Subject: putting .txt files in a structure
Posted by wdolan on Wed, 12 Aug 2015 20:50:18 GMT
View Forum Message <> Reply to Message

So I've created a structure which has a bunch of arrays (both string, and integer). I handwrote a file called readme.txt which explains all the variables in the structure. I can't get the file itself to become part of the structure.

Part of the code looks like this (not the actual code, but similar..):
btstruc={mm=momentmm,$
ros=btstruc.ros, $
readme=readme.txt}

Everything works, except the text file!

Any ideas?

Subject: Re: putting .txt files in a structure
Posted by Paul Van Delst[1] on Wed, 12 Aug 2015 21:05:03 GMT
View Forum Message <> Reply to Message

On 08/12/15 16:50, Wayana Dolan wrote:
> So I've created a structure which has a bunch of arrays (both
> string,
> and integer). I handwrote a file called readme.txt which explains all
> the variables in the structure. I can't get the file itself to become
> part of the structure.

I'm not sure exactly what you mean by "get the file itself to become
part of the structure."

Do you mean the file *name*? [easy]

Or...

Do you mean the file *contents*? [hard]

> Part of the code looks like this (not the actual code, but similar..):
> btstruc={mm=momentmm,$
> ros=btstruc.ros, $
> readme=readme.txt}
>
> Everything works, except the text file!

The above pseudo-code tells me you are trying to get the file *name* as
part of the structure.

But somehow I don't think that's what you want....right?

Subject: Re: putting .txt files in a structure
Posted by wdolan on Wed, 12 Aug 2015 21:23:48 GMT
View Forum Message <> Reply to Message

Hi Paul.

You are correct in assuming that. I would like the text file as a whole to be part of the structure, so that when I hand off my structure to another person, they can know what all the variables are.

On Wednesday, August 12, 2015 at 2:05:06 PM UTC-7, Paul van Delst wrote:
> On 08/12/15 16:50, Wayana Dolan wrote:
>> So I've created a structure which has a bunch of arrays (both
>> string,
>> and integer). I handwrote a file called readme.txt which explains all
>> the variables in the structure. I can't get the file itself to become
>> part of the structure.
>
> I'm not sure exactly what you mean by "get the file itself to become
> part of the structure."
>
> Do you mean the file *name*? [easy]
>
> Or...
>
> Do you mean the file *contents*? [hard]
>
>> Part of the code looks like this (not the actual code, but similar..):
>> btstruc={mm=momentmm,$
>> ros=btstruc.ros, $
>> readme=readme.txt}
>>
>> Everything works, except the text file!
>
> The above pseudo-code tells me you are trying to get the file *name* as
> part of the structure.
>
> But somehow I don't think that's what you want....right?

Subject: Re: putting .txt files in a structure

On 08/12/15 17:23, Wayana Dolan wrote:
> Hi Paul.
>
> You are correct in assuming that. I would like the text file as a
> whole to be part of the structure, so that when I hand off my structure
> to another person, they can know what all the variables are.

Ah. Well, then, you need to write code to read said text file, create
the (or a) structure based on what you read (e.g. tag names), and then
populate your newly created structure with values from the file.

It's a fair bit of work (in any language).

I would look at create_struct. It's what I use to read netcdf files into
a structure. Same deal as what you're doing apart from teh file format.

Other folks may have better/simpler ideas based on their experience.
E.g. is there a "read_*" function/procedure to do it?

cheers,

paulv

>
>
> On Wednesday, August 12, 2015 at 2:05:06 PM UTC-7, Paul van Delst wrote:
>> On 08/12/15 16:50, Wayana Dolan wrote:
>>> So I've created a structure which has a bunch of arrays (both
>>> string,
>>> and integer). I handwrote a file called readme.txt which explains all
>>> the variables in the structure. I can't get the file itself to become
>>> part of the structure.
>>
>> I'm not sure exactly what you mean by "get the file itself to become
>> part of the structure."
>>
>> Do you mean the file *name*? [easy]
>>
>> Or...
>>
>> Do you mean the file *contents*? [hard]
>>
>>> Part of the code looks like this (not the actual code, but similar..):
>>> btstruc={mm=momentmm,$
>>> ros=btstruc.ros, $
>>> readme=readme.txt}

>>>
>>> Everything works, except the text file!
>>
>> The above pseudo-code tells me you are trying to get the file *name* as
>> part of the structure.
>>
>> But somehow I don't think that's what you want....right?
>

Subject: Re: putting .txt files in a structure
Posted by Michael Galloy on Thu, 13 Aug 2015 05:57:19 GMT
View Forum Message <> Reply to Message

Do you mean you want to have the full text of the file as a string in
your structure?

If so, it's not so bad:

```
  nlines = file_lines(filename)
  lines = strarr(nlines)
  openr, lun, filename, /get_lun
  readf, lun, lines
  free_lun, lun

  cr = string([10B])   ; string([13B, 10B]) on Windows
  text = strjoin(lines, cr)
```

If you have my library, it's just:

```
  text = mg_strmerge(mg_file(filename, /readf))
```

Then:

```
  btstruc = {mm: momentmm,$
             ros: btstruc.ros, $
             readme: text}
```

-Mike

On 8/12/15 3:52 PM, Paul van Delst wrote:
>
>
> On 08/12/15 17:23, Wayana Dolan wrote:
>> Hi Paul.
>>
>> You are correct in assuming that. I would like the text file as a
>> whole to be part of the structure, so that when I hand off my structure

>> to another person, they can know what all the variables are.
>
> Ah. Well, then, you need to write code to read said text file, create
> the (or a) structure based on what you read (e.g. tag names), and then
> populate your newly created structure with values from the file.
>
> It's a fair bit of work (in any language).
>
> I would look at create_struct. It's what I use to read netcdf files into
> a structure. Same deal as what you're doing apart from teh file format.
>
> Other folks may have better/simpler ideas based on their experience.
> E.g. is there a "read_*" function/procedure to do it?
>
> cheers,
>
> paulv
>
>>
>>
>> On Wednesday, August 12, 2015 at 2:05:06 PM UTC-7, Paul van Delst wrote:
>>> On 08/12/15 16:50, Wayana Dolan wrote:
>>>> So I've created a structure which has a bunch of arrays (both
>>>> string,
>>>> and integer). I handwrote a file called readme.txt which explains all
>>>> the variables in the structure. I can't get the file itself to become
>>>> part of the structure.
>>>
>>> I'm not sure exactly what you mean by "get the file itself to become
>>> part of the structure."
>>>
>>> Do you mean the file *name*? [easy]
>>>
>>> Or...
>>>
>>> Do you mean the file *contents*? [hard]
>>>
>>>> Part of the code looks like this (not the actual code, but similar..):
>>>> btstruc={mm=momentmm,$
>>>>   ros=btstruc.ros, $
>>>>   readme=readme.txt}
>>>>
>>>> Everything works, except the text file!
>>>
>>> The above pseudo-code tells me you are trying to get the file *name* as
>>> part of the structure.
>>>
>>> But somehow I don't think that's what you want....right?

>>

--
Michael Galloy
www.michaelgalloy.com
Modern IDL: A Guide to IDL Programming (http://modernidl.idldev.com)

Subject: Re: putting .txt files in a structure
Posted by Paul Van Delst[1] on Thu, 13 Aug 2015 14:05:50 GMT
View Forum Message <> Reply to Message

Hello,

On 08/13/15 01:57, Michael Galloy wrote:
> Do you mean you want to have the full text of the file as a string in
> your structure?

Oh. I though he wanted the file text parsed into tags:values. E.g. if
the file text was something like:

```
parameter1  3.14159
threshold2  2.71828
```

then the resulting structure (using IDL definition) would look something
like

```
text = {parameter1 : 3.14159, $
       threshold2 : 2.71828}
```

and then, via something like:

```
text = read_myfile("readme.txt")
```

you could then do

```
btstruc = {mm: momentmm,$
          ros: btstruc.ros, $
          readme: text}
```

and then

```
IDL> help, btstruc.readme
** Structure <df05a8>, 2 tags, length=8, data length=8, refs=3:
   PARAMETER1      FLOAT           3.14159
   THRESHOLD2      FLOAT           2.71828
```

>
> If so, it's not so bad:
>
>   nlines = file_lines(filename)
>   lines = strarr(nlines)
>   openr, lun, filename, /get_lun
>   readf, lun, lines
>   free_lun, lun
>
>   cr = string([10B])   ; string([13B, 10B]) on Windows
>   text = strjoin(lines, cr)
>
> If you have my library, it's just:
>
>   text = mg_strmerge(mg_file(filename, /readf))
>
> Then:
>
>   btstruc = {mm: momentmm,$
>   ros: btstruc.ros, $
>   readme: text}

But, yes, now I see this may be what he meant (and much simpler).

cheers,

paulv

p.s. Some days I always get the answer for "What colour is General MacArthur's white horse?" wrong.
