
Subject: Re: debugging with new variables (dictionary, hash, ...)
Posted by [Helder Marchetto](#) on Wed, 14 Jan 2015 22:35:20 GMT
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I can only offer a "happy birthday". I have no chance to access the code.
I think that the following are the same (at least in my default workbench configuration):
Keyboard = workbench = command line
F5 = "In" = ???
F6 = "Over" = .SO
F7 = "Out" = .OUT

There is also the "don't try this at home" option.
While in the dictionary or hash procedure, try what happens when you press Ctrl+Shift+F6 (=Skip). You will generate some "unexpected" errors like:

% SCOPE_VARFETCH: String expression required in this context: KEY.

Cheers,
Helder

On Wednesday, January 14, 2015 at 11:25:16 PM UTC+1, Jim P wrote:
> On Wednesday, January 14, 2015 at 3:19:10 PM UTC-7, wlandsman wrote:
>> You could use the .STEPOVER (.SO) command. ("Unlike .STEP, if .STEPOVER executes a statement that calls another routine, the called routine runs until it ends before control returns to interactive mode.")
>>
>> Or somewhat more tedious you could use .OUT once you enter into HASH or DICTIONARY to get out in one step.
>>
>> Now you just have to assign .SO to a key (which I assume can be done but don't know how offhand).
>>
>> --Wayne
>>
>>
>> On Wednesday, January 14, 2015 at 5:06:04 PM UTC-5, Helder wrote:
>>> Hi,
>>> I like to debug inserting breakpoints and then I like to use F5 or F6 (step-in and step-over) to go through the code.
>>> If you have some of the new variables in the code, it will be a painful clicking exercise...
>>>
>>> Here is a minimal example, that simulates what happens to me quite often...
>>>
>>> function retValue, inVar1, inVar2
>>> return, {inVar1:inVar1, inVar2:inVar2}
>>> end
>>>
>>> pro testDict

```

>>> d = dictionary('var', 5,'new',6)
>>> print, retValue(d.var, d.new) ;put a breakpoint on this line
>>> end
>>>
>>> Now run testDict and then suppose you would like to go in the function "retValue" by clicking
F5 (step-in). Well, good luck. It's going to take, in this example with two dictionaries, about 93
clicks of F5. Below is the terminal output.
>>>
>>> Is there any chance to see all of this disappear in the future?
>>>
>>> Regards,
>>> Helder
>>>
>>> PS: There are of course ways around this, like putting a new toggle point at the beginning of
the procedure/function being called. However, the behavior does not fit with other IDL functions.
>>>
>>> % Stepped to: DICTIONARY::GETPROPERTY 13
>>> % Stepped to: DICTIONARY::GETPROPERTY 16
>>> % Stepped to: DICTIONARY::GETPROPERTY 18
>>> % Stepped to: DICTIONARY::GETPROPERTY 19
>>> % Stepped to: DICTIONARY::HASKEY 91
>>> % Stepped to: DICTIONARY::HASKEY 93
>>> % Stepped to: DICTIONARY::HASKEY 96
>>> % Stepped to: DICTIONARY::HASKEY 99
>>> % Stepped to: HASH::HASKEY 428
>>> % Stepped to: HASH::HASKEY 430
>>> % Stepped to: HASH::HASKEY 432
>>> % Stepped to: HASH::HASKEY 435
>>> % Stepped to: HASH::HASKEY 437
>>> % Stepped to: HASH::HASKEY 440
>>> % Stepped to: HASH::HASKEY 442
>>> % Stepped to: HASH::HASKEY 443
>>> % Stepped to: HASH::HASKEY 444
>>> % Stepped to: HASH::HASKEY 445
>>> % Stepped to: HASH::HASKEY 448
>>> % Stepped to: HASH::HASKEY 449
>>> % Stepped to: HASH::HASKEY 451
>>> % Stepped to: DICTIONARY::GETPROPERTY 20
>>> % Stepped to: DICTIONARY::GET 77
>>> % Stepped to: DICTIONARY::GET 79
>>> % Stepped to: DICTIONARY::GET 82
>>> % Stepped to: DICTIONARY::GET 85
>>> % Stepped to: HASH::GET 213
>>> % Stepped to: HASH::GET 216
>>> % Stepped to: HASH::GET 218
>>> % Stepped to: HASH::GET 221
>>> % Stepped to: HASH::GET 223
>>> % Stepped to: HASH::GET 226

```

```
>>> % Stepped to: HASH::GET      227
>>> % Stepped to: HASH::GET      231
>>> % Stepped to: HASH::GET      232
>>> % Stepped to: HASH::GET      233
>>> % Stepped to: HASH::GET      236
>>> % Stepped to: HASH::GET      237
>>> % Stepped to: HASH::GET      238
>>> % Stepped to: HASH::GET      243
>>> % Stepped to: HASH::GET      246
>>> % Stepped to: HASH::GET      247
>>> % Stepped to: HASH::GET      255
>>> % Stepped to: HASH::GET      256
>>> % Stepped to: HASH::GET      261
>>> % Stepped to: HASH::GET      265
>>> % Stepped to: DICTIONARY::GETPROPERTY  37
>>> % Stepped to: DICTIONARY::GETPROPERTY  13
>>> % Stepped to: DICTIONARY::GETPROPERTY  16
>>> % Stepped to: DICTIONARY::GETPROPERTY  18
>>> % Stepped to: DICTIONARY::GETPROPERTY  19
>>> % Stepped to: DICTIONARY::HASKEY  91
>>> % Stepped to: DICTIONARY::HASKEY  93
>>> % Stepped to: DICTIONARY::HASKEY  96
>>> % Stepped to: DICTIONARY::HASKEY  99
>>> % Stepped to: HASH::HASKEY  428
>>> % Stepped to: HASH::HASKEY  430
>>> % Stepped to: HASH::HASKEY  432
>>> % Stepped to: HASH::HASKEY  435
>>> % Stepped to: HASH::HASKEY  437
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>>> % Stepped to: HASH::HASKEY  448
>>> % Stepped to: HASH::HASKEY  449
>>> % Stepped to: HASH::HASKEY  451
>>> % Stepped to: DICTIONARY::GETPROPERTY  20
>>> % Stepped to: DICTIONARY::GET  77
>>> % Stepped to: DICTIONARY::GET  79
>>> % Stepped to: DICTIONARY::GET  82
>>> % Stepped to: DICTIONARY::GET  85
>>> % Stepped to: HASH::GET      213
>>> % Stepped to: HASH::GET      216
>>> % Stepped to: HASH::GET      218
>>> % Stepped to: HASH::GET      221
>>> % Stepped to: HASH::GET      223
>>> % Stepped to: HASH::GET      226
>>> % Stepped to: HASH::GET      227
```

```
>>> % Stepped to: HASH::GET      231
>>> % Stepped to: HASH::GET      232
>>> % Stepped to: HASH::GET      233
>>> % Stepped to: HASH::GET      236
>>> % Stepped to: HASH::GET      237
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>>> % Stepped to: HASH::GET      243
>>> % Stepped to: HASH::GET      246
>>> % Stepped to: HASH::GET      247
>>> % Stepped to: HASH::GET      255
>>> % Stepped to: HASH::GET      256
>>> % Stepped to: HASH::GET      261
>>> % Stepped to: HASH::GET      265
>>> % Stepped to: DICTIONARY::GETPROPERTY  37
```

>

> There's also a ".out" button that was added to the workbench toolbar in 8.1.

>

> It would be nice if these classes could be shoved down to C code or the IDL source routines could be exposed instead of being hidden in a .sav file. If anyone can't think of something to get me for my birthday, this would do the trick.

>

> Jim P.
