Subject: Re: routine to translate DEC microvax Floating point...
Posted by Craig Markwardt on Thu, 31 May 2001 18:35:33 GMT
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Richard French <rfrench@wellesley.edu> writes:

> Hi, friends -
> I have some 20-year old data in binary floating point format (DEC
> microvax
> running ULTRIX4.4). Unfortunately, that ancient machine, while still
> running, can
> no longer connect to the internet, so my old subterfuge of converting
> the floating
> point to ascii on the microvax, piping across the network to my Alpha
> machine,
> and then reconverting it to binary no longer works. I do have the binary
> files on
> my new machine, but I don't know how the bits are packed for DEC
> microvax
> floating point format, and my web prowls have not revealed the answer.
> I'm hoping that some of you may know how to decode floating point
> (and possibly also double precision) from DEC microvax format to IEEE. I
>
> think I recall seeing some IDL utilties to do this once, but I have not
> been able
> to track them down.

Hi Dick--

Why don't you simply try reading the numbers into IDL. I did a search on Google, and of the source code in the scientific package called Yorick which knows about a lot of formats. Both showed that IEEE float and VAX float are potentially the same format, except for a different "bias." This suggests that reading the numbers into IDL will give the same number, except for a factor of 2^N (which you can determine once).

However, if you have "D" or "H" type doubles then it's harder, but still doable. Leaving that open-ended until you find out...

Craig

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