array[10]
>
>  FIELDNAMES   STRING    Array[10]
>
>  FIELDLOCATIONS LONG    Array[10]
>
>  FIELDGROUPS  LONG      Array[10]
>
> IDL> data = Replicate(struct, 100)

```

Thanks for your patience David. The problem is that the template structure is not quite the same as the one created by `read_ascii()`; compare the output you got with the one in point (2) of my previous message. In other words, what I need to replicate is an element of the output of `read_ascii()`, but without having to call it first. Hopefully, this is clearer.

Cheers,
Seb
