Subject: Re: idl2matlab translate-o-matic
Posted by davidf on Sun, 20 Feb 2000 08:00:00 GMT
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Michael C Schweisguth (mschweis@u.arizona.edu) writes:

> but, MATLAB is ubiquitous.

Yeah, whatever. But the big advantage of IDL is that it
is starting to be *everywhere*. :-)

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: idl2matlab translate-o-matic
Posted by Michael C Schweisguth on Sun, 20 Feb 2000 08:00:00 GMT
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> Ken Mankoff (mankoff@colorado.edu) writes:
> I thought IDL and Matlab were the same thing. :-)

well, i think that-- if i recall correctly-- the IDL syntax is more
declaritive. you have to be careful with data types.

the object oriented graphics (again, if i recall correctly) were
really nice.

but, MATLAB is ubiquitous.

Subject: Re: idl2matlab translate-o-matic
Posted by davidf on Sun, 20 Feb 2000 08:00:00 GMT
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Ken Mankoff (mankoff@colorado.edu) writes:

> Does anyone know if or where one of these exists?

I thought IDL and Matlab were the same thing. :-)

Cheers,

David

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Subject: Re: idl2matlab translate-o-matic
Posted by davidf on Mon, 21 Feb 2000 08:00:00 GMT
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Mark D. Williams (markw-xxxnospamxxx@resource-eng.com) writes:

> Thanks, David, it's rare that those PV-WAVE users
> out here get an actual invitation to join one of
> these newsgroup discussions!

My pleasure. :-)

> Just out of curiosity, when was the last time you
> actually saw a WAVE> command prompt? Anytime since
> your days at VNI?

Uh, well, yes. But to say more could jeopardize
potential revenue streams. :-)

Cheers,

David

--
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Subject: Re: idl2matlab translate-o-matic
Posted by Mark D. Williams on Mon, 21 Feb 2000 08:00:00 GMT

David Fanning wrote:
>
> Frankly, I don't know how the user of either one
> of these programs could go wrong. They are both
> great programs. And both a hell of a lot better
> than PV-Wave.
>
> (Not really, but I didn't want anyone out there
> to feel left out. :-)

Thanks, David, it's rare that those PV-WAVE users
out here get an actual invitation to join one of
these newsgroup discussions!

Just out of curiosity, when was the last time you
actually saw a WAVE> command prompt? Anytime since
your days at VNI?

Regards,
M. Williams
Resource Engineering, Inc.

Subject: Re: idl2matlab translate-o-matic
Posted by davidf on Mon, 21 Feb 2000 08:00:00 GMT

Michael C Schweisguth (mschweis@u.arizona.edu) writes:

> again, what advantadge does IDL have over MATLAB? what would cause an IDL
> revival?

Oh, dear. I only jumped into this thread because
I have a quirky sense of humor that manifests
itself when my tennis game is tanking. :-(

But as long as I am here, let me make some more
serious comments about what might cause an IDL
revival.

First of all, let me say that Matlab is a great product.
And you are right, it's nearly ubiquitous. Those folks
have had a strategy to seize the hearts and minds of
young engineers in college with very cheap student
software and they have executed it flawlessly. I can't
imagine there is an engineering student anywhere who

doesn't know Matlab, and I'll bet a very large number of them want it on their computers when they take their first professional job.

My impression of Matlab and IDL is that Matlab is probably still more sophisticated mathematically and IDL is more sophisticated in terms of its programming features. For example, you can build better graphical user interfaces for your programs in IDL than you can in Matlab. The differences used to be more profound than they are now. Clearly the folks know about each other and spend a fair amount of engineering resources trying to copy each other's best features. Hence my crack about them being the same thing. I think they are evolving towards each other, rather than away from each other.

Matlab's mathematical superiority certainly evolved from the interests and abilities of its founders, as did IDL's superiority as an image processing language. ALthough both programs have evolved, you can still clearly see in both of them the vestiges of their early history. In fact, it is probably the "approach" each takes to the subject at hand that makes one feel "right" and the other "wrong" for each individual user. (Not to mention that *none* of us wants to learn yet another language after already suffering the huge learning curve involved in learning either one of these languages.)

Matlab certainly scores a point in having the ability to make an executable file from its code. (Although I understand that such a file cannot have graphical user interface elements in it. Please correct me if I am wrong.) IDL scores a point in adding such language enhancements as pointers and objects. Objects in particular have changed *everything* about the way I write IDL programs. And the object graphics system is unparalleled for representing 3D data.

Is IDL use spreading? Absolutely. I base this partly on the sale of my IDL book. Just the other day I had a look at the dollar amount of books sold in the past two years. Shocking! And for a book the folks at RSI thought was too simple-minded to appeal to anyone, too. :-) But what was even more shocking to me is that sales have not fallen off in over two years time! *That* is a growing market, surely.

Could it spread more? Yes, certainly. I fear, sometimes,

that the reason Matlab is ubiquitous and IDL is only becoming so is that the Matlab folks understand the end user--and the *psychology* of the end user--much better than the IDL folks. The high-end object graphics system--even objects themselves--are fabulous. There is nothing to touch them in Matlab to my knowledge. But I'm afraid they are too complicated for the normal user. Too fancy, too powerful, too hard to use. Matlab, it seems to me, does a better job of focusing on features the majority of their customers use every day. IDL does a better job of creating features professional programmers find desirable.

But, to their credit, the IDL folks are finally beginning to see the value of the Matlab approach. It is now possible to get some great academic pricing. (Not $99, to be sure, but a whole lot closer to this than it used to be. They do have a $99 student version of IDL, but this is so crippled as to make it nearly useless.) There is also a program at RSI to get people to write more books about IDL. (Although no one has contacted me. I'm still too simple-minded, I guess. :-) And I know the engineering people are concerned about putting some of the power of IDL back in the hands of the casual user. All of this bodes well for the future of IDL.

Frankly, I don't know how the user of either one of these programs could go wrong. They are both great programs. And both a hell of a lot better than PV-Wave.

(Not really, but I didn't want anyone out there to feel left out. :-)

Cheers,

David

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Subject: Re: idl2matlab translate-o-matic
Posted by Nigel Wade on Mon, 21 Feb 2000 08:00:00 GMT
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Michael C Schweisguth wrote:
>

>
> again, what advantadge does IDL have over MATLAB?

Don't temp me!

Are trying to start a holy war? ;)

--

Nigel Wade, System Administrator, Space Plasma Physics Group,
University of Leicester, Leicester, LE1 7RH, UK
E-mail : nmw@ion.le.ac.uk
Phone : +44 (0)116 2523568, Fax : +44 (0)116 2523555

Subject: Re: idl2matlab translate-o-matic
Posted by Michael C Schweisguth on Mon, 21 Feb 2000 08:00:00 GMT
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In comp.soft-sys.matlab David Fanning <davidf@dfanning.com> wrote:
BTW, i looked at your web site and IDL (to me) looks like fortran.
since MATLAB is more like C, i perfer it.

again, what advantadge does IDL have over MATLAB? what would cause an IDL
revival?

> Michael C Schweisguth (mschweis@u.arizona.edu) writes:
> Yeah, whatever. But the big advantage of IDL is that it
> is starting to be *everywhere*. :-)

Subject: Re: idl2matlab translate-o-matic
Posted by Michael C Schweisguth on Mon, 21 Feb 2000 08:00:00 GMT
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In comp.soft-sys.matlab David Fanning <davidf@dfanning.com> wrote:
> Michael C Schweisguth (mschweis@u.arizona.edu) writes:

>> but, MATLAB is ubiquitous.

> Yeah, whatever. But the big advantage of IDL is that it

> is starting to be *everywhere*. :-)

> Cheers,
> David

hmmm.... where do you get your statistics? your book sales?

Subject: Re: idl2matlab translate-o-matic
Posted by davidf on Tue, 22 Feb 2000 08:00:00 GMT
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David McClain (dmcclain@azstarnet.com) writes:

> Perhaps "better than MatLab", but hardly what "professional programmers"
> want.

Well, I admit I didn't conduct a scientific study, but
I was thinking about what my friends and I like. We're
pretty professional, at least most of the time. Say before
the beer arrives. :-)

> What can you say of a language that is purely array oriented, but
> cannot comprehend the existence of an empty array?

I don't know. I don't know what an empty array is either.
Perhaps that's why I like IDL.

> What of a language that
> can itself reclaim memory from unused arrays, but forces the user to reclaim
> "pointers" and "objects"? Etc., etc., ...

I'm sorry, but I think this *completely* misses the point.
Cleaning up variables is one thing, but checking for *every*
pointer reference at the end of every program module that
exits would bring just about any program--never mind IDL--
to a complete stand-still. It shouldn't be done. I applaud
the folks at RSI for dismissing the idea out of hand.

Cheers,

David

--
David Fanning, Ph.D.
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Subject: Re: idl2matlab translate-o-matic
Posted by Sean Cote on Tue, 22 Feb 2000 08:00:00 GMT
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>> That, _and_ the IDL student software takes the opposite strategy.
>>
>> To wit, the student version of IDL is still at 5.0 (IIRC).
>
> Never mind, it's not very usable, anyhow, as you state yourself.
>
> But all that talk on Matlab made me curious, so I had a look, and at
> least for non US/Canada users, the Student edition of Matlab is even
> worse than the one of IDL, as it is limited to 128x128 matrices....

The Mathworks' Student VERSION has no matrix-size-limit unlike the
counterpart (Prentice Hall Student EDITION).

http://www.mathworks.com/products/studentversion/

Subject: Re: idl2matlab translate-o-matic
Posted by pit on Tue, 22 Feb 2000 08:00:00 GMT
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In article <88te9t$er7$1@nnrp1.deja.com>,
Andrew <noymer@my-deja.com> writes:

> That, _and_ the IDL student software takes the opposite strategy.
>
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Peter

--
~~~~~~
~~~~~~~~~~~~~~
Dr. Peter "Pit" Suetterlin http://www.astro.uu.nl/~suetter

Sterrenkundig Instituut Utrecht
Tel.: +31 (0)30 253 5225 P.Suetterlin@astro.uu.nl

Subject: Re: idl2matlab translate-o-matic
Posted by David McClain on Tue, 22 Feb 2000 08:00:00 GMT
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David Fanning <davidf@dfanning.com> wrote in message
news:MPG.131b0ab058866bad989a3c@news.frii.com...
> Michael C Schweisguth (mschweis@u.arizona.edu) writes:
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Perhaps "better than MatLab", but hardly what "professional programmers"
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cannot comprehend the existence of an empty array? What of a language that
can itself reclaim memory from unused arrays, but forces the user to reclaim
"pointers" and "objects"? Etc., etc., ...

D.McClain, Sr. Scientist
Raytheon Systems Co.
Tucson, AZ

Subject: Re: idl2matlab translate-o-matic
Posted by noymer on Tue, 22 Feb 2000 08:00:00 GMT
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In article <MPG.131b0ab058866bad989a3c@news.frii.com>,
davidf@dfanning.com (David Fanning) wrote:
> [MATLAB] have had a strategy to seize the hearts and minds of
> young engineers in college with very cheap student
> software and they have executed it flawlessly. ...

That, _and_ the IDL student software takes the opposite strategy.

To wit, the student version of IDL is still at 5.0 (IIRC).

I don't know how this stacks up against MATLAB student version,
but the IDL student version is also badly crippled. The max array
size is 256x256. Try to make a 256x256 SURFACE with the IDL
student version, though. It barfs. SURFACE calls some internal
arrays, so the largest square array that can be SURFACE'd is 73x73.

And, the Student version of IDL (Linux) tells me that it expires in March 2001. NOTHING in the pre-sale documentation told me about this. (Of course, I am my own sysadmin...:-)

Just my $0.02. I like IDL. I have nothing against MATLAB -- never used it. I don't use Object Graphics (are these in the student version?), but they look cool. I am mostly interested in the graphics not the number crunching so I'm happy with IDL --- the student version could be shape'd up a little bit, though. At the very least it would be nice to have a new student version before March 2001 :-).
-- Andrew
noymer@my-deja.com
