
Subject: How to use SPAWN for creating multiple output files?
Posted by [atmospheric physics](#) on Wed, 11 Jun 2014 10:00:57 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hello,

I have multiple *.nc files. I want to create SHA 256 checksum file for each of the datafile.

In linux shell, I get the checksum info as:

```
$ sha256sum XYZ_1000.nc'  
89654655f1a75fc398fb86c9f56c255bb991768eb223a6defa1f1d5d0ede f6aa XYZ_1000.nc
```

So, I tried to use the same in IDL as below:

```
IDL> spawn, 'sha256sum XYZ_201304000.nc'  
89654655f1a75fc398fb86c9f56c255bb991768eb223a6defa1f1d5d0ede f6aa XYZ_1000.nc
```

As I have created all the *.nc data files in IDL program, I would like to add few lines below to create respective checksum file (e.g., <myfile>.sha256).

I have my datafiles as - XYZ_1000.nc, XYZ_1001.nc, XYZ_1002.nc,
I would like to copy the checksum output

```
89654655f1a75fc398fb86c9f56c255bb991768eb223a6defa1f1d5d0ede f6aa
```

to the new file - XYZ_1000.sha256

I know it can be done directly on linux terminal but I want to create simultaneously in the IDL code.

Can anyone help me how I can do this in IDL using SPAWN command?

Thanks in advance,
Madhavan

Subject: Re: How to use SPAWN for creating multiple output files?
Posted by on Wed, 11 Jun 2014 12:40:30 GMT
[View Forum Message](#) <> [Reply to Message](#)

Den onsdagen den 11:e juni 2014 kl. 12:00:57 UTC+2 skrev Madhavan Bomidi:

> Hello,

>

> I have multiple *.nc files. I want to create SHA 256 checksum file for each of the datafile.

>

> In linux shell, I get the checksum info as:

>

> \$ sha256sum XYZ_1000.nc'

>
> 89654655f1a75fc398fb86c9f56c255bb991768eb223a6defa1f1d5d0ede f6aa XYZ_1000.nc
>
> So, I tried to use the same in IDL as below:
>
> IDL> spawn, 'sha256sum XYZ_201304000.nc'
>
> 89654655f1a75fc398fb86c9f56c255bb991768eb223a6defa1f1d5d0ede f6aa XYZ_1000.nc
>
> As I have created all the *.nc data files in IDL program, I would like to add few lines below to
create respective checksum file (e.g., <myfile>.sha256).
>
> I have my datafiles as - XYZ_1000.nc, XYZ_1001.nc, XYZ_1002.nc,
>
> I would like to copy the checksum output
>
> 89654655f1a75fc398fb86c9f56c255bb991768eb223a6defa1f1d5d0ede f6aa
>
> to the new file - XYZ_1000.sha256
>
> I know it can be done directly on linux terminal but I want to create simultaneously in the IDL
code.
>
> Can anyone help me how I can do this in IDL using SPAWN command?
>
> Thanks in advance,
>
> Madhavan

Something like this should work (untested):

```
IDL> myfile='XYZ_1000'  
IDL> spawn, 'sha256sum '+myfile+'.nc > '+myfile+'.sha256'
```

Subject: Re: How to use SPAWN for creating multiple output files?

Posted by [Matthew Argall](#) on Wed, 11 Jun 2014 13:02:06 GMT

[View Forum Message](#) <> [Reply to Message](#)

Here is a longer solution. Creating the file with ">" as Mats suggested is probably faster, but in this manner you can store the checksum into a variable in case you want to do something with it.

```
theFiles = file_search('XYZ_*.nc')  
basename = file_basename(theFiles, '.nc')  
dirname = file_dirname(theFiles)  
output_filenames = filepath(basename + '.sha256', ROOT_DIR=dirname)
```

```
for i = 0, nFiles - 1 do begin
```

```
spawn, 'sha256sum ' + theFiles[i], checksum

openw, lun, output_filenames[i], /GET_LUN
printf, lun, checksum
free_lun, lun
endfor
```

Subject: Re: How to use SPAWN for creating multiple output files?
Posted by [atmospheric physics](#) on Wed, 11 Jun 2014 14:24:55 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thank you both...

On Wednesday, June 11, 2014 3:02:06 PM UTC+2, Matthew Argall wrote:

> Here is a longer solution. Creating the file with ">" as Mats suggested is probably faster, but in
this manner you can store the checksum into a variable in case you want to do something with it.

```
>
>
>
> theFiles = file_search('XYZ_*.nc')
>
> basename = file_basename(theFiles, '.nc')
>
> dirname = file_dirname(theFiles)
>
> output_filenames = filepath(basename + '.sha256', ROOT_DIR=dirname)
>
>
>
> for i = 0, nFiles - 1 do begin
>
>   spawn, 'sha256sum ' + theFiles[i], checksum
>
>
>
>   openw, lun, output_filenames[i], /GET_LUN
>
>   printf, lun, checksum
>
>   free_lun, lun
>
> endfor
```
