
Subject: Re: 10 bytes real

Posted by [Craig Markwardt](#) on Thu, 26 Oct 2000 15:31:05 GMT

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Thierry Wannier <thierry.wannier@unifr.ch> writes:

> I want to analyse with IDL data obtained in the lab.
> For this, I have to transfer and read on my PC the data which were
> generated by a "home made" software running on a Mac.
> Transfer: OK
> Read with IDL:
> I first fought successfully against a tribe a big-endians integer, then
> found a way to cope with Booleans but now "I feel like a motherless
> child" in front of a bunch of 10 bytes reals (IEEE).
>
> Some suggestions?
> Thanks: T.Wannier

Ten-byte reals. Ughh. Are you sure you can use something normal like
8-byte reals? IDL doesn't do 10-byte.

For 4- and 8-byte reals I am personally hooked on using IEEE_TO_HOST
and HOST_TO_IEEE from the IDL Astronomy Library. It has the nifty
benefit converting any standard network-order type, including
integers, into the host-specific endianness. Here is how I use it with
floating point numbers.

```
bb = bytarr(8)    ;; Read ten bytes of data  
readu, unit, bb
```

```
ff = double(bb, 0) ;; Cast to double, but still with the wrong byte order
```

```
ieee_to_host, ff  ;; Convert to host byte order
```

Craig

P.S. You will have to download at least `where_negzero.pro`
`conv_unix_vax.pro` as well.

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