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Subject: Re: Using Comm... err, alternative?  
Posted by [davidf](#) on Wed, 16 Aug 2000 07:00:00 GMT  
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Mark Hadfield (m.hadfield@niwa.cri.nz) writes:

> widget\_control, self.top, TIMER=3600 ?

Something like that. :-)

I had a birthday this week and, of course, I draw someone half my age for my first match in the tennis tournament last night. I'm beginning to hate kids. :-(

We are battling it out. The kid has a wicked serve he cranks right into my body. I can barely get my privates out of the way, let alone hit it back. But he is not handling my (slower) serve any better. He somehow manages to win the first set in a tie-breaker, but I'm not thinking of losing by any stretch of the imagination. We keep battling. One of the best matches I've played this summer.

We are 4-4 in the second when I hit a wicked approach shot, which he someone gets back over the net, barely. I rush in, s-t-r-e-t-c-h and hit the volley, but YIKES! I can't move my feet as fast as I used to and I'm stepping on my racket. WHAM! Face planted on the court. Ankle hurts like hell.

Can I continue? Hell, yes, I think. But I can't put any weight on the foot. It's been a great match, the kid deserves to win as much as I do, so I offer to play it out, as a courtesy. He hits three drop shots in the next game, which I look at disdainfully. He wins 6-4.

Headline in today's paper: WhatsHisName Upsets Fanning, No 2 Seed!!!!

Aaaaahhhhhhaaaa. It's hell to grow old.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting

Phone: 970-221-0438 E-Mail: [davidf@dfanning.com](mailto:davidf@dfanning.com)

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

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Subject: Re: Using Comm... err, alternative?

Posted by [Liam E. Gumley](#) on Wed, 16 Aug 2000 07:00:00 GMT

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Pavel Romashkin <[promashkin@cmdl.noaa.gov](mailto:promashkin@cmdl.noaa.gov)> wrote in message  
news:399B1A1A.F9980995@cmdl.noaa.gov...

- > I have a short question. When you have several (identical, object
- > plotting only) widget windows, how do you find out which one is the
- > topmost without using a common block or defining a main-level variable?
- > I use focus events all right, but I have not figure out where to keep
- > the resulting information.
- > I certainly will use a pointer if all those daughter windows are
- > generated from a parent widget program. But how do I do this if I create
- > them from a command line?

If you need to access an active non-modal widget from the command line  
without using an a-priori reference (such as an object), then I think you  
have to use either a common block or a user-defined system variable which  
stores information about the widget. See Paul van Delst's WPLOT and WOPLOT  
for an example of a case where this is required:

<http://airs2.ssec.wisc.edu/~paulv/#idl>

If anyone knows another way, let's hear it!

Cheers,

Liam.

<http://cimss.ssec.wisc.edu/~gumley>

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Subject: Re: Using Comm... err, alternative?

Posted by [davidf](#) on Wed, 16 Aug 2000 07:00:00 GMT

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Pavel Romashkin ([promashkin@cmdl.noaa.gov](mailto:promashkin@cmdl.noaa.gov)) writes:

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- > plotting only) widget windows, how do you find out which one is the
- > topmost without using a common block or defining a main-level variable?
- > I use focus events all right, but I have not figure out where to keep
- > the resulting information.
- > I certainly will use a pointer if all those daughter windows are
- > generated from a parent widget program. But how do I do this if I create
- > them from a command line?

The more relevant question, it seems to me, is why in the world would you care? Multiple windows on the display are going to be mixed up by the user anyway. Why try to go to any effort to order them?

Enquiring minds want to know... :-)

Speaking of keyboard focus events. I'm writing the "color protection" section of my new widget programming chapter even as we speak. I've used a variety of color protection schemes in the past, but this time I thought I would teach people to use keyboard focus events, since these seemed to me to be fairly "automatic".

In other words, you don't have to do a whole lot of coding to make it work. Whenever you get a keyboard focus event, load the program's color vectors and redraw the graphic display if you are on a 24-bit display. Perfect.

But...

These things seem just a bit overzealous to me. There are a LOT of keyboard focus events, apparently, because I find them doing a LOT of drawing. They are making me nervous. I don't like anyone who is so \*eager\*. :-(

I'm thinking of going back to something a little more my own speed.

Has anyone else had this experience? What do you use for color protection? My only requirement is that it be device-depth and device-decomposed state independent.

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/>  
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Subject: Re: Using Comm... err, alternative?

Posted by [Mark Hadfield](#) on Thu, 17 Aug 2000 02:44:19 GMT

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"David Fanning" <davidf@dfanning.com> wrote in message  
news:MPG.1404f0a7b450acaa989bd9@news.frii.com...

> I'm thinking of going back to something a little more  
> my own speed.

widget\_control, self.top, TIMER=3600 ?

---

Mark Hadfield

m.hadfield@niwa.cri.nz <http://katipo.niwa.cri.nz/~hadfield/>

National Institute for Water and Atmospheric Research

PO Box 14-901, Wellington, New Zealand

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Subject: Re: Using Comm... err, alternative?

Posted by [John-David T. Smith](#) on Thu, 17 Aug 2000 07:00:00 GMT

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Pavel Romashkin wrote:

>

> David Fanning wrote:

>>

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>> in the world would you care? Multiple windows on the  
>> display are going to be mixed up by the user anyway.  
>> Why try to go to any effort to order them?

>

> My idea was, if a user creates several plot windows during an ad-hoc  
> session, then he can overplot from command line to any one of them by  
> just bringing it to the foreground. I am beginning to think that a  
> common block is appropriate here, because I see no other way to link an  
> existing widget with command-line executed code.

Am I being obtuse or couldn't you just use the provided !D.WINDOW sysvar in the  
focus event callback simply as:

```
widget_control,self.mywin,get_value=win  
wset,win
```

I do this all the time at the same time as resetting colors. All plot commands  
then go to the relevant chosen window. One issue is with using tracking events  
for the callback, so that by the time the user has returned to the command line,  
another window has been unintentionally entered. You can also try expose and/or  
keyboard focus events.

Or is this an object graphics thing? I'm embarrassed to say that I have yet to invoke a single O.G. command. Too many case changes and underlines make my code ugly (IDL\_ThisDISPlays\_a\_VIEWofaModel\_withinAConTainerofWindowsgr dotcom).

JD

--

J.D. Smith                   /\*\   WORK: (607) 255-6263  
Cornell University Dept. of Astronomy \\*/   (607) 255-5842  
304 Space Sciences Bldg.       /\*\   FAX: (607) 255-5875  
Ithaca, NY 14853            \\*/

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Subject: Re: Using Comm... err, alternative?  
Posted by [davidf](#) on Thu, 17 Aug 2000 07:00:00 GMT  
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Mark Hadfield (m.hadfield@niwa.cri.nz) writes:

> I get the occasional "Hey nice stuff, I must take a look at it some time"  
> message and I once got a "I tried it and it didn't work!"

50/50. That's not so bad. My mail is decidedly less friendly than that. :-)

Cheers,

David

--

David Fanning, Ph.D.  
Fanning Software Consulting  
Phone: 970-221-0438 E-Mail: [davidf@dfanning.com](mailto:davidf@dfanning.com)  
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Subject: Re: Using Comm... err, alternative?  
Posted by [promashkin](#) on Thu, 17 Aug 2000 07:00:00 GMT  
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Mark Hadfield wrote:

>  
> And here I am trying to make direct graphics more object-like

No offence meant, Mark. To me, object syntax with -> is not worse than typical procedure syntax with a comma. I guess I am just following the

Man Ahead of the Pack :-) who writes his widgets to replace CW\_\* stuff so that noone can guess he used objects in reality. I may send my "Display" to him first so that he can market it once I hide that Common block and Heap\_gc :-)

Cheers,  
Pavel

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Subject: Re: Using Comm... err, alternative?  
Posted by [davidf](#) on Thu, 17 Aug 2000 07:00:00 GMT  
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Mark Hadfield (m.hadfield@niwa.cri.nz) writes:

> And here I am trying to make direct graphics more object-like:

Oh, it's an admirable mission. But have you checked your ftp logs? Pavel and I (and Ben, of course, it goes without saying) are the only ones who have downloaded the darn things. :-(

Cheers,

David

--

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Subject: Re: Using Comm... err, alternative?  
Posted by [promashkin](#) on Thu, 17 Aug 2000 07:00:00 GMT  
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Thanks Liam. I read the whole section on Xregistered yesterday but got so confused by the end that could take no advantage at all of whats in there. I'll look again, but like you said, relying on Xmanager's common block is not any worse than making my own. Besides, they can change things in theirs and that would make my code confused.

Thank you,  
Pavel

---

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Subject: Re: Using Comm... err, alternative?

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Pavel Romashkin wrote:

>

> David Fanning wrote:

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> common block is appropriate here, because I see no other way to link an  
> existing widget with command-line executed code.

Maybe there's another way. The following is from the IDL 5.3 online help for XREGISTERED:

"The XREGISTERED function returns True if the widget named as its argument is currently registered with the XMANAGER as an exclusive widget. Otherwise the routine returns false. If the named widget is registered, XREGISTERED returns the number of instances of that name in the list maintained by XMANAGER. The registered widget is brought to the front of the desktop unless the NOSHOW keyword is set."

[stuff deleted]

"Note - XREGISTERED checks for Name in a COMMON block created by XMANAGER. The stored name is case-sensitive."

The common block in question is named 'MANAGED' (not such a good name, but whatever):

```
COMMON managed, ids, $ ; IDs of widgets being managed
      names, $ ; Names of widgets being managed
      modalList ; List of active modal widgets
```

If your application is named 'XPLOT' (i.e. the name that was passed to XMANAGER), then if N instances of the widget exist, there should be N entries in NAMES with the value 'XPLOT', and N corresponding entries in IDS. Thus you could get to the identifiers of active widgets without having to create your own common block. Of course, this relies on the internals of XMANAGER: it would be better if XREGISTERED returned an array of identifiers for the requested widget names.

If you choose to go ahead and create your own COMMON block or user-defined system variable, then at least you have things under your control, and you are not depending on the XMANAGER implementation.

Cheers,  
Liam.  
<http://cimss.ssec.wisc.edu/~gumley>

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Subject: Re: Using Comm... err, alternative?  
Posted by [promashkin](#) on Thu, 17 Aug 2000 07:00:00 GMT  
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David Fanning wrote:

>  
> The "self" object  
> reference comes immediately to mind, but then your  
> user is going to know for sure that this thing is an  
> object and run like hell in the other direction. :-(

This is *\*exactly\** what I am thinking. I wanted to make this PLOT substitute (re-inventing the wheel again) so transparent that they have no clue they use object graphics :) I'll release it when this thread is forgotten.

For the lack of Voodoo I'll settle for Common block (I won't even know its there since they don't display in my Variable watch window anyway :(

Cheers,  
Pavel

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> common block is appropriate here, because I see no other way to link an  
> existing widget with command-line executed code.

I think the only alternative to a Common block would be to make the initial "Plot" command a function that returned some kind of reference, which the user could keep track of to do the "overplot". The "self" object reference comes immediately to mind, but then your user is going to know for sure that this thing is an object and run like hell in the other direction. :-(



Cheers,

David

P.S. I looked "object" up in my dictionary and I find no reference to "voodoo" or "werewolf" anywhere. I don't know where the notion that these things are to be avoided came from.

--

David Fanning, Ph.D.

Fanning Software Consulting

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- > These things seem just a bit overzealous to me.
- > There are a LOT of keyboard focus events, apparently,
- > because I find them doing a LOT of drawing. They are
- > making me nervous. I don't like anyone who is so \*eager\*. :-(

I have not had problems with focus events. I haven't used them everywhere (and, in fact, with \*keyboard\*), but in this case, when all I have is a base widget and a draw widget, it seems to me that the only time I get events returned is when I put the base in the foreground or background (by clicking a mouse button). Am I missing something?

Cheers,

Pavel

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Subject: Re: Using Comm... err, alternative?  
Posted by [Mark Hadfield](#) on Thu, 17 Aug 2000 22:08:19 GMT  
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"Pavel Romashkin" <promashkin@cmdl.noaa.gov> wrote in message  
news:399C243A.8EAF52C6@cmdl.noaa.gov...

> David Fanning wrote:

>>

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> This is *exactly* what I am thinking. I wanted to make this PLOT

> substitute (re-inventing the wheel again) so transparent that they have

> no clue they use object graphics :-). I'll release it when this thread is  
forgotten.

And here I am trying to make direct graphics more object-like:

```
; Plot a map in one window
```

```
odg0 = obj_new('MGHdgWindow', DIMENSIONS=[400,400])  
odg0->plot, '!p.color = 255 & !p.background = 0', /EXECUTE  
odg0->plot, 'map_set', 0, 170, LIMIT=[-50,160,-30,180], /ISOTROPIC,  
/MERCATOR  
odg0->plot, 'map_continents', /HIRES, /FILL_CONTINENTS
```

```
; A line plot in another window (with different colours)
```

```
odg1 = obj_new('MGHdgWindow', DIMENSIONS=[450,350], RESIZEABLE=0)  
odg1->plot, '!p.color = 0 & !p.background = 255', /EXECUTE  
odg1->plot, 'plot', findgen(100000)
```

```
; Go back and add something to the map.
```

```
odg0->refresh  
odg0->plot, 'map_grid'
```

---

Mark Hadfield  
m.hadfield@niwa.cri.nz <http://katipo.niwa.cri.nz/~hadfield/>  
National Institute for Water and Atmospheric Research  
PO Box 14-901, Wellington, New Zealand

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Subject: Re: Using Comm... err, alternative?  
Posted by [Mark Hadfield](#) on Thu, 17 Aug 2000 23:34:10 GMT

"David Fanning" <davidf@dfanning.com> wrote in message  
news:MPG.1406144ab7dbf879989bdc@news.frii.com...

>

> ...But have you checked your

> ftp logs? Pavel and I (and Ben, of course, it goes without

> saying) are the only ones who have downloaded the darn things. :-(

My IDL software site gets quite a few hits and appears fairly high in Google searches, but only, I suspect, because there's a link to it on David's page. As far as I am aware, I am the only person who has ever actually \*used\* the code I write.

I get the occasional "Hey nice stuff, I must take a look at it some time" message and I once got a "I tried it and it didn't work!"

---

Mark Hadfield

m.hadfield@niwa.cri.nz <http://katipo.niwa.cri.nz/~hadfield/>

National Institute for Water and Atmospheric Research

PO Box 14-901, Wellington, New Zealand

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