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Subject: ROUTINE\_NAMES and other magic  
Posted by [Craig Markwardt](#) on Mon, 17 Apr 2000 07:00:00 GMT  
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One thing that ROUTINE\_NAMES() (\*\*note) cannot do is \*add\* variables to another level. If the variable exists, then you can muck as much as you want with it, but if it doesn't exist, sorry.

Oh, another funny thing. Try this recursive procedure:

```
PRO DEEPSTOP, level
if level EQ 2 then stop
deepstop, level + 1
END
```

and then run it with

```
deepstop, 1
```

```
% Stop encountered: DEEPSTOP      2 /dev/tty
```

```
IDL> help
```

```
% At DEEPSTOP      2 /dev/tty
```

```
% DEEPSTOP      3 /dev/tty
```

```
% $MAIN$
```

```
LEVEL      INT      =      2
```

```
Compiled Procedures:
```

```
    $MAIN$ DEEPSTOP
```

```
Compiled Functions:
```

Okay, this is fine. We've stopped two recursive levels down. But then if we try to set a variable like this:

```
IDL> a = 1
```

```
a = 1
```

```
  ^
```

```
% Unable to add local variable to recursively active program unit: DEEPSTOP
```

Freaky! It's probably not meaningful in most situations; only when you have recursive procedures which define dynamic variables via EXECUTE(). Just thought it was cute.

Craig

\*\*note - ROUTINE\_NAMES() is the recently discussed magical function which allows one to manipulate variables at other call levels

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