Subject: Re: Assoc and byteorder keywords
Posted by Richard French on Thu, 28 Aug 2003 15:44:05 GMT
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On 8/28/03 7:45 AM, in article BB7363AB.C9D%rfrench@wellesley.edu, "Richard G. French" <rfrench@wellesley.edu> wrote:

> I have several large binary data sets (image cubes) that I access from
> multiple platforms, using IDL. Typically, I do something like:
>
> Openr,lun,/GET_LUN,'images.bin'
> Images=assoc(lun,fltarr(nx,ny))
>
> I might then want to do something like this:
>
> Norm=(images[5]-images[4])/(images[3]>threshold)
>
> Unfortunately, from some platforms, the images are not in the correct byte
> order. Because byteorder is a procedure and not a function, I am forced into
> locutions such as:
>
> im5=images[5]
> Byteorder,im5, /SWAP_IF_BIG_ENDIAN
>
> im4=images[4]
> Byteorder,im4, /SWAP_IF_BIG_ENDIAN
>
> im3=images[3]
> Byteorder,im3, /SWAP_IF_BIG_ENDIAN
>
> Nomr=(im5-im4)/(im3>threshold)
>
> This seems to be negating the syntactical efficiency of the ASSOC function.
> I could wrap all of this into a function, of course, but it seems to me that
> an easier way would be for ASSOC to have the capability of doing the
> byte-swapping on the fly, by having the same keywords as BYTEORDER. So, for
> example, I would like to see:
>
>
> Images=ASSOC(lun,fltarr(nx,ny),/SWAP_IF_BIG_ENDIAN)
>
> If RSI could just then call byteorder internally to the ASSOC function
> before delivering the data to the user, it would result in much cleaner code
> at my end. Does anyone see a way to do something like this already, or see
> any problems with this suggestion?
>
> Dick French
>

The fine folks at RSI wrote to me directly to let me know that there is such a keyword to the OPENR command, which does exactly what I am after. Not sure how I missed this one - probably was introduced a few versions ago and I did not pay attention to the change. Thought others might want to know.

Dick French
