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Subject: Re: debugging with new variables (dictionary, hash, ...)

Posted by [Jim Pendleton](#) on Wed, 14 Jan 2015 22:25:15 GMT

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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
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>> % 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
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>> % 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.

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