
Subject: Re: SHAPEFILE changes in IDL7.1?

Posted by [David Fanning](#) on Mon, 30 Nov 2009 18:14:36 GMT

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Brian McNoldy writes:

> I've been a happy user of David Fanning's DRAWSTATES routine for years
> -- it allows you to easily plot various datasets in a shapefile
> (states, counties, roads, lakes, etc from just about any shapefile you
> find online). I recently upgraded to v7.1 and although it still
> works, a basic call to it takes about 4 minutes instead of being
> virtually instantaneous. I'm wondering if anyone else has come across
> something like this. I'm on Linux (CentOS5) and using IDL 7.1... it
> was not an issue in 7.0 and earlier. Maybe it was a change in the
> DLM?

Oh, oh. Sounds like they switched to the algorithm they
use in ENVI. :-(

I don't have time today to investigate, but I'll look into
it tonight. Can you give more details? Are you drawing this
on a map projection, etc.?

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

Sepore ma de ni thue. ("Perhaps thos speakest truth.")

Subject: Re: SHAPEFILE changes in IDL7.1?

Posted by [Brian McNoldy](#) on Mon, 30 Nov 2009 18:31:23 GMT

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On Nov 30, 11:14 am, David Fanning <n...@dfanning.com> wrote:

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> use in ENVI. :-(
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> it tonight. Can you give more details? Are you drawing this
> on a map projection, etc.?

>
> Cheers,
> David
>

I figured something changed in the heart of the language, because all other components were unchanged. I am not doing anything fancy with it, just drawing county lines (as an example... I also draw roads from another shapefile) on an existing map projection. The routine does end up doing what it's supposed to, but it takes unreasonably long -- several minutes instead of a blink. Here is what I'm using (and have successfully used for years):

```
drawstates,'COUNTIES.SHP',attribute_name='NAME',statenames=' ALL'
```

Thanks in advance for looking into it!
Brian

Subject: Re: SHAPEFILE changes in IDL7.1?
Posted by [Brian McNoldy](#) on Mon, 30 Nov 2009 19:44:52 GMT
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On Nov 30, 11:31 am, Brian McNoldy <mcno...@atmos.colostate.edu> wrote:

> On Nov 30, 11:14 am, David Fanning <n...@dfanning.com> wrote:

>
>
>

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> successfully used for years):

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> Thanks in advance for looking into it!

> Brian

I narrowed the problem down to the last line of the program:

"Heap_Free, entities".

(see <http://www.dfanning.com/programs/drawstates.pro> for the full program)

If I change that to "Ptr_Free, entities", all is well and the program works like it used to: quickly. Something between v7.0 and v7.1 is quite different when it comes to heap versus pointer cleaning!

Subject: Re: SHAPEFILE changes in IDL7.1?

Posted by [David Fanning](#) on Mon, 30 Nov 2009 20:10:07 GMT

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Brian McNoldy wites:

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> "Heap_Free, entities".

> (see <http://www.dfanning.com/programs/drawstates.pro> for the full program)

> If I change that to "Ptr_Free, entities", all is well and the program

> works like it used to: quickly. Something between v7.0 and v7.1 is

> quite different when it comes to heap versus pointer cleaning!

Yikes! Except that you will be leaking memory like a sieve! :-)

Good clue, though. I'll see what I can come up with tonight.

It may be we need a function that can pick structures

apart and free pointers and objects inside them recursively.

(The purpose of HEAP_FREE, alas.)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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Sepore ma de ni thue. ("Perhaps thos speakest truth.")

Subject: Re: SHAPEFILE changes in IDL7.1?

Posted by [David Fanning](#) on Tue, 01 Dec 2009 01:24:49 GMT

Brian McNoldy writes:

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> I narrowed the problem down to the last line of the program:
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> quite different when it comes to heap versus pointer cleaning!

As I was walking back to my car this afternoon, thinking about this, it occurred to me that this problem could very well be connected to that Scope_VarFetch problem Wayne reported a week or so ago that slowed one of his programs down to a crawl. Have you by any chance installed the IDL 7.1.2 patch that is available? I think that is the first thing I would try before I spent too much more time on this.

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
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Subject: Re: SHAPEFILE changes in IDL7.1?
Posted by [Brian McNoldy](#) on Wed, 02 Dec 2009 00:25:29 GMT
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On Nov 30, 6:24 pm, David Fanning <n...@dfanning.com> wrote:

> Brian McNoldy writes:
>
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>> "Heap_Free, entities".
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> patch that is available? I think that is the first thing
> I would try before I spent too much more time on this.
>
> Cheers,
>
> David

Looked into the 7.1.2 patch, and ITT responded that the patch is only
for Windows (Josh Elliott, Tech Support Engineer). So that doesn't
solve the issue in Linux unfortunately. For now, I'm still using
PTR_FREE instead of HEAP_FREE and things are at least working like
they used to!
