Subject: Re: memory allocation Posted by Craig Markwardt on Tue, 27 Jul 1999 07:00:00 GMT View Forum Message <> Reply to Message

```
davidf@dfanning.com (David Fanning) writes:
 Essa Yacoub (yacoub@cmrr.umn.edu) writes:
>
>> I am assigning an array using the complex function
>>
>> rd=
    complex(mag regress*cos(phase regress),mag regress*sin(phase regress))
>>
>>> 99% of the time this turns out to be a programming error >>>
>>
      the code works, because I have successfully used it on several data
>> sets of
      different sizes. In this particular case, the data size is much
>> larger. I am running
      this on an sgi onyx 2 system with 2 gig of ram, so that should not
>> be
      a problem. In fact I can open another session in another window and
>>
               bigger arrays with no problem. It actually crashed before
>> create
>> this above statement
      and I zeroed an array I was no longer using and it continued a while
>> longer.
      (using .con) before crashing again at a different line.
>>
> I'm going to guess that there are more of these large arrays
> hanging around that you are also not cleaning up. When you
```

David makes some good suggestions for being memory efficient in your IDL programs. However, if you are running on a Unix system you may be running into the memory limit for a single process. Memory footprints for processes are typically limited to prevent a single task from hogging all of the resources, but often this is what you want!

You can try either limit (csh or tcsh) or ulimit (sh). By itself, "limit" produces this output for me on an alpha machine:

```
[33]> limit
datasize
             131072 kbytes
```

If you get a small number like I did, then you can try increasing it, like so,

limit datasize 2048M # 2048 megabytes = 2 gigabytes

Usage may vary, depending on your shell and Unix version. If you can't increase it yourself, it's time to abase yourself to your sysadmin.

Good luck, Craig

EMAIL: craigmnet@cow.physics.wisc.edu Craig B. Markwardt, Ph.D. Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
