
Subject: How to check for existence of an HDF5 group

Posted by [dg86](#) on Sat, 07 Feb 2015 18:24:47 GMT

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Dear Folks,

I want to create new groups within an HDF5 file. Before creating a new group, however, I'd like to check whether a group of the same name already exists. What's the right way to do this?

Calling H5G_OPEN or H5G_GET_OBJINFO with a new group name throws an error. I could write a wrapper routine that catches the error and returns a "group not found" value but that seems kludgy.

H5_LIST returns a whole lot of information, which I suppose I could parse. That also seems clunky.

Is there a more elegant solution? Something along the lines of FILE_TEST that works for HDF5 groups (H5G_TEST, e.g.)?

All the best,

David

Subject: Re: How to check for existence of an HDF5 group

Posted by [markb77](#) on Sun, 08 Feb 2015 09:39:50 GMT

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On Saturday, February 7, 2015 at 7:24:50 PM UTC+1, David Grier wrote:

> Dear Folks,

>
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> I'd like to check whether a group of the same name already exists. What's the right
> way to do this?

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> Is there a more elegant solution? Something along the lines of FILE_TEST that works
> for HDF5 groups (H5G_TEST, e.g.)?

>
> All the best,

>

> David

hi David,

The way to do it is to use H5_LIST with the FILTER keyword.

Also, I have a routine for this in my library: wmb_h5_group_exists()

which can be found at http://www.github.com/superchromix/wmb_lib

best,
Mark

Subject: Re: How to check for existence of an HDF5 group

Posted by [dg86](#) on Mon, 09 Feb 2015 01:24:55 GMT

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On Sunday, February 8, 2015 at 4:39:51 AM UTC-5, superchromix wrote:

> On Saturday, February 7, 2015 at 7:24:50 PM UTC+1, David Grier wrote:

>> Dear Folks,

>>

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>> I'd like to check whether a group of the same name already exists. What's the right

>> way to do this?

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> hi David,

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> Also, I have a routine for this in my library: wmb_h5_group_exists()

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> which can be found at http://www.github.com/superchromix/wmb_lib
>
> best,
> Mark

Thanks for the pointer to your repository, Mark. I'll have to look through the HDF5 routines closely. In the meanwhile, the following kludge is working for me. I try to open the group, and catch the error if the group doesn't exist. This is part of an object definition for storing multi-volume video data in an HDF5 archive:

```
;;;;  
function h5video::H5G_OPEN, loc_id, group  
  
    COMPILE_OPT IDL2, HIDDEN  
  
    catch, error  
    if (error ne 0L) then begin  
        return, 0L  
        catch, /cancel  
    endif  
  
    gid = h5g_open(loc_id, group)  
    return, gid  
end
```

Subject: Re: How to check for existence of an HDF5 group
Posted by [ferdonbbp](#) on Tue, 30 May 2017 09:44:51 GMT
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> Is there a more elegant solution?

Although this answer comes much later I didn't find the correct answer anywhere. I believe H5Lexists is what you are looking for:
https://support.hdfgroup.org/HDF5/doc1.8/RM/RM_H5L.html#Link-Exists

Cheers,
Fernando
