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Subject: Re: widget\_list() question

Posted by [Paul Van Delst\[1\]](#) on Thu, 09 Sep 2010 19:32:16 GMT

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I just read "Returning LIST widget values" on the Coyote website. That answers part of my question regarding retrieving the values.

And the "dynamic\_menus.pro" example of the same pretty much answers the rest.

Apologies for the noise....

cheers,

paulv

Paul van Delst wrote:

> Hello,

>

> I am putting together a little display tool where I would like to keep track of datafiles I have been using/displaying.

> I want all the filenames for the session to be visible, as well as selectable so I can "flip" between files (all of the

> data from the files are kept in an IDL\_Container object.)

>

> So what I want to be able to do is:

> 1) create an empty list widget.

> 2) append new filenames to the list as they are read in. (e.g. "widget\_control, id, append\_value = filename" type of thing)

> 3) retrieve the list of all the filenames, or just the currently selected one.

> 4) retrieve the position in the list of the currently selected entry (I think I know how to do that already).

>

> I thought I could use a regular old WIDGET\_LIST() to do this but it appears to be quite difficult to concatenate values

> in an already existing list, to say nothing of retrieving the list of string values in the list. I gather I'll need to

> use the FUNC\_GET\_VALUE keyword, but how does one construct a function to retrieve the list contents? (The documentation

> didn't point to any examples that I could find)

>

> I guess the question I'm asking is if widget\_list() can handle this sort of functionality, or do I need to construct my

> own compound widget to do the job?

>

> Alternatively, should I just keep track of stuff in my own (already existing) file\_list container and

simple recreate

> the list from scratch everytime something changes? (Seems a bit bull-in-a-china-shop'ish)  
>  
> Any info/hints appreciated.  
>  
> cheers,  
>  
> paulv

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Subject: Re: widget\_list() question

Posted by [David Fanning](#) on Thu, 09 Sep 2010 19:47:16 GMT

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Paul van Delst writes:

> I am putting together a little display tool where I would like to keep track of datafiles I have been using/displaying.  
> I want all the filenames for the session to be visible, as well as selectable so I can "flip" between files (all of the  
> data from the files are kept in an IDL\_Container object.)  
>  
> So what I want to be able to do is:  
> 1) create an empty list widget.  
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>  
> I thought I could use a regular old WIDGET\_LIST() to do this but it appears to be quite difficult to concatenate values  
> in an already existing list, to say nothing of retrieving the list of string values in the list. I gather I'll need to  
> use the FUNC\_GET\_VALUE keyword, but how does one construct a function to retrieve the list contents? (The documentation  
> didn't point to any examples that I could find)

These are call-back routines, meaning that they are called  
(like the CLEANUP call-back routine) with the first positional  
parameter being the ID of the widget whose value you are trying  
to set.

```
PRO MySetValue, id, value  
END
```

```
FUNCTION MyGetValue, id  
  RETURN, value
```

END

Naturally, you don't call them, IDL does, typically:

```
Widget_Control, myWidgetID, SET_VALUE=thisValue  
Widget_Control, myWidgetID, GET_VALUE=someValue
```

You might get some sense of this by looking at CW\_DrawColor:

[http://www.dfanning.com/programs/cw\\_drawcolor.pro](http://www.dfanning.com/programs/cw_drawcolor.pro)

- > I guess the question I'm asking is if widget\_list() can handle this sort of functionality, or do I need to construct my
- > own compound widget to do the job?
- >
- > Alternatively, should I just keep track of stuff in my own (already existing) file\_list container and simply recreate
- > the list from scratch everytime something changes? (Seems a bit bull-in-a-china-shop'ish)

Uh, this is IDL we are talking about, right!? It's going to be a bit bull-in-a-china-shop'ish. In fact, it's likely to be a LOT more work than you were planning to do today. :-)

I think you are going to have to write some kind of a compound widget, since list widgets don't (for some inexplicable reason) actually *\*have\** a value:

[http://www.dfanning.com/widget\\_tips/listselection.html](http://www.dfanning.com/widget_tips/listselection.html)

Naturally, I think you should write an "object-widget" since those are a great deal more flexible than a regular compound widget (see the example above), but it's up to you. It's a day's worth of programming, probably, in either case.

I think you are going to have to destroy and recreate the list widget when you change its contents. Whether you can do that in a non-intrusive way without a lot of flashing going on depends on things that may be outside of your control, although I would certainly try to turn the UPDATE keyword on and off for the TLB when you try to do these things. Occasionally, I have been successful with this technique, although not always.

Good luck! We will be happy to use it when you are finished with it. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

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Subject: Re: widget\_list() question

Posted by [Spon](#) on Fri, 10 Sep 2010 11:02:38 GMT

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On Sep 9, 8:47 pm, David Fanning <n...@dfanning.com> wrote:

> [...] you should write an "object-widget"

> Good luck! We will be happy to use it when you are

> finished with it. :-)

Me too please!

>

> Cheers,

>

> David

Welcome back, David!

How was Oregon?

Did I miss the "I'm back!" post, or did you sneak in quietly while no-one was looking? :-)

Regards,

Chris

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Subject: Re: widget\_list() question

Posted by [David Fanning](#) on Fri, 10 Sep 2010 13:16:09 GMT

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Spon writes:

> Did I miss the "I'm back!" post, or did you sneak in quietly while no-

> one was looking? :-)

I snuck back in. Unfortunately, the trail has the effect of slowing everything way, way down, including one's

mental state. Life becomes very simple and deliberate.  
It's a radical departure from real life.

So that (and a month's worth of e-mail) is making it difficult to get back in the saddle. Plus, there is the added pressure of people expecting interesting stories to come out of this experience.

All I can tell you at the moment is that I am working on it, but I am still struggling to get out of the "Dick and Jane walked, and walked, and walked" mode of storytelling. But, stayed tuned. :-)

Cheers,

David

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David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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