
Subject: Writing to Multiple txt file with different names
Posted by [thtran296](#) on Tue, 18 Jul 2017 13:12:15 GMT
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Hello everybody,

I need to write my data to a bunch of different files, ideally with 'consecutive' names, such as File 1, File 2, File 3, .. so on (up to thousands of text files)

Here's my attempt:

```
get_lun, unit
for i = 1,1000 do begin
    openw, unit, 'File_' + i + '.dat', /get_lun
    printf, unit, 'my data will go in here'
endfor
```

IDL keeps saying filename argument must be a scalar string.
Any help would be appreciated.

Thank you.

Subject: Re: Writing to Multiple txt file with different names
Posted by [Jim Pendleton](#) on Tue, 18 Jul 2017 13:40:21 GMT
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On Tuesday, July 18, 2017 at 7:12:18 AM UTC-6, thtr...@gmail.com wrote:

```
> Hello everybody,
>
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> File 1, File 2, File 3, .. so on (up to thousands of text files)
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> endfor
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> IDL keeps saying filename argument must be a scalar string.
> Any help would be appreciated.
>
> Thank you.
```

Try
openw, unit, 'File_' + i.toString() + '.dat', /get_lun

or if you're using an older version of IDL,
openw, unit, 'File_' + strtrim(i, 2) + '.dat', /get_lun

The reason is that when the interpreter sees the "+" and a number, it will up-cast the other arguments in the expression to the highest precedence, rather than converting integers to strings.

Compare and contrast:

```
IDL> i = 10 & help, 'file_' + i + '.dat'
```

```
% Type conversion error: Unable to convert given STRING to Integer.
```

```
% Detected at: $MAIN$
```

```
% Type conversion error: Unable to convert given STRING to Integer.
```

```
% Detected at: $MAIN$
```

```
<Expression>  INT      =      10
```

```
IDL> i = 10 & help, '1' + i + '3'
```

```
<Expression>  INT      =      14
```

```
IDL> i = 10 & help, '1' + i + 30.0
```

```
<Expression>  FLOAT    =     41.0000
```

Jim P

Subject: Re: Writing to Multiple txt file with different names

Posted by [Craig Markwardt](#) on Tue, 18 Jul 2017 13:42:04 GMT

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On Tuesday, July 18, 2017 at 9:12:18 AM UTC-4, thtr...@gmail.com wrote:

> Hello everybody,

>

> I need to write my data to a bunch of different files, ideally with 'consecutive' names, such as File 1, File 2, File 3, .. so on (up to thousands of text files)

>

> Here's my attempt:

>

> get_lun, unit

> for i = 1,1000 do begin

> openw, unit, 'File_' + i + '.dat', /get_lun

> printf, unit, 'my data will go in here'

> endfor

>

> IDL keeps saying filename argument must be a scalar string.

> Any help would be appreciated.

>

Problem 1. You need to use "straight" quotes. You are using something like Microsoft word or some notepads that use curly quotes. IDL uses straight quotes.

Problem 2. The string 'File_'+i+'.dat' won't work because you are combining an integer and string. You could use 'File_'+strtrim(i,2)+'.dat' or use STRING() with a FORMAT= argument.

Problem 3. You are using GET_LUN once at the top of your loop and again for each loop. You never close any files. Use FREE_LUN at the end of your loop.

CM
