Subject: Re: Can you do 'unions' with pv-wave?
Posted by hahn on Tue, 22 Nov 1994 01:08:26 GMT
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In article <1994Nov19.012318.9400@mksol.dseg.ti.com> jgavin@mksol.dseg.ti.com (Jeffrey S. Gavin) writes:
> From: jgavin@mksol.dseg.ti.com (Jeffrey S. Gavin)
> Subject: Can you do 'unions' with pv-wave?
> Date: Sat, 19 Nov 1994 01:23:18 GMT

> Is there a way to have a single variable viewed as multiple types, similar
> to the way unions work in C. For example:

[example deleted]

> Our brute-force approach is to read the 50MB file in once as an array of bytes, then again as an array of int, float, then double. This takes time and space
> when actually, we simply want to view the same exact data in different ways.
> Again, the 'C' union structure is the best way I can describe the problem.

> Thanks for any help.

> Regards,

> Jeff

> --
> Jeff Gavin Jeff.Gavin@dseg.ti.com
> Texas Instruments MSG: JGAV / (214) 462-5496

The predefined approach to this problem is to read the data in pieces into a string array or string and use reads to retrieve data from the string using a fortran style format. Example (not tested) which assumes your data file on disk is open:

```
temp_s = String ('*', format='(A200)')     ; declare a 200 byte string
c2 = '**'           ; declare a 2 byte character item
i2 = 0              ; declare a short integer variable

readu, iunit, temp_s     ; read 200 bytes from disk

reads, temp_s, c2  ; read into a string variable

reads, temp_s, i2  ; read the same data into a short integer variable
```

... hope this helps