

---

Subject: Re: Lost Functions

Posted by [davidf](#) on Fri, 24 Oct 1997 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

[This followup was also posted to comp.lang.idl-pvwave]

Matthew Hanson (matt@ktaadn.com) writes:

- > I have been having a very bizaare problem in IDL 5.0 on Solaris 2.6
- > involving Functions becoming 'lost'.
- > In my batch file i compile all functions. Output reads as expected:
- > Compiled Module: MY\_FUNCTIONS
- > Then the batch file calls a main, the main then calls MY\_FUNCTION, but
- > instead of working it says : Unknown Variable: MY\_FUNCTION, even though
- > right above it it says that it is a compiled function. If you type Help
- > at this point MY\_FUNCTION appears as a valid function.
- > Now here is the even weirder part.
- > I commented out MY\_FUNCTION and put in a STOP. After the program stops
- > I enter MY\_FUNCTION at the command prompt Exactly as it appears in the
- > script. It works fine. But if i .continue it will fail as before. I
- > have seen this behavior with several different functions.
- > Has anyone else experienced this?

Of course. :-)

Here is what is happening to you. Somewhere in the list of procedures and functions that is being compiled \*before\* your MY\_FUNCTION is compiled is a call to the MY\_FUNCTION function. Since IDL doesn't yet know about the MY\_FUNCTION function, it figures the call:

```
result = MY_FUNCTION(whatever)
```

is a subscripted variable and it puts its name on its variable name list. This list is consulted first before it looks at its procedure and function list when it is trying to resolve the call.

Most of the time this kind of problem is resolved by having your programs be compiled automatically when they are needed. In other words, give your program files the same name as the procedure or function and let IDL find them when it needs them.

If you absolutely need to compile your programs first, then put this command on the first line of your batch file:

```
Forward_Function MY_FUNCTION
```

Now the name "MY\_FUNCTION" will be reserved for the function  
and IDL will not get confused.

Cheers,

David

-----  
David Fanning, Ph.D.  
Fanning Software Consulting  
E-Mail: davidf@dfanning.com  
Phone: 970-221-0438  
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

---