
Subject: Why Output Keywords Fail in cgWindow
Posted by [David Fanning](#) on Thu, 01 Aug 2013 15:30:50 GMT
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Folks,

I had a question this morning that had to do with why output keywords fail to produce the correct output when the command they are used with is added to cgWindow. I've answered this question before, but I was surprised to find I had never written an article about it. I have now.

The answer has to do with the way IDL commands are "played back" when the graphics window is resized. I use CALL_PROCEDURE to replay the commands that have been loaded into cgWindow. Unfortunately, CALL_PROCEDURE does not have a mechanism for returning output keywords.

You can find a description of the problem and a simple workaround in this article:

http://www.idlcoyote.com/cg_tips/outkeyword.php

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

Subject: Re: Why Output Keywords Fail in cgWindow
Posted by [Bob\[4\]](#) on Sat, 03 Aug 2013 10:30:32 GMT
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On Thursday, August 1, 2013 9:30:50 AM UTC-6, David Fanning wrote:

> Unfortunately,
> CALL_PROCEDURE does not have a mechanism for returning output keywords.

This is not true. For example,

```
IDL> call_procedure, 'help', /MEMORY, OUTPUT=mem_out
```

```
IDL> print, mem_out
```

```
heap memory used: 1191740, max: 1192007, gets: 1125, frees: 281
```

Subject: Re: Why Output Keywords Fail in cgWindow

Posted by [Fabzi](#) on Mon, 12 Aug 2013 09:34:34 GMT

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Hi,

On 08/03/2013 12:30 PM, bobnnamtrop@gmail.com wrote:

> On Thursday, August 1, 2013 9:30:50 AM UTC-6, David Fanning wrote:

>>> Unfortunately,

>>> CALL_PROCEDURE does not have a mechanism for returning output keywords.

> This is not true. For example,

>

> IDL> call_procedure, 'help', /MEMORY, OUTPUT=mem_out

> IDL> print, mem_out

> heap memory used: 1191740, max: 1192007, gets: 1125, frees: 281

I think it is more related to the use of _EXTRA keywords, isn't it?

IDL> help, _EXTRA={MEMORY:1, OUTPUT:mem_out}

% HELP: Expression must be named variable in this context: <STRING
Array[1]>.

% Execution halted at: \$MAIN\$

Subject: Re: Why Output Keywords Fail in cgWindow

Posted by [David Fanning](#) on Mon, 12 Aug 2013 12:25:05 GMT

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Fabien writes:

> I think it is more related to the use of _EXTRA keywords, isn't it?

>

> IDL> help, _EXTRA={MEMORY:1, OUTPUT:mem_out}

> % HELP: Expression must be named variable in this context: <STRING

> Array[1]>.

> % Execution halted at: \$MAIN\$

Yes, it is related to the use of the _EXTRA keyword. Without saving every keyword explicitly, and then calling it explicitly, there is no way to recover the keyword value from Call_Procedure.

I could, of course, do something like this for a handful of graphics commands (say, the Coyote Graphics commands), by turning the graphics commands into objects. But, I envisioned cgWindow as a program that could work with *any* IDL graphics command, even those that I didn't write.

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>
Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: Why Output Keywords Fail in cgWindow
Posted by [Fabzi](#) on Mon, 12 Aug 2013 12:41:26 GMT
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On 08/12/2013 02:25 PM, David Fanning wrote:
> I envisioned cgWindow as a program that
> could work with*any* IDL graphics command, even those that I didn't
> write.

I agree, and this is obviously a success. I don't see the problem of output keywords as a big issue anymore. For most applications, simple workarounds can be found.

Cheers

Fabien
