Subject: Re: ncdf + x-connection + many files = crazy.
Posted by Kenneth P. Bowman on Tue, 08 Feb 2011 21:29:58 GMT
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In article

<5011027c-85df-499f-b725-2e7af1965254@m27g2000prj.googlegroups.com>, Matt <savoie@nsidc.org> wrote:

- > Hey all,
- >
- > I've got a great riddle for you today. (Long story short, can you run
- > the test code included below to completion on your machine?) I've
- > already filed a bug report, but I want to see if other people can
- > reproduce these errors.

We get error messages like this some times when reading or writing netcdf files to network volumes. They seem to go away when reading/writing on the local machine.

I assume it is a filesystem bug. It usually happens with multiple large files.

Ken Bowman

Subject: Re: ncdf + x-connection + many files = crazy.
Posted by Foldy Lajos on Tue, 08 Feb 2011 21:31:24 GMT
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On Tue, 8 Feb 2011, Matt wrote:

- > Hey all,
- >
- > I've got a great riddle for you today. (Long story short, can you run
- > the test code included below to completion on your machine?) I've
- > already filed a bug report, but I want to see if other people can
- > reproduce these errors.
- >

>

- > I'm experiencing machine/version-dependent, non-deterministic behavior
- > that seems to present itself orthogonal to the triggering mechanism.
- > In other words, I've got a crazy-making problem.
- > I experienced this in working code, but through patient debugging,
- > I've pared this down my until I've got a relatively small program that
- > demonstrates the problem behavior.

>

- > The undesirable behavior is a NCDF_OPEN error (NC_ERROR=-31) after
- > some *random* number of open/close iterations on a netcdf file that

```
> was created with IDL (or possibly a segfault core dump on other
> machines.). The second feature is that I don't see this behavior
> until I make an x-connection of some sort (window, /free, or even a
> "device, depth=depth" will cause errors)
>
> Machine 1: (only has idl 7.0.1 64bit installed)
> savoie@snow:~/tmp> uname -a
> Linux snow 2.6.27.54-0.2-default #1 SMP 2010-10-19 18:40:07 +0200
> x86 64 x86 64 x86 64 GNU/Linux
>
Machine 2 (fails with 32 bit idl7.0.1 & idl6.4):
> savoie@snowblower:~/tmp> uname -a
> Linux snowblower 2.6.34.7-0.5-default #1 SMP 2010-10-25 08:40:12 +0200
> i686 i686 i386 GNux
>
> All the code does is open and close a netcdf file, many, many times.
> But after an x-connection (via "window, /free"), the code errors out
> at a different spot in the iteration.
>
>
> Below is the output I get on the problem machines and below that, the
> source code for you to try at home. For extra credit, modify the code
> to open a netcdf file created with a different program than IDL, NCO
> for example.
>
> --OUTPUT------
> savoie@snow:~/tmp> idl70
> IDL Version 7.0.1 (linux x86_64 m64). (c) 2008, ITT Visual Information
> Solutions
Installation number: 100-431.
> Licensed for use by: University of Colorado
> IDL> .run ./crash_ncdf.pro
> % Compiled module: CREATE HAND SAMPLE.
> % Compiled module: CRASH_NCDF.
> IDL> crash ncdf
> % Loaded DLM: NCDF.
> Successfully completed first iterations
> i =
         143017
> ncdf fid =
> % CRASH_NCDF: NCDF_OPEN: Unable to open the file "/projects/NRTSI-G/
> tmp_crashing_ncdf/sample_h
          and.nc".
>
                 (NC_ERROR=-31)
> % Execution halted at: CRASH NCDF
                                           44 /homes/snowblower/savoie/
> tmp/crash ncdf.pro
```

```
> %
               $MAIN$
>
> Sample Test Code:
  -----
> :: Author: Matt Savoie <savoie@nsidc.org>
 ; :Copyright: (C) <2011> University of Colorado.
> ;:Version: $Id:$
>
> ; Created 02/03/2011
> ; National Snow & Ice Data Center, University of Colorado, Boulder
 >
 ; Generate a very simple netcdf file.
> :-
> pro create_hand_sample, file
   compile_opt idl2, logical_predicate
>
   sample_var = dindgen(4, 3)
>
   ncid = ncdf create( file, /CLOBBER )
>
   dimidx = ncdf_dimdef( ncid, 'x', 4 )
>
   dimidy = ncdf_dimdef( ncid, 'y', 3 )
>
   varid = ncdf_vardef( ncid, 'variable', /double )
   ncdf_control, ncid, /ENDEF
>
   ncdf_varput, ncid, varid, sample_var
>
   ncdf close, ncid
>
 end
>
>
  ; This is just a sample looping program that shows a problem
  ; Opening and Closing a single netcdf file many times.
>
> pro crash_ncdf
   compile_opt idl2, logical_predicate
>
   catch, theError
>
   if the Error ne 0 then begin
>
    Catch, /cancel
>
    print, "i = ", i
>
    print, "ncdf_fid = ", ncdf_fid
>
     message, !ERROR_STATE.msg
>
   endif
>
>
```

```
file = './sample.nc'
   create hand sample, file
>
   long_iteration = 1900000L
>
   for i = 0l, long_iteration do begin
>
     ncdf_fid = ncdf_open( file, write = 0 )
>
     ncdf_close, ncdf_fid
>
   endfor
>
>
   print, 'Successfully completed first iterations'
>
   window. /free
   wdelete
>
>
   for i = 0l, long_iteration do begin
     ncdf_fid = ncdf_open( file, write = 0 )
>
     ncdf close, ncdf fid
>
   endfor
>
   print, 'Successfully completed second iterations'
> end
linux x86_64:
IDL 7.0 (64 bit) fails
IDL 6.4 (64 bit) succeeds
regards,
Lajos
ps: you are defining a scalar variable, not an array
   sample_var = dindgen(4, 3)
>
   ncid = ncdf create( file, /CLOBBER )
>
   dimidx = ncdf_dimdef( ncid, 'x', 4)
   dimidy = ncdf dimdef(ncid, 'y', 3)
>
   varid = ncdf_vardef( ncid, 'variable', /double )
   ncdf control, ncid, /ENDEF
   ncdf varput, ncid, varid, sample var
   ncdf_close, ncid
```

Subject: Re: ncdf + x-connection + many files = crazy.
Posted by Michael Galloy on Tue, 08 Feb 2011 21:36:04 GMT
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```
On 2/8/11 1:37 PM, Matt wrote:
> Hey all,
>
> I've got a great riddle for you today. (Long story short, can you run
> the test code included below to completion on your machine?) I've
> already filed a bug report, but I want to see if other people can
> reproduce these errors.
>
> I'm experiencing machine/version-dependent, non-deterministic behavior
> that seems to present itself orthogonal to the triggering mechanism.
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> I experienced this in working code, but through patient debugging,
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>
> The undesirable behavior is a NCDF_OPEN error (NC_ERROR=-31) after
> some *random* number of open/close iterations on a netcdf file that
> was created with IDL (or possibly a segfault core dump on other
> machines.). The second feature is that I don't see this behavior
> until I make an x-connection of some sort (window, /free, or even a
> "device, depth=depth" will cause errors)
>
> Machine 1: (only has idl 7.0.1 64bit installed)
> savoie@snow:~/tmp> uname -a
Linux snow 2.6.27.54-0.2-default #1 SMP 2010-10-19 18:40:07 +0200
> x86_64 x86_64 x86_64 GNU/Linux
Machine 2 (fails with 32 bit idl7.0.1& idl6.4):
> savoie@snowblower:~/tmp> uname -a
> Linux snowblower 2.6.34.7-0.5-default #1 SMP 2010-10-25 08:40:12 +0200
> i686 i686 i386 GNux
>
> All the code does is open and close a netcdf file, many, many times.
> But after an x-connection (via "window, /free"), the code errors out
> at a different spot in the iteration.
>
> Below is the output I get on the problem machines and below that, the
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> to open a netcdf file created with a different program than IDL, NCO
> for example.
>
> --OUTPUT-----
> savoie@snow:~/tmp> idl70
> IDL Version 7.0.1 (linux x86 64 m64). (c) 2008, ITT Visual Information
```

```
> Solutions
Installation number: 100-431.
> Licensed for use by: University of Colorado
>
> IDL> .run ./crash_ncdf.pro
> % Compiled module: CREATE_HAND_SAMPLE.
> % Compiled module: CRASH NCDF.
> IDL> crash ncdf
> % Loaded DLM: NCDF.
> Successfully completed first iterations
> i =
        143017
> ncdf fid =
> % CRASH_NCDF: NCDF_OPEN: Unable to open the file "/projects/NRTSI-G/
> tmp_crashing_ncdf/sample_h
           and.nc".
>
                  (NC_ERROR=-31)
                                           44 /homes/snowblower/savoie/
> % Execution halted at: CRASH NCDF
> tmp/crash ncdf.pro
> %
                 $MAIN$
I made it through OK with IDL 8.0.1 (and netCDF 4.1 instead of the 3.6.2
in IDL 7.0):
IDL> crash ncdf
% Loaded DLM: NCDF.
Successfully completed first iterations
Successfully completed second iterations
IDL> print, !version
{ x86 64 darwin unix Mac OS X 8.0.1 Oct 5 2010
                                                       64}
Mike
www.michaelgalloy.com
Research Mathematician
Tech-X Corporation
```

Subject: Re: ncdf + x-connection + many files = crazy.
Posted by Michael Galloy on Tue, 08 Feb 2011 21:44:42 GMT
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On 2/8/11 2:36 PM, Michael Galloy wrote:

```
> On 2/8/11 1:37 PM, Matt wrote:
```

>> Hey all,

>>

>> I've got a great riddle for you today. (Long story short, can you run

>> the test code included below to completion on your machine?) I've

>> already filed a bug report, but I want to see if other people can

```
>> reproduce these errors.
>>
>> I'm experiencing machine/version-dependent, non-deterministic behavior
>> that seems to present itself orthogonal to the triggering mechanism.
>> In other words, I've got a crazy-making problem.
>>
>> I experienced this in working code, but through patient debugging,
>> I've pared this down my until I've got a relatively small program that
>> demonstrates the problem behavior.
>>
>> The undesirable behavior is a NCDF_OPEN error (NC_ERROR=-31) after
>> some *random* number of open/close iterations on a netcdf file that
>> was created with IDL (or possibly a segfault core dump on other
>> machines.). The second feature is that I don't see this behavior
>> until I make an x-connection of some sort (window, /free, or even a
>> "device, depth=depth" will cause errors)
>> Machine 1: (only has idl 7.0.1 64bit installed)
>> savoie@snow:~/tmp> uname -a
>> Linux snow 2.6.27.54-0.2-default #1 SMP 2010-10-19 18:40:07 +0200
>> x86 64 x86 64 x86 64 GNU/Linux
>>
>> Machine 2 (fails with 32 bit idl7.0.1& idl6.4):
>> savoie@snowblower:~/tmp> uname -a
>> Linux snowblower 2.6.34.7-0.5-default #1 SMP 2010-10-25 08:40:12 +0200
>> i686 i686 i386 GNux
>>
>> All the code does is open and close a netcdf file, many, many times.
>> But after an x-connection (via "window, /free"), the code errors out
>> at a different spot in the iteration.
>>
>>
>> Below is the output I get on the problem machines and below that, the
>> source code for you to try at home. For extra credit, modify the code
>> to open a netcdf file created with a different program than IDL, NCO
>> for example.
>>
>> --OUTPUT------
>> savoie@snow:~/tmp> idl70
>> IDL Version 7.0.1 (linux x86_64 m64). (c) 2008, ITT Visual Information
>> Solutions
>> Installation number: 100-431.
  Licensed for use by: University of Colorado
>>
>> IDL> .run ./crash ncdf.pro
>> % Compiled module: CREATE HAND SAMPLE.
```

```
>> % Compiled module: CRASH_NCDF.
>> IDL> crash ncdf
>> % Loaded DLM: NCDF.
>> Successfully completed first iterations
>> i = 143017
>> ncdf fid = 5
>> % CRASH_NCDF: NCDF_OPEN: Unable to open the file "/projects/NRTSI-G/
>> tmp_crashing_ncdf/sample_h
>> and.nc".
>> (NC _ERROR=-31)
>> % Execution halted at: CRASH_NCDF 44 /homes/snowblower/savoie/
>> tmp/crash ncdf.pro
>> % $MAIN$
> I made it through OK with IDL 8.0.1 (and netCDF 4.1 instead of the 3.6.2
> in IDL 7.0):
>
> IDL> crash ncdf
> % Loaded DLM: NCDF.
> Successfully completed first iterations
> Successfully completed second iterations
> IDL> print, !version
> { x86_64 darwin unix Mac OS X 8.0.1 Oct 5 2010 64 64}
> Mike
> --
> www.michaelgalloy.com
> Research Mathematician
> Tech-X Corporation
Actually, I'm OK on 7.0 also.
IDL> crash_ncdf
% Compiled module: CRASH_NCDF.
% Loaded DLM: NCDF.
Successfully completed first iterations
Successfully completed second iterations
IDL> print, !version
{ i386 darwin unix Mac OS X 7.0 Oct 25 2007
                                              32
                                                    64}
IDL> help, 'ncdf', /dlm
** NCDF - IDL NetCDF support (loaded)
  Version: 3.6.2, Build Date: OCT 25 2007, Source: ITT Visual
Information Solutions
   Path: /Applications/itt/idl70/bin/bin.darwin.i386/idl_netcdf.so
Mike
```

```
Subject: Re: ncdf + x-connection + many files = crazy. Posted by Matt[2] on Tue, 08 Feb 2011 21:58:09 GMT View Forum Message <> Reply to Message
```

On Feb 8, 2:31 pm, FOLDY Lajos <fo...@rmki.kfki.hu> wrote:
> On Tue, 8 Feb 2011, Matt wrote:
> ps: you are defining a scalar variable, not an array

>> dimidx = ncdf_dimdef(ncid, 'x', 4)
>> dimidy = ncdf_dimdef(ncid, 'y', 3)
>> varid = ncdf_vardef(ncid, 'variable', /double)

Look at that, you're right. But the file is still created o.k. even as a vector and since I'm just opening and closing it it shouldn't effect it.....

Yup changing the offending line to this has no effect on my errors. varid = ncdf_vardef(ncid, 'variable', [dimidx, dimidy], /double)

But thanks for checking this for me.

Matt

Subject: Re: ncdf + x-connection + many files = crazy. Posted by Matt[2] on Tue, 08 Feb 2011 22:02:07 GMT View Forum Message <> Reply to Message

Ken,

On Feb 8, 2:29 pm, "Kenneth P. Bowman" <k-bow...@null.edu> wrote:

>

- > We get error messages like this some times when reading or
- > writing netcdf files to network volumes. They seem to go
- > away when reading/writing on the local machine.

>

- > I assume it is a filesystem bug. It usually happens with
- > multiple large files.

The first time I got an NC_ERROR=-31 (previous problems), I was trying to write a file to a location mounted with fuse-ssh and it was

definitely a problem with writing across the file systems and my solution was to write that single file locally, and copy it later.

The funny thing in this case, is actually if I write to a different/ remote filesystem, I *don't* get the error. It only occurs when I write to a local filesystem.

Thanks for the input,

Matt

Subject: Re: ncdf + x-connection + many files = crazv. Posted by Matt[2] on Tue, 08 Feb 2011 22:04:30 GMT View Forum Message <> Reply to Message

On Feb 8, 2:44 pm, Michael Galloy <mgal...@gmail.com> wrote:

- > On 2/8/11 2:36 PM, Michael Galloy wrote:
- Actually, I'm OK on 7.0 also.
- >
- > IDL> crash ncdf
- > % Compiled module: CRASH NCDF.
- > % Loaded DLM: NCDF.
- > Successfully completed first iterations
- > Successfully completed second iterations
- > IDL> print, !version
- > { i386 darwin unix Mac OS X 7.0 Oct 25 2007 32 64}
- > IDL> help, 'ncdf', /dlm
- > ** NCDF IDL NetCDF support (loaded)
- Version: 3.6.2, Build Date: OCT 25 2007, Source: ITT Visual
- > Information Solutions
- Path: /Applications/itt/idl70/bin/bin.darwin.i386/idl_netcdf.so

Yeah Mike,

I can't recreate this on 8.0x with a mac either. But at least one other person sees this problem, and it means it's not just our system.

Thanks everyone.

Matt

Subject: Re: ncdf + x-connection + many files = crazy. Posted by Paul Van Delst[1] on Tue, 08 Feb 2011 23:17:34 GMT

```
Matt wrote:
> Hey all,
> I've got a great riddle for you today. (Long story short, can you run
> the test code included below to completion on your machine?)
Dunno if another couple datapoints will help or not, but:
#1:
IDL> crash ncdf
% Compiled module: CRASH NCDF.
% Loaded DLM: NCDF.
Successfully completed first iterations
Successfully completed second iterations
IDL> print, !version
{ x86 linux unix linux 8.0.1 Oct 6 2010
                                         32
                                               64}
IDL> help, 'ncdf', /dlm
** NCDF - IDL NetCDF support (loaded)
  Version: 4.1.1, Build Date: JUN 18 2010, Source: ITT Visual Information Solutions
  Path: /usr/local/idl/idl/idl80/bin/bin.linux.x86/idl netcdf.so
#2:
IDL> crash ncdf
% Compiled module: CRASH NCDF.
% Loaded DLM: NCDF.
Successfully completed first iterations
Successfully completed second iterations
IDL> print, !version
{ ibmr2 AIX unix AIX 6.4 Mar 24 2007
                                              64}
                                        64
IDL> help, 'ncdf', /dlm
** NCDF - IDL NetCDF support (loaded)
  Version: 3.5.0, Build Date: MAR 24 2007, Source: ITT Visual Information Solutions
  Path: /usrx/local/rsi64/idl64/bin/bin.ibm.rs6000 64/idl netcdf.a
cheers,
paulv
```

Subject: Re: ncdf + x-connection + many files = crazy. Posted by Fabzou on Wed, 09 Feb 2011 08:32:46 GMT

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Hi.

On 02/08/2011 09:37 PM, Matt wrote:

- > The undesirable behavior is a NCDF_OPEN error (NC_ERROR=-31) after
- > some *random* number of open/close iterations on a netcdf file that
- > was created with IDL (or possibly a segfault core dump on other
- > machines.).

I reported a similar problem

(http://www.rhinocerus.net/forum/lang-idl-pvwave/657163-rando m-netcdf-i-o-error.html).

It happens by reading *or* writing of numerous netcdf files, randomly.

It appears to me that the error occurence is related to both the machine load and the response time of the hard drives. I stopped using IDL (7.1.1) with data stored on network drives because of this problem.

Maybe IDL8.0 is doing better here?

Fab

Subject: Re: ncdf + x-connection + many files = crazy. Posted by R.Bauer on Wed, 09 Feb 2011 08:39:35 GMT View Forum Message <> Reply to Message

Am 08.02.2011 21:37, schrieb Matt:

- > Hey all,
- >
- > I've got a great riddle for you today. (Long story short, can you run
- > the test code included below to completion on your machine?) I've
- > already filed a bug report, but I want to see if other people can
- > reproduce these errors.

Hi Matt

I got it too, and I remember a similiar test case for a old fixed bug. I'll search for that. May be it is a regression.

crash_ncdf % Loaded DLM: NCDF. i = 819132 ncdf fid = 65536

```
% CRASH_NCDF: NCDF_OPEN: Unable to open the file "./sample.nc".
(NC ERROR=-31)
% Execution halted at: CRASH_NCDF
                                         41
** NCDF - IDL NetCDF support (loaded)
  Version: 4.1.1, Build Date: JUN 18 2010, Source: ITT Visual
Information Solutions
IDL> help, !version,/str
** Structure !VERSION, 8 tags, length=104, data length=100:
              STRING 'x86 64'
 ARCH
             STRING
                      'linux'
 OS
 OS FAMILY
                 STRING
                           'unix'
 OS NAME
                 STRING
                           'linux'
 RELEASE
                STRING '8.0'
 BUILD DATE
                  STRING 'Jun 18 2010'
 MEMORY BITS
                    INT
                               64
 FILE OFFSET BITS
           INT
                      64
Linux sunshine 2.6.32-28-generic #55-Ubuntu SMP Mon Jan 10 23:42:43 UTC
2011 x86 64 GNU/Linux
Reimar
> I'm experiencing machine/version-dependent, non-deterministic behavior
> that seems to present itself orthogonal to the triggering mechanism.
> In other words, I've got a crazy-making problem.
>
> I experienced this in working code, but through patient debugging,
> I've pared this down my until I've got a relatively small program that
> demonstrates the problem behavior.
>
> The undesirable behavior is a NCDF_OPEN error (NC_ERROR=-31) after
> some *random* number of open/close iterations on a netcdf file that
> was created with IDL (or possibly a segfault core dump on other
> machines.). The second feature is that I don't see this behavior
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> "device, depth=depth" will cause errors)
>
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> savoie@snow:~/tmp> uname -a
> Linux snow 2.6.27.54-0.2-default #1 SMP 2010-10-19 18:40:07 +0200
> x86 64 x86 64 x86 64 GNU/Linux
>
```

```
> Machine 2 (fails with 32 bit idl7.0.1 & idl6.4):
> savoie@snowblower:~/tmp> uname -a
> Linux snowblower 2.6.34.7-0.5-default #1 SMP 2010-10-25 08:40:12 +0200
> i686 i686 i386 GNux
>
> All the code does is open and close a netcdf file, many, many times.
> But after an x-connection (via "window, /free"), the code errors out
> at a different spot in the iteration.
>
>
> Below is the output I get on the problem machines and below that, the
> source code for you to try at home. For extra credit, modify the code
> to open a netcdf file created with a different program than IDL, NCO
> for example.
>
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> IDL Version 7.0.1 (linux x86_64 m64). (c) 2008, ITT Visual Information
Solutions
> Installation number: 100-431.
> Licensed for use by: University of Colorado
>
> IDL> .run ./crash_ncdf.pro
> % Compiled module: CREATE_HAND_SAMPLE.
> % Compiled module: CRASH_NCDF.
> IDL> crash ncdf
> % Loaded DLM: NCDF.
> Successfully completed first iterations
        143017
> i =
> ncdf fid =
                  5
> % CRASH_NCDF: NCDF_OPEN: Unable to open the file "/projects/NRTSI-G/
> tmp_crashing_ncdf/sample_h
          and.nc".
>
                 (NC ERROR=-31)
 % Execution halted at: CRASH_NCDF
                                         44 /homes/snowblower/savoie/
> tmp/crash ncdf.pro
  %
                $MAIN$
>
  Sample Test Code:
; :Author: Matt Savoie <savoie@nsidc.org>
> ; :Copyright: (C) <2011> University of Colorado.
> ;:Version: $Id:$
> ;
```

```
> ; Created 02/03/2011
> ; National Snow & Ice Data Center, University of Colorado, Boulder
> ;-==========*/
>
>
> ; Generate a very simple netcdf file.
> :-
> pro create_hand_sample, file
    compile_opt idl2, logical_predicate
>
    sample_var = dindgen(4, 3)
>
    ncid = ncdf create( file, /CLOBBER )
>
    dimidx = ncdf_dimdef( ncid, 'x', 4 )
>
    dimidy = ncdf_dimdef( ncid, 'y', 3 )
>
    varid = ncdf_vardef( ncid, 'variable', /double )
>
    ncdf_control, ncid, /ENDEF
>
    ncdf varput, ncid, varid, sample var
>
    ncdf_close, ncid
>
>
> end
>
>
> ;+
  ; This is just a sample looping program that shows a problem
  ; Opening and Closing a single netcdf file many times.
> ;-
> pro crash_ncdf
    compile_opt idl2, logical_predicate
>
    catch, the Error
>
    if the Error ne 0 then begin
>
     Catch, /cancel
>
      print, "i = ", i
>
      print, "ncdf_fid = ", ncdf_fid
>
      message, !ERROR_STATE.msg
>
    endif
>
>
>
    file = './sample.nc'
>
    create_hand_sample, file
>
>
    long_iteration = 1900000L
>
>
    for i = 0l, long_iteration do begin
>
      ncdf_fid = ncdf_open( file, write = 0 )
>
      ncdf_close, ncdf_fid
>
    endfor
>
>
```

```
print, 'Successfully completed first iterations'
    window. /free
>
    wdelete
>
    for i = 0l, long_iteration do begin
>
      ncdf_fid = ncdf_open( file, write = 0 )
>
      ncdf close, ncdf fid
>
    endfor
>
    print, 'Successfully completed second iterations'
>
> end
Subject: Re: ncdf + x-connection + many files = crazy.
Posted by R.Bauer on Wed, 09 Feb 2011 08:56:20 GMT
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> Hi Matt
>
> I got it too, and I remember a similiar test case for a old fixed bug.
> I'll search for that. May be it is a regression.
>
> crash_ncdf
> % Loaded DLM: NCDF.
         819132
> i =
> ncdf fid =
                65536
strange it is for me always "ncdf_fid =
                                         65536"
I can reproduce that number
Reimar
Subject: Re: ncdf + x-connection + many files = crazy.
Posted by Maarten[1] on Wed, 09 Feb 2011 09:21:32 GMT
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On Feb 9, 9:56 am, Reimar Bauer < R.Ba...@fz-juelich.de> wrote:
>> crash ncdf
>> % Loaded DLM: NCDF.
>> i =
          819132
```

65536

>> ncdf fid =

```
> strange it is for me always "ncdf fid =
                                            65536"
> I can reproduce that number
```

The nc_open documentation just says it is an int. To me that means 32bit, but could they have compiled the library with 16-bit ints?

Maarten

```
Subject: Re: ncdf + x-connection + many files = crazy.
Posted by Matt[2] on Wed, 09 Feb 2011 22:26:09 GMT
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```

```
On Feb 9, 1:39 am, Reimar Bauer < R.Ba...@fz-juelich.de> wrote:
> I got it too, and I remember a similiar test case for a old fixed bug.
> I'll search for that. May be it is a regression.
> crash_ncdf
> % Loaded DLM: NCDF.
        819132
> ncdf fid =
                65536
> % CRASH NCDF: NCDF OPEN: Unable to open the file "./sample.nc".
> (NC_ERROR=-31)
> % Execution halted at: CRASH NCDF
                                            41
Remar,
```

It look like you ran out of file handles? Or at least it's quite a coincidence if not. 2¹⁶ = 65536. Thanks for the data point.

Matt

```
Subject: Re: ncdf + x-connection + many files = crazy.
Posted by Matt[2] on Wed, 09 Feb 2011 22:27:52 GMT
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```

```
On Feb 9, 2:21 am, Maarten <maarten.sn...@knmi.nl> wrote:
> On Feb 9, 9:56 am, Reimar Bauer < R.Ba...@fz-juelich.de> wrote:
>>> crash ncdf
>>> % Loaded DLM: NCDF.
>>> i =
          819132
```

```
>>> ncdf_fid = 65536
>
>> strange it is for me always "ncdf_fid = 65536"
>
>> I can reproduce that number
>
> The nc_open documentation just says it is an int. To me that means 32-
> bit, but could they have compiled the library with 16-bit ints?
>
> Maarten
```

Looks like I should have read all three results before posting. I agree that Reimar's number is pretty fishy. My ncdf_fid was always pretty low.

Thanks again everyone.

Matt

```
Subject: Re: ncdf + x-connection + many files = crazy. Posted by Matt[2] on Fri, 18 Feb 2011 23:30:44 GMT View Forum Message <> Reply to Message
```

Reimar,

So I might have spoken too soon. I just installed 8.0.1 and we are reproducing the error, but now our ncdf_fid is also 65536. Can you give me the version, and OS information for your machine?

Thanks, Matt

```
On Feb 9, 1:56 am, Reimar Bauer <R.Ba...@fz-juelich.de> wrote:
>> Hi Matt
>
>> I got it too, and I remember a similiar test case for a old fixed bug.
>> I'll search for that. May be it is a regression.
>
>> crash_ncdf
>> % Loaded DLM:NCDF.
>> i = 819132
>> ncdf_fid = 65536
>
> strange it is for me always "ncdf_fid = 65536"
>
```

> I can reproduce that number

>

> Reimar

```
Subject: Re: ncdf + x-connection + many files = crazy. Posted by R.Bauer on Mon, 21 Feb 2011 10:38:13 GMT View Forum Message <> Reply to Message
```

```
Am 19.02.2011 00:30, schrieb Matt:
> Reimar,
>
> So I might have spoken too soon. I just installed 8.0.1 and we are
> reproducing the error, but now our ncdf_fid is also 65536. Can you
> give me the version, and OS information for your machine?
IDL> help, !version,/str
** Structure !VERSION, 8 tags, length=104, data length=100:
 ARCH
              STRING 'x86 64'
 OS
            STRING
                      'linux'
 OS FAMILY
                 STRING
                           'unix'
 OS NAME
                 STRING
                           'linux'
 RELEASE
                STRING
                          '8.0'
 BUILD DATE
                  STRING
                           'Jun 18 2010'
 MEMORY BITS
                   INT
                              64
 FILE_OFFSET_BITS
          INT
                     64
```

OS: linux ubuntu 10.04 LTS

Reimar

```
> Thanks,
> Matt
>
> On Feb 9, 1:56 am, Reimar Bauer <R.Ba...@fz-juelich.de> wrote:
>>> Hi Matt
>>
>>> I got it too, and I remember a similiar test case for a old fixed bug.
>>> I'll search for that. May be it is a regression.
>>
>>> crash_ncdf
>>> % Loaded DLM:NCDF.
>>> i = 819132
>>> ncdf_fid = 65536
```

```
>> strange it is for me always "ncdf_fid = 65536"
>> I can reproduce that number
>> Reimar
>
```