Subject: Re: Debugging a widget program (someone else's) Posted by Michael Galloy on Thu, 09 May 2013 23:14:42 GMT View Forum Message <> Reply to Message

On 5/9/13 3:03 pm, wlandsman wrote:

- > I'm looking for generic advice on how to debug a large widget
- > program. Right now I press on a button and it displays an
- > incorrect value. But I don't have any idea where to insert a
- > breakpoint in the thousands of lines of code to debug the problem.
- > Yes, I could look at the widget creation section for the button, then
- > look for the event handler, and then try to follow the hierarchy of
- > procedures until I find the function doing the calculations.

>

- > What I would really like is some sort of procedure event log, that
- > could show me in order the procedures and functions that are called
- > after I press the button. Sort of like a reverse traceback that
- > tells me where I am going rather than how I got where I am ;-)

>

- > I vaguely recall reading about something like this, but maybe it
- > wasn't in IDL.

>

> Thanks, --Wayne

>

You could use something like my logging framework, but that would require putting a line in each routine you cared about. Something as simple as:

```
mg_log, ", /debug
```

When the widget program was initialized, you would want to start up the logging system with something like:

```
mg_log, level=5, filename='widget.log'
```

You can change the level to less than 5 to turn off the /DEBUG messages.

More information at:

http://michaelgalloy.com/2011/11/17/logging.html

Mike

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Michael Galloy www.michaelgalloy.com Modern IDL: A Guide to IDL Programming (http://modernidl.idldev.com) Research Mathematician Tech-X Corporation

## Subject: Re: Debugging a widget program (someone else's) Posted by wlandsman on Fri, 10 May 2013 03:52:09 GMT

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Thanks Mike, the logging framework looks great for development of large projects. In my case, I was able to use PROFILER to list all the procedures used after pressing the widget button - though in alphabetical order rather than in the order they are called. But among the ~200 procedures listed, I was able to spot and debug the likely culprit. Cheers, --Wayne

```
On Thursday, May 9, 2013 7:14:42 PM UTC-4, Mike Galloy wrote:
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>
> Mike
> Michael Galloy
  www.michaelgalloy.com
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> Research Mathematician
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```