Subject: Re: Suppressing diagnostic messages en masse
Posted by David Fanning on Fri, 03 Feb 2006 00:57:48 GMT

Ed Hyer writes:

> I am engaged in semi-permanent debugging of some pretty long scripts,
> which in the course of developing I have peppered with PRINT statements
> to achieve various diagnostic ends.
>
> I don't think the script is "final," whatever that means, but it's time
> to do some production runs, where the script will be invoked 10,000
> times, instead of the usual 1.
>
> I can do a search-and-replace to comment out the diagnostics for this
> purpose, but what would really be nice is if I could somehow put a
> keyword flag into the routine that, when set, would suppress|promote
> the diagnostic messages. Sounds like the sort of thing that might
> exist. Anyone know how to do this?

Had you thought to use MESSAGE to achieve your "various
diagnostic ends", you would be golden. Just set !Quiet=1
and run the darn thing. No messages.

But PRINT is going to print, no matter what.

```
;****************************************************
PRO test

Print, 'This is PRINT message'
Message, 'This is a message from MESSAGE.', /Informational

end
****************************************************
```

```
IDL> .COMPILE test
   Compiled module: TEST.
IDL> test
   This is PRINT message
   TEST: This is a message from MESSAGE.
IDL> !Quiet=1
IDL> test
   This is PRINT message
```

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Suppressing diagnostic messages en masse
Posted by mmeron on Fri, 03 Feb 2006 01:00:22 GMT
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In article <1138927542.301363.217360@z14g2000cwz.googlegroups.com>, "Ed Hyer"
<ejhyer@gmail.com> writes:
> Hey great minds,
>
> I am engaged in semi-permanent debugging of some pretty long scripts,
> which in the course of developing I have peppered with PRINT statements
> to achieve various diagnostic ends.
>
> I don't think the script is "final," whatever that means, but it's time
> to do some production runs, where the script will be invoked 10,000
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> I can do a search-and-replace to comment out the diagnostics for this
> purpose, but what would really be nice is if I could somehow put a
> keyword flag into the routine that, when set, would suppress|promote
> the diagnostic messages. Sounds like the sort of thing that might
> exist. Anyone know how to do this?
>
Just use a keyword flag, as you said.

1) Add to the call line of the routine something like ",diagnose = diag'

2) Add to the body of the routine "diflag = keyword_set(diag)'

3) Run search and replace, replacing every instance of "print," with
"if diflag then print,"

The choice of variable names is, of course, up to you.

Mati Meron | "When you argue with a fool,
meron@cars.uchicago.edu | chances are he is doing just the same"

Subject: Re: Suppressing diagnostic messages en masse
Posted by David Fanning on Fri, 03 Feb 2006 01:03:58 GMT
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David Fanning writes:

> Had you thought to use MESSAGE to achieve your "various
> diagnostic ends", you would be golden. Just set !Quiet=1
> and run the darn thing. No messages.

Please forget it. I must have been out of my mind
to put something like this on a newsgroup. !Quiet=1!?
I am about to create another generation of programmers
with no friggin' idea what is going on. :-(

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Subject: Re: Suppressing diagnostic messages en masse
Posted by Paul Van Delst[1] on Fri, 03 Feb 2006 01:06:01 GMT
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Ed Hyer wrote:
> Hey great minds,
>
> I am engaged in semi-permanent debugging of some pretty long scripts,
> which in the course of developing I have peppered with PRINT statements
> to achieve various diagnostic ends.
>
> I don't think the script is "final," whatever that means, but it's time
> to do some production runs, where the script will be invoked 10,000
> times, instead of the usual 1.
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> I can do a search-and-replace to comment out the diagnostics for this
> purpose, but what would really be nice is if I could somehow put a
> keyword flag into the routine that, when set, would suppress|promote
> the diagnostic messages. Sounds like the sort of thing that might
> exist. Anyone know how to do this?

I don't know about "system" level keywords to do this, but I usually add a "Debug" keyword
to my procedures - particularly widget code, but other stuff too.

You should be able to do a supervised global search and replace so that

```
  PRINT,
becomes
  IF ( KEYWORD_SET(Debug) ) THEN PRINT,
```

However, if you have a lot of PRINTs, you might want to "block" them, e.g.

```
  IF ( KEYWORD_SET(Debug) ) THEN BEGIN
    PRINT, x
    PRINT, y
    PRINT, a,b,c
    ....
  ENDIF
```

It depends on how you've written the code. Lots of "IF (KEYWORD_SET(Debug))..." lines could slow things down a bit (and "a bit" multiplied by 10000 is a lot).

A sed or awk filter for the code might also be an option. That is, you run the code through sed or awk to comment or uncomment the debug print statements depending on your need.

paulv

--
Paul van Delst
CIMSS @ NOAA/NCEP/EMC

Subject: Re: Suppressing diagnostic messages en masse
Posted by Jean[1] on Fri, 03 Feb 2006 17:43:05 GMT
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>> Had you thought to use MESSAGE to achieve your "various
>> diagnostic ends", you would be golden. Just set !Quiet=1
>> and run the darn thing. No messages.
>
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> to put something like this on a newsgroup. !Quiet=1!?
> I am about to create another generation of programmers
> with no friggin' idea what is going on. :-(
>
> Cheers,
> David

What is wrong with that? Especially if you set it only when you are
"done" developing?

Jean

Subject: Re: Suppressing diagnostic messages en masse
Posted by David Fanning on Fri, 03 Feb 2006 18:11:30 GMT
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Jean H. writes:

>
> What is wrong with that? Especially if you set it only when you are
> "done" developing?

Are you kidding!? It's when you *think* you are done
developing that you need this information the most!

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
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