Subject: Return UNDEFINED from a function Posted by MarioIncandenza on Wed, 11 Oct 2006 22:57:34 GMT View Forum Message <> Reply to Message

Unfortunately, this appears to be possible. This is somewhere between a) another example of what a dunderhead I am, and b) a serious flaw in the IDL compiler, and I'm not sure where right now.

Witness this function:

function return_undefined,this=this,that=that on_error,2 if n_elements(this) ne 0 then thisthat=0 if n_elements(that) ne 0 then thisthat=1 return,thisthat end

Now, in IDL:

% Compiled module: RETURN_UNDEFINED.

IDL> test=return_undefined()

% Variable is undefined: <UNDEFINED>.

% Execution halted at: \$MAIN\$ IDL> help,return_undefined()

<Expression> UNDEFINED = <Undefined>

This is the actual root cause of the "Variable is undefined: <UNDEFINED>" error I experienced a few months back.

What's going on here is that IDL never checks to see if the value in the RETURN statement is defined. So, if you use HELP, you can immediately tell that your function is for some reason trying to return an undefined variable. But if you use PRINT, or simply try to assign the results, you get this profoundly unhelpful error.

Shouldn't the RETURN statement check to see that its argument is defined? Am I wrong that this is bad compiler behavior?

--Edward H.