Subject: Re: VARRAY, memory & extracting subarrays
Posted by Craig Markwardt on Mon, 02 Jul 2001 05:10:34 GMT
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Kristine Hensel <kristine@esands.com> writes:
> I'm processing large (105 MB) arrays of images, and I've been running
> into memory problems. (Not surprisingly, right?) I've started using
> Eric Korpela's VARRAY routine, which has helped, but I still can't
> manage to extract a subarray without using all of the available memory.
> Theoretically I have 1 GB of memory, and we've tried maximizing every
> system variable that we can, but I'm still crashing ("Unable to allocate
> memory to create array") when I try to run my image processing program.
...

VARRAY is a pretty extreme measure for your needs. Avoid it if you
can. [Although I admit Korpela's routine is *very* cool!]

1. Can you increase your swap space?
2. Have you checked your process limits (ie, "limit" or "ulimit"
   command before running IDL)?
3. Big problem is that you say "sector_images = images", which deletes
   the old mapping of sector_images. You can do this instead:
      sector_images(*,*,*) = images ; or even better,
      sector_images(0,0,0) = images ; which is faster but sneaky
4. Investigate chunking or banding.

Hope these help! I would really bet on number 2 though.
Craig

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