
Subject: Re: idl -quiet command-line option doesn't work in cron
Posted by [Bringfried Stecklum](#) on Thu, 23 Jul 2009 18:34:25 GMT
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Ed Hyer wrote:

> I created a save file 'routine.sav', and am running it in cron, like
> this:
>
> idl -quiet -queue -rt=routine.sav > log.txt
>
> So, in Linux terms, STDOUT is sent to log.txt, and STDERR goes into an
> email to me from the system. I like this, because I have a quick place
> to check if anything went wrong.
>
> The reason for -quiet is to suppress the startup message, which goes
> to STDERR when you start IDL:
>
> IDL Version 7.0.6 (linux x86_64 m64). (c) 2008, ITT Visual Information
> Solutions Installation number:.
>
> This works from the command line, but when I put it into cron, I still
> get the message, sent to me in an email from cron.
>
> Any ideas?

>
>
You have to redirect the output in /etc/crontab, like

```
# m h dom mon dow user command  
25 6 * * * hyer idl -quiet -queue -rt=routine.sav &> /dev/null
```

to avoid any message being sent to you. If you still want stderr to be mailed
just use 1> /dev/null.

Regards, Bringfried

Subject: Re: idl -quiet command-line option doesn't work in cron
Posted by [Mariolncandenza](#) on Fri, 24 Jul 2009 16:46:33 GMT
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On Jul 23, 11:34 am, Bringfried Stecklum <steck...@tls-tautenburg.de>
wrote:

> You have to redirect the output in /etc/crontab, like
>
> # m h dom mon dow user command
> 25 6 * * * hyer idl -quiet -queue -rt=routine.sav &> /dev/null
>

Ah, but I **want** the output (to my logfile) and I **want** the errors (to my email). What I do not want is the IDL startup message. The command line option `-quiet`, exists for exactly this reason, and it works-- except, for some reason, it doesn't work in cron. Puzzling.

Subject: Re: idl -quiet command-line option doesn't work in cron
Posted by [Bringfried Stecklum](#) on Fri, 24 Jul 2009 17:28:30 GMT
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Edward Hyer wrote:

> On Jul 23, 11:34 am, Bringfried Stecklum <steck...@tls-tautenburg.de>
> wrote:
>> You have to redirect the output in `/etc/crontab`, like
>>
>> # m h dom mon dow user command
>> 25 6 * * * hyer idl -quiet -queue -rt=routine.sav &> /dev/null
>>
>
> Ah, but I **want** the output (to my logfile) and I **want** the errors
> (to my email). What I do not want is the IDL startup message. The
> command line option `-quiet`, exists for exactly this reason, and it
> works-- except, for some reason, it doesn't work in cron. Puzzling.

I got you wrong, sorry. Do you call idl directly in crontab or via a shell script? A last resort would be to pipe the output into `"head -n +2"` to skip the first two lines.

Subject: Re: idl -quiet command-line option doesn't work in cron
Posted by [Mariolncandenza](#) on Sun, 26 Jul 2009 22:03:20 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Jul 24, 10:28 am, Bringfried Stecklum <steck...@tls-tautenburg.de>
wrote:
> I got you wrong, sorry. Do you call idl directly in crontab or via a shell
> script? A last resort would be to pipe the output into `"head -n +2"` to skip the
> first two lines.

OK, I am getting somewhere. Making a shell-script wrapper and calling that in cron gets rid of the "IDL Version XX" issue, so my original question is solved.

Now, what I am still getting are three messages that IDL is sending to STDERR:

```
% Loaded DLM: HDF.  
% Program caused arithmetic error: Floating divide by 0  
% Program caused arithmetic error: Floating illegal operand
```

I thought I remembered a thread about the math errors on this group, but I couldn't find it searching. The DLM loading message I'm not optimistic about. Unless someone on this group knows a way to suppress it, I will probably end up giving up on getting good errors through cron, and directing the STDERR from the IDL process to either the log or the bit bucket. Does any know if IDL supplies a return code indicating completion vs. crashing of the VM?

P.S. FMI (For My Information, when I Google this problem down the road): when your cron requires you to use 'sg' to get the right ownership/permissions for files created, the command called must be in single quotes, as

```
38 3 * * * sg thisgroup 'csh script.csh'
```

Subject: Re: idl -quiet command-line option doesn't work in cron
Posted by [Kenneth P. Bowman](#) on Mon, 27 Jul 2009 13:26:55 GMT
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In article
<60259131-6518-4d39-90b7-6c4ba08f29f4@a39g2000pre.googlegroups.com>,
Edward Hyer <ejhyer@gmail.com> wrote:

```
> wrote:  
> Now, what I am still getting are three messages that IDL is sending to  
> STDERR:  
>  
> % Loaded DLM: HDF.  
> % Program caused arithmetic error: Floating divide by 0  
> % Program caused arithmetic error: Floating illegal operand  
>  
> I thought I remembered a thread about the math errors on this group,  
> but I couldn't find it searching.
```

You can turn off floating-point error messages by setting

```
!EXCEPT = 0
```

but that is not to say it is a good idea. I would think knowing about floating-point exceptions would be more important than having "clean" output.

Ken Bowman

Subject: Re: idl -quiet command-line option doesn't work in cron
Posted by [Mariolncandenza](#) on Mon, 27 Jul 2009 15:54:38 GMT
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On Jul 27, 6:26 am, "Kenneth P. Bowman" <k-bow...@null.edu> wrote:

> You can turn off floating-point error messages by setting
>
> !EXCEPT = 0
>
> but that is not to say it is a good idea. I would think knowing about
> floating-point exceptions would be more important than having
> "clean" output.

Many of my routines ruthlessly and systematically divide by zero,
because the denominator is Ndata.
Besides, if floating-point errors are so important, how come IDL won't
tell me where they happened? :)

Subject: Re: idl -quiet command-line option doesn't work in cron
Posted by [David Fanning](#) on Mon, 27 Jul 2009 16:05:10 GMT
[View Forum Message](#) <> [Reply to Message](#)

Edward Hyer writes:

> Many of my routines ruthlessly and systematically divide by zero,
> because the denominator is Ndata.
> Besides, if floating-point errors are so important, how come IDL won't
> tell me where they happened? :)

It assumes you don't want to know. :-)

If you *do* want to know, set !Except=2.

Cheers,

David

--

David Fanning, Ph.D.
Coyote's Guide to IDL Programming (www.dfanning.com)
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: idl -quiet command-line option doesn't work in cron
Posted by [Kenneth P. Bowman](#) on Mon, 27 Jul 2009 21:19:31 GMT
[View Forum Message](#) <> [Reply to Message](#)

In article

<d012ae88-d64f-4ea7-b015-9efdc089a44c@u16g2000pru.googlegroups.com>,
Edward Hyer <ejhyer@gmail.com> wrote:

>> You can turn off floating-point error messages by setting

>>

>>

>> floating-point exceptions would be more important than having

>> "clean" output.

>

> Many of my routines ruthlessly and systematically divide by zero,

> because the denominator is Ndata.

> Besides, if floating-point errors are so important, how come IDL won't

> tell me where they happened? :)

As David pointed out, you can set

```
!EXCEPT = 2
```

to find out where errors are occurring.

The danger with ignoring floating-point exceptions is that they can be occurring in multiple places (some benign, some malignant). With the default (!EXCEPT = 1), you only get one notification. This raises the possibility of undetected errors.

In my (somewhat obsessive) view, a properly function program should not generate floating-point errors, except possibly underflows.

It gives me shivers when someone says, "My program is working fine. Just ignore those floating-point errors."

Ken

Subject: Re: idl -quiet command-line option doesn't work in cron
Posted by [Michael Galloy](#) on Mon, 27 Jul 2009 21:56:58 GMT
[View Forum Message](#) <> [Reply to Message](#)

Kenneth P. Bowman wrote:

> In article

> <d012ae88-d64f-4ea7-b015-9efdc089a44c@u16g2000pru.googlegroups.com>,
> Edward Hyer <ejhyer@gmail.com> wrote:
>
>> On Jul 27, 6:26 am, "Kenneth P. Bowman" <k-bow...@null.edu> wrote:
>>> You can turn off floating-point error messages by setting
>>>
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> to find out where errors are occurring.
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> be occurring in multiple places (some benign, some malignant). With
> the default (!EXCEPT = 1), you only get one notification. This raises
> the possibility of undetected errors.
>
> In my (somewhat obsessive) view, a properly function program should
> not generate floating-point errors, except possibly underflows.
>
> It gives me shivers when someone says, "My program is working fine.
> Just ignore those floating-point errors."
>
> Ken

Of course, graphics can generate them too:

```
IDL> plot, findgen(11)
% Program caused arithmetic error: Floating illegal operand
```

Mike

--

www.michaelgalloy.com
Associate Research Scientist
Tech-X Corporation

Subject: Re: idl -quiet command-line option doesn't work in cron
Posted by [David Fanning](#) on Mon, 27 Jul 2009 22:15:34 GMT
[View Forum Message](#) <> [Reply to Message](#)

mgalloy writes:

```
> Of course, graphics can generate them too:  
>  
> IDL> plot, findgen(11)  
> % Program caused arithmetic error: Floating illegal operand
```

Personally, I think it best to turn ALL feedback off (!QUIET=1) and program by intuition and first principles. That's how the real programmers do it. ;-)

Cheers,

David

--

David Fanning, Ph.D.
Coyote's Guide to IDL Programming (www.dfanning.com)
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: idl -quiet command-line option doesn't work in cron
Posted by [Kenneth P. Bowman](#) on Tue, 28 Jul 2009 02:37:57 GMT
[View Forum Message](#) <> [Reply to Message](#)

In article <h4l7rc\$fo7\$1@news.ett.com.ua>, mgalloy <mgalloy@gmail.com> wrote:

```
> Of course, graphics can generate them too:  
>  
> IDL> plot, findgen(11)  
> % Program caused arithmetic error: Floating illegal operand  
>  
> Mike
```

That's curious. I don't see that happen

```
IDL> plot, findgen(11)  
IDL>
```

I *am* accustomed to seeing underflow errors when using MAP_SET. (Hope that doesn't set David off on another mapping rant!)

Cheers, Ken
