
Subject: Using a text list to populate a LIST() in IDL
Posted by [johnson.dustin.astro](#) on Sun, 23 Feb 2014 22:31:14 GMT
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Hi,

I am writing a function/routine that makes use of a user provided list of strings. Right now, the user needs to edit the LIST(a,b,c,d) parameter. I was wondering if there is a way for me to have the routine reference a .txt file and use the contents to populate the list, rather than have the user edit the function.

Does anyone know how I would accomplish this?

Thanks!

Subject: Re: Using a text list to populate a LIST() in IDL
Posted by [Paul Van Delst\[1\]](#) on Mon, 24 Feb 2014 17:20:25 GMT
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I created a test file, "test_string.txt", that contains the following (minus the "%<" lines):

```
-----%<-----  
this is string one  
and now string two  
this little piggy cried wee wee wee...  
the end  
-----%<-----
```

Then the procedure:

```
-----%<-----  
pro read_into_list, user_list  
  user_list = list()  
  openr, fid, "test_string.txt", /get_lun  
  cbuffer = ""  
  while (~ eof(fid)) do begin  
    readf, fid, cbuffer  
    user_list.add, cbuffer  
  endwhile  
  free_lun, fid  
end  
-----%<-----
```

Running the above in IDL:

```
IDL> .run read_into_list
% Compiled module: READ_INT0_LIST.
IDL> read_into_list, x
IDL> help, x
X      LIST <ID=1 NELEMENTS=4>
IDL> for i=0, n_elements(x)-1 do help, x[i]
<Expression>  STRING  = 'this is string one'
<Expression>  STRING  = 'and now string two'
<Expression>  STRING  = 'this little piggy cried wee wee wee...'
<Expression>  STRING  = 'the end'
```

When I edit the file and run again I get

```
IDL> read_into_list, x
IDL> for i=0, n_elements(x)-1 do help, x[i]
<Expression>  STRING  = 'this is string one'
<Expression>  STRING  = 'and now string two'
<Expression>  STRING  = 'toss in a third string,'
<Expression>  STRING  = 'this little piggy cried wee wee wee...'
<Expression>  STRING  = 'the end'
<Expression>  STRING  = 'not really. This the the last line'
```

How's that?

cheers,

paulv

On 02/23/14 17:31, johnson.dustin.astro@gmail.com wrote:

```
> Hi,
>
>
> I am writing a function/routine that makes use of a user provided
> list
of strings. Right now, the user needs to edit the LIST(a,b,c,d)
parameter. I was wondering if there is a way for me to have the routine
reference a .txt file and use the contents to populate the list, rather
than have the user edit the function.
>
> Does anyone know how I would accomplish this?
>
> Thanks!
>
```

Subject: Re: Using a text list to populate a LIST() in IDL
Posted by [Dick Jackson](#) on Tue, 25 Feb 2014 04:04:57 GMT
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Hi folks,

If an extra copy of the strings will fit in memory, this might be easier:

```
f = 'test_string.txt'
strs = StrArr(File_Lines(f))
OpenR, unit, f, /Get_LUN
ReadF, unit, strs
Free_LUN, unit
strList = List(strs, /EXTRACT)
```

--

Cheers,
-Dick

Dick Jackson Software Consulting Inc.
Victoria, BC, Canada
www.d-jackson.com

Paul van Delst wrote, On 2014-02-24, 9:20am:

> I created a test file, "test_string.txt", that contains the following (minus the
> "%<" lines):

```
>
> -----%<-----
> this is string one
> and now string two
> this little piggy cried wee wee wee...
> the end
> -----%<-----
```

>
> Then the procedure:

```
>
> -----%<-----
> pro read_into_list, user_list
>   user_list = list()
>   openr, fid, "test_string.txt", /get_lun
>   cbuffer = ""
>   while (~ eof(fid)) do begin
>     readf, fid, cbuffer
>     user_list.add, cbuffer
>   endwhile
>   free_lun, fid
> end
> -----%<-----
```

```

>
> Running the above in IDL:
>
>
> IDL> .run read_into_list
> % Compiled module: READ_INT0_LIST.
> IDL> read_into_list, x
> IDL> help, x
> X          LIST <ID=1 NELEMENTS=4>
> IDL> for i=0, n_elements(x)-1 do help, x[i]
> <Expression>  STRING  = 'this is string one'
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> <Expression>  STRING  = 'this little piggy cried wee wee wee...'
> <Expression>  STRING  = 'the end'
>
> When I edit the file and run again I get
>
> IDL> read_into_list, x
> IDL> for i=0, n_elements(x)-1 do help, x[i]
> <Expression>  STRING  = 'this is string one'
> <Expression>  STRING  = 'and now string two'
> <Expression>  STRING  = 'toss in a third string,'
> <Expression>  STRING  = 'this little piggy cried wee wee wee...'
> <Expression>  STRING  = 'the end'
> <Expression>  STRING  = 'not really. This the the last line'
>
>
> How's that?
>
>
> cheers,
>
> paulv
>
> On 02/23/14 17:31, johnson.dustin.astro@gmail.com wrote:
>> Hi,
>>
>>
>> I am writing a function/routine that makes use of a user provided
>> list
> of strings. Right now, the user needs to edit the LIST(a,b,c,d)
> parameter. I was wondering if there is a way for me to have the routine
> reference a .txt file and use the contents to populate the list, rather
> than have the user edit the function.
>>
>> Does anyone know how I would accomplish this?
>>
>> Thanks!

```

>>

Subject: Re: Using a text list to populate a LIST() in IDL
Posted by [Paul Van Delst\[1\]](#) on Tue, 25 Feb 2014 14:09:32 GMT
[View Forum Message](#) <> [Reply to Message](#)

Ooo... nice one. Much simpler/better.

On 02/24/14 23:04, Dick Jackson wrote:

```
> Hi folks,
>
> If an extra copy of the strings will fit in memory, this might be easier:
>
> f = 'test_string.txt'
> strs = StrArr(File_Lines(f))
> OpenR, unit, f, /Get_LUN
> ReadF, unit, strs
> Free_LUN, unit
> strList = List(strs, /EXTRACT)
>
```

Subject: Re: Using a text list to populate a LIST() in IDL
Posted by [johnson.dustin.astro](#) on Wed, 26 Feb 2014 04:06:05 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Sunday, February 23, 2014 2:31:14 PM UTC-8, johnson.du...@gmail.com wrote:

```
> Hi,
>
>
>
>
>
>
> I am writing a function/routine that makes use of a user provided list of strings. Right now, the
user needs to edit the LIST(a,b,c,d) parameter. I was wondering if there is a way for me to have
the routine reference a .txt file and use the contents to populate the list, rather than have the user
edit the function.
>
>
>
> Does anyone know how I would accomplish this?
>
>
>
> Thanks!
```

Thank you both for your help, worked great!
