
Subject: Re: reading unformatted data into a structure
Posted by [Rick Towler](#) on Tue, 19 Mar 2002 17:54:42 GMT
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```
>
> unsigned short coordSys; /* The coordinate system used:
>    0 = Geographical lat/long.
>    1 = Projection */
> char projection[32]; /* Projection name (see above) */
> int projParam1; /* 1. projection parameter (see above). */
>
> this int may well need to be aligned on a word boundary. If so 16 bits of
> padding will have been inserted into the struct by the C compiler to align
> it. If the struct is output by a single write this padding will have been
> output with the rest of the data.
>
> On the PC, IDL may have been built to allow structs without padding, so
the
> same alignment problem might not appear in IDL, so reading the struct as a
> single item in IDL will store those 16 bits of padding into projParam1,
and
> all other items in the struct will be similarly offset.
>
```

This seems to be the problem. I was wondering why I had 2 null bytes at the beginning of my next bytarr. I had actually stumbled on the data by padding the entire header but this meant that most of my header data was wacked.

```
> If the struct was part of an array, then a further 16 bits of padding may
> have been added at the end of the struct to ensure that the int which is
> the first element of the second struct in the array was properly aligned.
>
```

The struct was not part of an array because I think that I am reading the correct data.

Thanks!

-Rick
