Subject: What's New in IDL 8.4 Posted by David Fanning on Fri, 31 Oct 2014 21:03:36 GMT View Forum Message <> Reply to Message

Folks,

I just watched Beau Legeer's new screencast on what is new with IDL 8.4.

https://www.youtube.com/watch?v= umxrSAEWis

All I can say is, "Wow!" I had no idea so many people were clamoring for Big Integers (you know, 2^400, printed on your display), and I plan to use the Prime and NextPrime static functions almost daily.

It sure would be fun to be a fly on the wall in the meeting in which customer requests were prioritized for the next version of IDL. I have a feeling I would be absolutely shocked at how out of touch I am with the tools programmers need to do their jobs.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: http://www.idlcoyote.com/

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

Subject: Re: What's New in IDL 8.4 Posted by Lajos Foldy on Fri, 31 Oct 2014 22:04:01 GMT View Forum Message <> Reply to Message

On Friday, October 31, 2014 10:03:43 PM UTC+1, David Fanning wrote:

- > Folks,
- >

>

- > I just watched Beau Legeer's new screencast on what is new with IDL 8.4.
- > https://www.youtube.com/watch?v=_umxrSAEWis
- > All I can say is, "Wow!" I had no idea so many people were clamoring for
- > Big Integers (you know, 2^400, printed on your display), and I plan to
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- > customer requests were prioritized for the next version of IDL. I have a
- > feeling I would be absolutely shocked at how out of touch I am with the
- > tools programmers need to do their jobs.

>

- > Cheers,
- >
- > David
- > --
- > David Fanning, Ph.D.
- > Fanning Software Consulting, Inc.
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There are priorities. The parallel processing API for IDL 8.4 was thrown out. BigInt is much more important.

https://groups.google.com/d/msg/comp.lang.idl-pvwave/bEr8Bh5 iLrI/60o6nJRNGdkJ

regards, Lajos

Subject: Re: What's New in IDL 8.4

Posted by David Fanning on Fri, 31 Oct 2014 22:13:57 GMT

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fawltylanguage@gmail.com writes:

> There are priorities. The parallel processing API for IDL 8.4 was thrown out. BigInt is much more important.

It must be important. I just can't for the life of me figure out why. Clearly, I'm missing something.

Cheers.

David

--

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Subject: Re: What's New in IDL 8.4

Posted by Lajos Foldy on Fri, 31 Oct 2014 22:43:22 GMT

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On Friday, October 31, 2014 11:14:03 PM UTC+1, David Fanning wrote:

>> There are priorities. The parallel processing API for IDL 8.4 was thrown out. BigInt is much more important.

>

- > It must be important. I just can't for the life of me figure out why.
- > Clearly, I'm missing something.

There must be a number theory mathematician somewhere on the globe who uses IDL and posted a feature request. Python has bignum, too, so it was accepted.

regards, Lajos

Subject: Re: What's New in IDL 8.4 Posted by David Fanning on Fri, 31 Oct 2014 23:08:50 GMT View Forum Message <> Reply to Message

fawltylanguage@gmail.com writes:

> There must be a number theory mathematician somewhere on the globe who uses IDL and posted a feature request. Python has bignum, too, so it was accepted.

Yeah, with a LOUD voice, apparently. :-)

Some of this stuff seems useful. The WatchFolder thing might be useful (at least I've heard people ask for this kind of thing), and some of the static functions might be handy, although God only knows when I'll need to know the next prime of a BigNumber. It really does seem to me like the kind of thing that might come up once in a lifetime, if then.

The code generator thing must be a marketing department's wet dream. Take all the people who can't for the life of them figure out how to make a plot in IDL (and, unfortunately, there are more and more of these people every day) and get someone to generate lousy code for them that somehow manages to work. Job done! Another successful IDL programmer.

But, really, who is asking for some of this stuff? Got to be the marketing guys so they can tick off a couple of boxes in the Python vs IDL matrix. It seems to me, with limited time and resources, you might want to spend time working on stuff that actually matters to people and how they do their jobs. Nobody is asking me, of course, but I could make a few suggestions if anyone was interested. :-)

Cheers,

David

--

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Subject: Re: What's New in IDL 8.4

Posted by markb77 on Sat, 01 Nov 2014 11:11:02 GMT

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On Saturday, November 1, 2014 12:08:56 AM UTC+1, David Fanning wrote:

- > But, really, who is asking for some of this stuff? Got to be the
- > marketing guys

hi David,

I can see why they're trying to update the language syntax to make IDL more like Python and less like FORTRAN... you need to keep the syntax current if the next generation of programmers are going to use IDL.

Same goes for function graphics.. while the current NG system has some glitches, you can understand why it's needed for the same reasons as above.

On the other hand, few USEFUL features have been added to recent releases for people who already know how to code in IDL. I appreciate the nice syntax of object programming, and the HASH is great for everyday use. However, the things desperately needed in my view are parallel / multi-threaded processing which is VM compatible (whether by an improved VM or whatever) and an updated Widget toolkit.

Will Exelis please stand up and answer when will we see some additions to parallel processing and widgets? I am suffering over here with one core of my CPU running 100% for 12 hours and the other 11 cores basically idle!!!

Mark

Subject: Re: What's New in IDL 8.4

Posted by Karl[1] on Sun, 02 Nov 2014 15:34:44 GMT

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On Saturday, November 1, 2014 5:11:06 AM UTC-6, superchromix wrote:

> On Saturday, November 1, 2014 12:08:56 AM UTC+1, David Fanning wrote:

>

- >> But, really, who is asking for some of this stuff? Got to be the
- >> marketing guys

>

> hi David.

>

> I can see why they're trying to update the language syntax to make IDL more like Python and less like FORTRAN... you need to keep the syntax current if the next generation of programmers are going to use IDL.

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_

> Will Exelis please stand up and answer when will we see some additions to parallel processing and widgets? I am suffering over here with one core of my CPU running 100% for 12 hours and the other 11 cores basically idle!!!

>

> Mark

BigInts were probably added to support crypto operations. With a large integer library available, it isn't too hard to implement some of the tried-and-true crypto primitives, which could then be used to digitally sign data, validate digital signatures, perform hashing, and perhaps perform encryption and decryption. It isn't hard to understand the demand for this in today's computing environment.

I was going to point out that it would not be too hard to pull the large integer functions out of a library like cryptopp, which has very liberal licensing, and put them in an IDL DLM. However, the BigInt functionality in IDL looks like it is integrated better than that.

Karl

Subject: Re: What's New in IDL 8.4

Posted by David Fanning on Sun, 02 Nov 2014 16:04:19 GMT

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Karl writes:

> BigInts were probably added to support crypto operations. With a large integer library available, it isn't too hard to implement some of the tried-and-true crypto primitives, which could then be used to digitally sign data, validate digital signatures, perform hashing, and perhaps perform encryption and decryption. It isn't hard to understand the demand for this in today's computing environment.

OK, I guess that makes sense. For ENVI, then.

Cheers,

David

--

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Subject: Re: What's New in IDL 8.4

Posted by Fabzi on Sun, 02 Nov 2014 18:31:03 GMT

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Hi.

On 31.10.2014 22:03, David Fanning wrote:

> customer requests were prioritized for the next version of IDL

Is there something like a "feature request" for IDL? How do Exelis actually decide on language evolutions, etc?

Cheers.

Fabien

Subject: Re: What's New in IDL 8.4

Posted by David Fanning on Sun, 02 Nov 2014 18:44:49 GMT

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Fabien writes:

- > Is there something like a "feature request" for IDL? How do Exelis
- > actually decide on language evolutions, etc?

[Comment deleted...]

Cheers.

David

--

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Subject: Re: What's New in IDL 8.4 Posted by chris_torrence@NOSPAM on Sat, 08 Nov 2014 16:07:11 GMT View Forum Message <> Reply to Message

On Sunday, November 2, 2014 11:44:51 AM UTC-7, David Fanning wrote:

> Fabien writes:

>

- >> Is there something like a "feature request" for IDL? How do Exelis
- >> actually decide on language evolutions, etc?

>

> [Comment deleted...]

>

> Cheers,

>

- > David
- > --
- > David Fanning, Ph.D.
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Ah, this is why I love this newsgroup.

I've been out for a couple of weeks, sorry I missed all the excitement.

Here's *an* answer:

BigInteger: nights & weekends for three weeks as a fun project

Parallel Processing: 6-9 months for multiple developers

New Widgets: see Parallel Processing

Cheers, Chris

Subject: Re: What's New in IDL 8.4

Posted by Fabzi on Mon, 10 Nov 2014 11:16:26 GMT

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Hi Chris,

On 08.11.2014 17:07, Chris Torrence wrote:

> Ah, this is why I love this newsgroup.

I understand that you can easily get annoyed while reading some critics;-). It is also quite normal that people are criticizing more easily on the internet than congratulating. So, again from my side: I like the

recent evolutions of the IDL syntax!

BUT, it could be a good idea for Exelis to communicate more about it's timetable for future developments. These user requests sound quite reasonable to me.

Cheers,

Fabien

Subject: Re: What's New in IDL 8.4 Posted by andrewcool777 on Wed, 12 Nov 2014 04:01:10 GMT View Forum Message <> Reply to Message

On Saturday, 1 November 2014 07:33:43 UTC+10:30, David Fanning wrote:

> Folks,

>

>

- > I just watched Beau Legeer's new screencast on what is new with IDL 8.4.
- > https://www.youtube.com/watch?v=_umxrSAEWis

>

- > All I can say is, "Wow!" I had no idea so many people were clamoring for
- > Big Integers (you know, 2^400, printed on your display), and I plan to
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> Cheers,

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> David

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And I'm turning blue in the face waiting for READ_PNG to return metadata. And maybe READ_JPEG to return EXIF data.

A one week task for one programmer, maybe...?

Andrew

Subject: Re: What's New in IDL 8.4
Posted by SHENYUE JIA on Thu, 20 Nov 2014 05:51:26 GMT
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On Friday, October 31, 2014 2:03:43 PM UTC-7, David Fanning wrote:

> Folks,

>

- > I just watched Beau Legeer's new screencast on what is new with IDL 8.4.
- >
 https://www.youtube.com/watch?v= umxrSAEWis

>

- > All I can say is, "Wow!" I had no idea so many people were clamoring for
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There is a different way of running pros in a parallel mode not using their API. Try to loop and use SPAWN and throw the command that can execute a script to the terminal. If your CPU has multiple cores, it can run the program. It worked very well for under OS X.

Subject: Re: What's New in IDL 8.4

Posted by pfp on Thu, 06 Aug 2015 22:54:21 GMT

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I just recently found BigInteger has a very handy feature: writing numbers in different bases. I had to convert numbers to base 36, and the first result I found when I searched for and IDL function to do this was BigIntegers's tostring method

(http://www.exelisvis.com/docs/BIGINTEGER.html#ToString).

There is also a function for base conversion in the JHUAPL library (basecon).

I happened to need base-36 numbers to work with orbit IDs of Hubble Space Telescope observations, which are encoded in base-36 in STScI's datasets and observation IDs.

On Saturday, November 8, 2014 at 9:07:13 AM UTC-7, Chris Torrence wrote:

> Here's *an* answer:

>

- > BigInteger: nights & weekends for three weeks as a fun project
- > Parallel Processing: 6-9 months for multiple developers
- > New Widgets: see Parallel Processing

>

- > Cheers,
- > Chris