
Subject: Re: ION script

Posted by [Rick Towler](#) on Fri, 07 Apr 2006 14:44:00 GMT

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greg michael wrote:

> I'm looking into writing an ION script web front-end for a program I've
> developed which currently uses widgets and the virtual machine. The
> program is an interactive image viewer for an an image database on the
> server side, and depends on quite a lot of IDL code. As far as I can
> see, it looks to me like each time you make a page request, ION script
> starts up, compiles all the necessary IDL code, runs the script, and
> exits. This means that for every interaction, all my IDL libraries need
> to be compiled. Is this really so? Is there any way to avoid that?

Yes and... No. Yes they are compiled and no you can't avoid it. If you use ION script.

ION Java may be more appropriate, or something completely different where your back end is written in IDL and you implement a front end in php or asp or Java and communicate via sockets. It really depends on what you are doing.

-Rick

Subject: Re: ION script

Posted by [Haje Korth](#) on Fri, 07 Apr 2006 20:20:28 GMT

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Greg,

I precompile my routines into an IDL save set which is restored in the ion script. Works fine for me....

Haje

"greg michael" <greg.michael@gmail.com> wrote in message

news:1144417776.152571.312170@i39g2000cwa.googlegroups.com.. .

> I'm looking into writing an ION script web front-end for a program I've
> developed which currently uses widgets and the virtual machine. The
> program is an interactive image viewer for an an image database on the
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> to be compiled. Is this really so? Is there any way to avoid that?
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Subject: Re: ION script
Posted by [greg michael](#) on Fri, 07 Apr 2006 20:43:18 GMT
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A-ha - of course! Perfect solution. Thanks very much.

Greg

Subject: Re: ION script
Posted by [Rick Towler](#) on Fri, 07 Apr 2006 21:11:50 GMT
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Haje Korth wrote:

- > Greg,
- > I precompile my routines into an IDL save set which is restored in the ion
- > script. Works fine for me....

<slaps hand to forehead> Pure genius, Haje...

You still have to deal with the startup time which can be significant depending on hardware and load. This was the factor in my ION script applications and it drove me a bit nuts. My application responded like RSI's website.

-Rick

- > "greg michael" wrote in message
 - > news:1144417776.152571.312170@i39g2000cwa.googlegroups.com..
 - >> I'm looking into writing an ION script web front-end for a program I've
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-

Subject: Re: ION script
Posted by [David Fanning](#) on Fri, 07 Apr 2006 21:15:59 GMT
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Rick Towler writes:

- > My application responded like RSI's website.

You guys are getting mean (and a whole lot funnier).
I'd hate to see where this newsgroup ends up, five
years from now. :-)

Cheers,

David

--

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

Subject: Re: ION script
Posted by [Rick Towler](#) on Fri, 07 Apr 2006 22:51:30 GMT
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David Fanning wrote:
> Rick Towler writes:
>
>> My application responded like RSI's website.
>
> You guys are getting mean (and a whole lot funnier).

Yeah, that was unfair. I just visited their site today and it was quite
snappy. Maybe they got a new ISP recently. Or stopped using ION script
to generate their dynamic content.

<Dr. Nick> I'm kidding. I'm kidding. </Dr. Nick>

I think it is time to go home....

-Rick

Subject: Re: ION script
Posted by [Haje Korth](#) on Sat, 08 Apr 2006 13:45:47 GMT
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Rick,
I hope the slap on the forehead did not hurt too bad. :-)

Note that I did not say that there aren't any trade-offs using ION. But for
me as a science guy it is the quickest way to get my applications up and
running on the web.

Cheers,

Haje

"Rick Towler" <rick.towler@nomail.noaa.gov> wrote in message
news:e16n72\$laf\$1@news.nems.noaa.gov...

>
>
> Haje Korth wrote:
>> Greg,
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>> ion script. Works fine for me....
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>>> to be compiled. Is this really so? Is there any way to avoid that?

Subject: Re: ION script

Posted by [Rick Towler](#) on Mon, 10 Apr 2006 16:07:47 GMT

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Haje Korth wrote:

> I hope the slap on the forehead did not hurt too bad. :-)

The redness has mostly worn off. :)

> Note that I did not say that there aren't any trade-offs using ION. But for
> me as a science guy it is the quickest way to get my applications up and
> running on the web.

Agreed. While somewhat limited in it's application, ION Script is easy to learn and does get you up and running quickly. That, more often than not, is worth the shortcomings. That said, if *I* needed to do this again, I would explore my alternatives.

Has anyone tried the free "alternatives" to build a web app with IDL? PERL? Python (pyIDL, python-IDL)? Any luck?

-Rick

Subject: ION script - true colour
Posted by [greg michael](#) on Mon, 10 Apr 2006 17:15:24 GMT
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Is it possible to use true colour with ION script? My program make an RGB output which ION handles like this...

```
IDL> set_plot, 'Z'  
IDL> device, SET_RESOLUTION=[320,256]
```

...code...

```
IDL> ion__img = tvrd()  
IDL> tvlct, ion__r, ion__g, ion__b, /GET  
IDL> ion__tmp = bytarr(3, 320, 256)  
IDL> ion__tmp[0, *, *] = ion__r[ion__img]  
IDL> ion__tmp[1, *, *] = ion__g[ion__img]  
IDL> ion__tmp[2, *, *] = ion__b[ion__img]  
IDL> ion__img = ion__tmp  
IDL> !QUIET = 1  
IDL> write_jpeg, 'C:\DOCUME~1\ADMINI~1\LOCALS~1\Temp\ion1452.jpg',  
ion__img, TRUE=1
```

which is assuming that I'm using a colour table. Comes out b/w. You can choose between png8, png24 and jpeg24, but they all do the same. Don't seem to be any true options for the ION_IMAGE tag.

regards,
Greg

Subject: Re: ION script
Posted by [Michael Galloy](#) on Mon, 10 Apr 2006 21:18:45 GMT
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Rick Towler wrote:

> Agreed. While somewhat limited in it's application, ION Script is easy
> to learn and does get you up and running quickly. That, more often than
> not, is worth the shortcomings. That said, if *I* needed to do this
> again, I would explore my alternatives.
>
> Has anyone tried the free "alternatives" to build a web app with IDL?
> PERL? Python (pyIDL, python-IDL)? Any luck?
>
> -Rick

I've written Perl scripts that call IDL on a web server. It's no worse than writing any other Perl script (I'm not a fan). IDL 6.2 has the capability to pass command line arguments when you invoke IDL which makes this type of thing much nicer.

-Mike
michaelgalloy.com

Subject: Re: ION script - true colour
Posted by [Haje Korth](#) on Tue, 11 Apr 2006 12:07:37 GMT
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Ken,
While my server runs on unix, I do the development under Windows, where the work around is unfortunately no good. However, as the code has grown I actually appreciate some other features of object graphics, such as alpha blending which I use frequently. While alpha blending is only a simple line of code, the keyword solution is pretty slick.

Haje

"Kenneth Bowman" <k-bowman@null.tamu.edu> wrote in message
news:k-bowman-A5D402.16484610042006@news.tamu.edu...

> In article <e1e5mj\$5t\$1@aplcore.jhuapl.edu>,
> "Haje Korth" <haje.korth@nospam.jhuapl.edu> wrote:
>
>> Greg,
>> from the manual:
>> "Direct Graphics
>> Images created using the IDL Direct Graphics commands are drawn to the
>> IDL
>> Z-Buffer. The Z-Buffer is an 8-bit device that stores intensity values
>> for
>> each pixel. These values are combined with the current color map to
>> produce

>> the final output image. If you change the device in any IDL code that is
>> executed in an <ION_IMAGE> tag, you must make sure to change the device
>> back
>> to the Z-Buffer and TV the final image to it."
>>
>> I use object graphics to avoid this limitation. For the record: I learned
>> object graphics specifically for this one task and it is probably the
>> only
>> time it ever shoes up in my codes! :-)
>>
>> Haje
>
> There is also the X-windows virtual frame buffer (Xvfb).
>
> <http://www.rsinc.com/services/techtip.asp?ttid=2382>
>
> I just tried this on my Mac (OS X 10.4.6). Xvfb apparently comes with the
> X
> distribution, and it worked just as advertised. Very slick. I'm going to
> start
> converting some background jobs I have to use it.
>
> Ken Bowman

Subject: Re: ION script - true colour
Posted by [K. Bowman](#) on Tue, 11 Apr 2006 13:52:50 GMT
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In article <e1g669\$sm1\$1@aplcore.jhuapl.edu>,
"Haje Korth" <haje.korth@nospam.jhuapl.edu> wrote:

> Ken,
> While my server runs on unix, I do the development under Windows, where the
> work around is unfortunately no good. However, as the code has grown I
> actually appreciate some other features of object graphics, such as alpha
> blending which I use frequently. While alpha blending is only a simple line
> of code, the keyword solution is pretty slick.
>
> Haje

Not that anyone in their right mind would want to do this ;-), but is it
possible to run IDL on Windows and use the X device?

Ken

Subject: Re: ION script - true colour
Posted by [Haje Korth](#) on Tue, 11 Apr 2006 14:15:15 GMT
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X device is not available on Windows, so it's impossible to go totally crazy! :-)

"Kenneth Bowman" <k-bowman@null.tamu.edu> wrote in message
news:k-bowman-A4652C.08525011042006@news.tamu.edu...
> In article <e1g669\$sml\$1@aplcore.jhuapl.edu>,
> "Haje Korth" <haje.korth@nospam.jhuapl.edu> wrote:
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> Ken

Subject: Re: ION script - true colour
Posted by [Craig Markwardt](#) on Wed, 12 Apr 2006 05:55:56 GMT
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Kenneth Bowman <k-bowman@null.tamu.edu> writes:
> In article <e1g669\$sml\$1@aplcore.jhuapl.edu>,
> "Haje Korth" <haje.korth@nospam.jhuapl.edu> wrote:
>
>> Ken,
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>> blending which I use frequently. While alpha blending is only a simple line
>> of code, the keyword solution is pretty slick.
>>
>> Haje
>
> Not that anyone in their right mind would want to do this ;-), but is it

> possible to run IDL on Windows and use the X device?

One can use the "virtual frame buffer" X server (Xvfb), which emulates an X head without actually needing a display. We use it some for this kind of thing where an unattended task needs to make X graphical output. It's not always installed with Linux, but my recent installs of Mac OS X and Fedora had them.

Craig

--

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
