Subject: Re: IDL/PVWAVE History
Posted by black on Fri, 14 Aug 1992 12:35:20 GMT
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Thanks to everyone who sent me info in IDL/PV~WAVE history. No more thanks!

I've recieved about 10 requests for this info. So I thought I'd post what seems to be the best of the answers I recieved. It seems to be posted in response to an earlier, similar question regarding IDL/PV~WAVE history.

John Black.

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thomsen@spf.trw.com (Mark R. Thomsen) writes
> David M. Legler writes
> I assume the heritage of these packages goes back to a common ancestor
> somewhere. What was it and how long ago did it exist ?
>
> I was told by a guy on the NCAR Graphics team that IDL, NCAR Graphics,
> and PV Wave share the same original architect/author. He said the name
> but I forgot it. When I was getting an excellent demonstration of IDL
> I mentioned this and the demo driver said he knows the originator and
> the story is true.
>
> Who is this masked man? I think IDL was the name of the original package.
>
> Mark R. Thomsen

I think I'd better clear this up before any new urban legends are created.

IDL:
IDL is a product of Research Systems, Inc., founded in 1977 by David Stern. The origins of IDL were developed at the Laboratory for Atmospheric and Space Physics (LASP) at the University of Colorado. David was one of the people involved in efforts to make computers easier to use for the physicists at the Lab. The first program in the evolutionary chain to IDL was named Rufus (named after Dave's dog). Rufus was a very simple vector oriented calculator that ran on the PDP-12. It accepted 2 letter codes that specified (1) An arithmetic operation (2) The input registers to serve as operands, and (3) the destination register. The next version was the Mars Mariner Spectrum Editor (MMED) which was a version of Rufus that ran on the PDP-8.

The next program in this line was named SOL, and it also ran on

the PDP-8. Unlike its predecessors, SOL was a real computer language with a real syntax (no more 2 letter codes). It was an APL influenced array oriented language with some primitive graphics capabilities. The resemblance to IDL was there, but very faintly.

In 1977, Dave left LASP to start Research Systems Inc. (RSI) with the intention of building on the ideas contained in SOL. The initial result of this endeavor was PDP-11 IDL, which was much more capable than SOL. Graphics was usually done on Tektronix terminals and outboard raster graphics displays. I used this version at LASP in 1981 on a PDP11/34 under RSX-11M in 1981 (I worked as a student at LASP from 1981 to 1987). I didn't use it for very long though, because 1981 was the year that Dave released the VAX/VMS version of IDL. This version, which was written in VAX-11 MACRO and FORTRAN, took advantage of the VAX virtual memory and 32-bit address space, and was a huge step beyond the PDP-11 version. It used essentially the same sort of graphics hardware as the PDP-11.

In 1987, Dave decided that Unix workstations were the direction in which IDL should progress, but porting the current VAX IDL to Unix didn't make much sense because of its MACRO and FORTRAN implementation. I had just finished my Masters degree and was looking for work. Dave hired me and together we wrote the current version of IDL for Unix on the Sun 3 taking advantage of the re-write to extend and improve the language. Since then, we've ported it to many Unix machines as well as moving it back to VMS. We have more employees now, but we're still developing and extending IDL as our sole product.

NCAR Graphics:

NCAR Graphics was and is a product of the National Center for Atmospheric Research (NCAR). It is an extensive library of callable routines for producing scientific graphics. There is no connection the between the origins of IDL and NCAR Graphics, although Boulder is a small enough place that we know some of the people at NCAR who have worked on it. I don't know how the rumor above got started, but it simply didn't happen that way. Dave gives great IDL demos, so he is quite likely the "excellent" demo giver mentioned above, but somewhere down the line facts have become confused.

PV~WAVE:

Anyone who reads this newsgroup regularly should know the answer to this. Around the time that the Unix version of IDL first became available (1988), Precision Visuals Inc. (PVI) entered into an agreement with RSI under which they enhanced and resold IDL under the name PV~WAVE. In September of last year, they exercised an option in that agreement that resulted in the following:

- They received a copy of the IDL source code as it existed

in September 1990 in return for a one time payment to RSI.
- The connection between RSI and PVI was severed. We do not give them code updates, enhancements, or bug fixes of any kind, and they do their own support and development.
IDL and PV~WAVE are now on separate development tracks.

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