
Subject: How does one determine the byte order of the RGBA struct?

Posted by [ptkacz](#) on Sun, 30 Apr 2017 04:59:48 GMT

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Hi All,

How does one programatically determine the byte order of the RGBA struct?

Peter

Subject: Re: How does one determine the byte order of the RGBA struct?

Posted by [Zbych](#) on Sun, 30 Apr 2017 10:23:53 GMT

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What do you need it for?

You can try to use `offsetof`:

```
if (offsetof(RGBA, a) == 0){  
    [...]  
}
```

Subject: Re: How does one determine the byte order of the RGBA struct?

Posted by [ptkacz](#) on Wed, 03 May 2017 02:51:49 GMT

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Thanks! That's a neat macro.

As for why, depending on what operations are to be applied to an RGBA structure, one might need to know how data is ordered. Similarly, if one ports code from one platform to another, how does one know if there's a byte ordering change, etc?

When I started looking at the definition of RGBA, there's a compiler directive of something like, `"#if bla"` then order RGBA this way, else, order the data this way. Since "bla" doesn't appear to be defined within the file locally, there's the question of what order is the data stored in?

Peter

PS: "bla" is a place holder and does not represent actual implemented C++ U++ code.
