Subject: Re: Catching type conversion errors
Posted by steinhh on Tue, 29 Dec 1998 08:00:00 GMT
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Martin Schultz <mgs@io.harvard.edu> wrote:

> This definitively runs counter what they say in the online help, and
> should therefore considered a real bug.

Hmm. My online help (v 5.2) states that

> Calling CATCH establishes an error handler for the current
> procedure that intercepts all errors that can be handled
> by IDL, excluding non-fatal warnings such as math errors.

The key phrase here is *non-fatal* warnings. Type conversion
"errors" don't halt the program flow (they never have), and
are thus not "fatal".

In my view, that makes it a real (even documented) feature :-)

Regards,

Stein Vidar

Subject: Re: Catching type conversion errors
Posted by Martin Schultz on Tue, 29 Dec 1998 08:00:00 GMT
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M. Hegde wrote:
>
> Hi,
>
> I observe that CATCH doesn't capture type conversion errors (in the absence
> of ON_IOERROR command). This appears to violate the error handling mechanism
> given in the IDL user's guide. Am I missing something? Are there any other
> errors which CATCH can not capture?
>
> Thanks in advance.
>
> -M. Hegde
>
> ex:
> PRO test
> CATCH, err
> IF (err NE 0) THEN BEGIN
> PRINT, !ERROR

```
>               RETURN
>         ENDIF
>         a       = FIX ( 'abc' )
>
>         END
```

same behaviour ...
{ mipseb IRIX unix 5.1.1 Jul 20 1998}
This definitively runs counter what they say in the online help, and
should therefore considered a real bug.

Martin.
--
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Dr. Martin Schultz
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Subject: Re: Catching type conversion errors
Posted by hegde on Wed, 30 Dec 1998 08:00:00 GMT
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Stein Vidar Hagfors Haugan (steinhh@ulrik.uio.no) wrote:

: Martin Schultz <mgs@io.harvard.edu> wrote:

: >This definitively runs counter what they say in the online help, and
: >should therefore considered a real bug.

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: The key phrase here is *non-fatal* warnings. Type conversion
: "errors" don't halt the program flow (they never have), and
: are thus not "fatal".

: In my view, that makes it a real (even documented) feature :-)

I think math errors are different in the sense that they are system dependent.
Type conversion (I/O) errors are IDL supported and seen by ON_IOERROR.
The control flow chart indicates CATCH should see everything that ON_IOERROR sees.
To circumvent this inability of CATCH, one has to use ON_IOERROR in addition
to CATCH; using two blocks of error handlers doesn't sound good to me.
Adding to this misery, FIX('') doesn't generate an exception/warning at all!

BTW, how to turn off these error messages? I tried !QUIET; it doesn't work
on SGI IRIX or SUN OS.

Regards,

-M. Hegde

Subject: Re: Catching type conversion errors
Posted by Martin Schultz on Wed, 30 Dec 1998 08:00:00 GMT
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Stein Vidar Hagfors Haugan wrote:
>
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>
> In my view, that makes it a real (even documented) feature :-)
>
> Regards,
>
> Stein Vidar

Not quite, I think. If type conversion errors were in fact subsumed
under math errors, that would be OK, because then you could catch fatal
errors and treat all others with the math error routines. But as it

stands now, you have to handle io errors with on_ioerror in order to get control over type onversion, which forces you to explicitely handle all other io errors as well (because on_ioerror superseeds catch). This runs counter the idea of catch I would think. In my oppinion, a good way out would be some /NON_FATAL keyword to catch which would catch those errors as well, and a FATAL tag in the !ERROR_STATE structure so that the user can identify the severeness of the error within the catch block.

It may not be a bug, but it's a nuisance anyhow.

Regards,
Martin.
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Subject: Re: Catching type conversion errors
Posted by steinhh on Thu, 31 Dec 1998 08:00:00 GMT
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Re-reading my previous post on this subject, I must add that I do agree with Martin Schultz and M. Hegde that the behaviour is a nuisance!

Regards,

Stein Vidar
