Subject: Re: Problem using sav files. Posted by Theo Brauers on Thu, 21 Sep 2000 07:00:00 GMT View Forum Message <> Reply to Message

## Liam Gumley wrote:

- > It's probably a long shot, but instead of using RESOLVE\_ALL, have you tried
- > compiling only your procedures and functions, and saving them? In other
- > words, allowing the built-in routines to compile at runtime?

>

- > Cheers,
- > Liam.

Thanks for your advice: When I compiled my program I excluded already about 50 routines (mainly from our libary) which are never reached in this application

```
excluded=['DL_MAC','DL_VMS', 'SETLOG', 'DELLOG' $
  , 'NCDF_G','NCDF_GR', ...... , 'CT_YELLOW_RED_BLUE_GREEN_BLACK' $
  . 'ENL_OPLOT']
```

in response to your posting I also excluded the following routines from the RSI\IDL53\lib directory

```
excluded = [ excluded $
  , 'DOC_LIBRARY' $
  , 'IDL CRANK' $
  , 'RESOLVE ALL' $
  , 'XDISPLAYFILE' $
  , 'XMANAGER' $
  'CONGRID' $
   'CORRELATE' $
  , 'CW BGROUP' $
  , 'CW_FIELD' $
  , 'FILEPATH' $
  , 'INTERPOL' $
  'LS2FIT' $
  , 'MOMENT' $
  , 'MEAN' $
  , 'POLY' $
   'POLY FIT' $
  , 'REVERSE' $
   'RSTRPOS' $
   'R_CORRELATE' $
  , 'STR SEP' $
  , 'UNIQ'
```

RESOLVE ALL, SKIP ROUT=excluded

The problem remains the same. When I skip resolve\_all and compile the whole thing during the the run for one data set it works fine for this set. When I SAVE/EXIT/START/RESTORE it crashes IDL again. :-|

Thanks for your help. Cheers Theo

--

-----

Dr. Theo Brauers
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52425 JUELICH, Germany
Tel. +49-2461-61-6646 Fax. +49-2461-61-5346
http://www.kfa-juelich.de/icg/icg3/MITARBEITER/th.brauers.ht ml

Subject: Re: Problem using sav files.
Posted by Liam E. Gumley on Thu, 21 Sep 2000 07:00:00 GMT
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Theo Brauers <th.brauers@fz-juelich.de> wrote in message news:39C9FFCA.138B6B3D@fz-juelich.de...

- > My program is an widget driven i/o interface for FACSIMILE. It
- > consists of about 400 functions/routines. When I compile the
- > whole thing using resolve\_all it works fine in this IDL session.
- > However, when I save the thing (easy.sav) and restart IDL using
- > the easy.sav file it worked fine for a while, then the thing
- > crashes IDL totally during operation even when I use the same
- > input data. Restarting IDL with sav file: crash. Restarting
- > IDL with source compiled: OK. Save and restart: Crash. Rebooting
- > and repeating gives the same result. I can also reproduce this
- > behaviour on a different machine, with different user profile.
- > I had the same behaviour with a previous version of the program
- > which crashed in the same way at a different location in the
- > program but I cannot reproduce this again :-|

It's probably a long shot, but instead of using RESOLVE\_ALL, have you tried compiling only your procedures and functions, and saving them? In other words, allowing the built-in routines to compile at runtime?

Cheers,

Liam.

http://cimss.ssec.wisc.edu/~gumley

## Subject: Re: Problem using sav files. Posted by Theo Brauers on Thu, 21 Sep 2000 07:00:00 GMT

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```
David Fanning wrote:
> I'm going to guess programmer error. :-)
> You will go a long way toward solving the problem if you
> stick some kind of Catch error handler in those functions/routines.
> It is hard to write an application with 4 functions that doesn't
> have some kind of error, let alone 400! I use a Catch
> error handler in most of my widget programs that is some
 variation of this:
    Catch, the Error
>
    IF the Error NE 0 THEN BEGIN
>
      Catch, /Cancel
      Widget_Control, event.top, Set_UValue=info, /No_Copy
>
      ok = Error_Message(Traceback=1, /Error)
>
      RETURN
>
    ENDIF
>
  The Error_Message program can be found on my web page. It
> will put the system error message (!Error_State.Msg) in
> a Dialog Message if appropriate for the device. Otherwise,
 it will use Message. But setting the Traceback keyword
> will lead you directly to the error. :-)
>
> Cheers,
>
 David
Hi again:
```

I put your code into those routines which are called in the vicinity of the crash. No error during the operation from compiled routines. It crashes again IDL coming up with Dr.Watson. The exception is an access violation 0xc0000005 at address 0x02854f14. The problem is that you cant step through a program loaded from sav file. Since the error doesnot occur during the operation from freshly compiled I am trapped ..... Probably its better to report the error to RSI or to wait for IDL5.4.

**Best Theo** 

--

\_\_\_\_\_

Dr. Theo Brauers
Institut fuer Atmosphaerische Chemie (ICG-3)
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Tel. +49-2461-61-6646 Fax. +49-2461-61-5346
http://www.kfa-juelich.de/icg/icg3/MITARBEITER/th.brauers.ht ml

Subject: Re: Problem using sav files.
Posted by Theo Brauers on Thu, 21 Sep 2000 07:00:00 GMT
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## David Fanning wrote: > > Theo Brauers (th.brauers@fz-juelich.de) writes: >> I am stuck with a problem using a sav file: >> >> My program is an widget driven i/o interface for FACSIMILE. It >> consists of about 400 functions/routines. When I compile the >> whole thing using resolve all it works fine in this IDL session. >> However, when I save the thing (easy.sav) and restart IDL using >> the easy sav file it worked fine for a while, then the thing >> crashes IDL totally during operation even when I use the same >> input data. Restarting IDL with sav file: crash. Restarting >> IDL with source compiled: OK. Save and restart: Crash. Rebooting >> and repeating gives the same result. I can also reproduce this >> behaviour on a different machine, with different user profile. >> I had the same behaviour with a previous version of the program >> which crashed in the same way at a different location in the >> program but I cannot reproduce this again :->> >> Does anybody have similar problems? Is there any possibility >> to catch an error before IDL crashes? >> I am using: { x86 Win32 Windows 5.3.1 Feb 23 2000} > I'm going to guess programmer error. :-) > > > You will go a long way toward solving the problem if you > stick some kind of Catch error handler in those functions/routines. > It is hard to write an application with 4 functions that doesn't > have some kind of error, let alone 400! I use a Catch > error handler in most of my widget programs that is some > variation of this: >

> Catch, the Error

> IF the Error NE 0 THEN BEGIN

Catch, /Cancel > Widget\_Control, event.top, Set\_UValue=info, /No\_Copy > ok = Error\_Message(Traceback=1, /Error) > **RETURN** > **ENDIF** > The Error\_Message program can be found on my web page. It will put the system error message (!Error\_State.Msg) in > a Dialog Message if appropriate for the device. Otherwise, > it will use Message. But setting the Traceback keyword will lead you directly to the error. :-) > > Cheers, > > David

## Hi David

Thanks for your advice. I am going to try it. However, the problem is that the program runs perfectly when compiled and it crashes IDL (WinNT Dr. Watson shows up) when restored from sav file. Correct me if I am wrong but I always thought that the SAVE/EXIT/START/RESTORE combination puts me back to the location where I came from, not lightyears away.

**Best Theo** 

Subject: Re: Problem using sav files.
Posted by davidf on Thu, 21 Sep 2000 07:00:00 GMT
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Theo Brauers (th.brauers@fz-juelich.de) writes:

> I am stuck with a problem using a sav file:

> My program is an widget driven i/o interface for EACS

- > My program is an widget driven i/o interface for FACSIMILE. It
- > consists of about 400 functions/routines. When I compile the
- whole thing using resolve\_all it works fine in this IDL session.However, when I save the thing ( easy.sav ) and restart IDL using
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- > program but I cannot reproduce this again :- |

>

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- > to catch an error before IDL crashes?
- > I am using: { x86 Win32 Windows 5.3.1 Feb 23 2000}

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```
Catch, theError
IF theError NE 0 THEN BEGIN
Catch, /Cancel
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ENDIF
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The Error\_Message program can be found on my web page. It will put the system error message (!Error\_State.Msg) in a Dialog\_Message if appropriate for the device. Otherwise, it will use Message. But setting the Traceback keyword will lead you directly to the error. :-)

Cheers.

David

--

David Fanning, Ph.D. Fanning Software Consulting

Phone: 970-221-0438 E-Mail: davidf@dfanning.com

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Problem using say files.

Posted by Liam E. Gumley on Fri, 22 Sep 2000 07:00:00 GMT

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Theo Brauers <th.brauers@fz-juelich.de> wrote in message news:39CA6F2B.6268BFB2@fz-juelich.de...

```
> Liam Gumley wrote:
>>
>> It's probably a long shot, but instead of using RESOLVE_ALL, have you
tried
>> compiling only your procedures and functions, and saving them? In other
>> words, allowing the built-in routines to compile at runtime?
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>> Cheers,
>> Liam.
>
> Thanks for your advice: When I compiled my program I excluded already
about 50
> routines (mainly from our libary) which are never reached in this
application
>
    excluded=['DL_MAC','DL_VMS', 'SETLOG', 'DELLOG' $
>
       , 'NCDF G', 'NCDF GR', ......, 'CT YELLOW RED BLUE GREEN BLACK' $
>
       , 'ENL_OPLOT' ]
>
>
  in response to your posting I also excluded the following
  routines from the RSI\IDL53\lib directory
>
    excluded = [ excluded $
>
       , 'DOC_LIBRARY' $
>
       , 'IDL_CRANK' $
>
       , 'MK_HTML_HELP' $
>
       , 'RESOLVE_ALL' $
>
       , 'XDISPLAYFILE' $
>
       , 'XMANAGER' $
>
       , 'CONGRID' $
>
       , 'CORRELATE' $
       , 'CW_BGROUP' $
>
       , 'CW_FIELD' $
>
       , 'FILEPATH' $
>
       , 'INTERPOL' $
>
       , 'LS2FIT' $
>
       , 'MOMENT' $
>
>
       , 'MEAN' $
       , 'POLY' $
>
       , 'POLY_FIT' $
>
       , 'REVERSE' $
>
       , 'RSTRPOS' $
       , 'R_CORRELATE' $
>
>
       , 'STR_SEP' $
       , 'UNIQ'
>
                 1
>
    RESOLVE ALL, SKIP ROUT=excluded
>
>
```

- > The problem remains the same. When I skip resolve\_all
- > and compile the whole thing during the the run for one data
- > set it works fine for this set. When I SAVE/EXIT/START/RESTORE
- > it crashes IDL again. :-

The next step would be to reproduce the problem with the fewest lines of code.

Cheers, Liam.

http://cimss.ssec.wisc.edu/~gumley