

---

Subject: Re: Recursion in IDL

Posted by [alans](#) on Mon, 05 Apr 1993 17:24:25 GMT

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

---

Recursion only works on procedures, though. It would be far more useful for IDL to support recursive \*functions\*. Unfortunately, this is more difficult for IDL's parser, I guess, because it has to distinguish between a function call and an array subscript operation which share the same syntax. E.G.,

```
function foo, bar
  if (bar eq 1) then $
    return, 1 else $
    return, bar * foo (bar-1)
end
```

```
IDL> print,foo(2)
% Variable is undefined: FOO.
% Execution halted at FOO </dev/tty( 1)> .
%   Called from FOO </dev/tty( 2)>.
%   Called from $MAIN$ .
```

Yecch! Does anyone know a way around this? Compile it twice? (Yes, actually I just tried and it \*does\* work if you ".run" it twice. (\*WOW\*) So I take it all back; IDL \*does\* support recursive functions, albeit with an ugly hack. For the record, I'm running IDL 3.0.0 on Sparc SunOs 4.1.1...

RSI, I understand the difficulty involved, but can something be done about that? I never explicitly ".run" anything; I put all procedures & functions in my IDL path, and have encouraged my colleagues to do the same...Gee, think of the CPU-hogging Object-Oriented possibilities with this - functions which walk structures of structures looking for a particular field names, recursive "sizeof"-type operations, etc. It boggles the imagination! ;-)

--

Alan J.Stein

MIT/Lincoln Laboratory

[alans@ll.mit.edu](mailto:alans@ll.mit.edu)

---