
Subject: Re: Binary file created with IDL strings
Posted by [Vince Hradil](#) on Wed, 05 Dec 2007 16:36:20 GMT
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On Dec 5, 10:32 am, peajai.all.the....@gmail.com wrote:

> I am trying to read in a IDL created binary file in C++. The file
> contains floats, ints, doubles, and strings. I am able to read the
> floats and ints (shorts in C++) with no problem, but once I get to the
> section of the file containing strings, I cannot seem to read in the
> correct number of bytes. I am not concerned with the contents on the
> strings, but there is more data in floats after the strings that I
> need to be able to read properly. If possible, I could seek forward
> however many bytes just to get to the location of the data after the
> strings. Does anyone know how many bytes each character in an IDL
> string is? There are 22 strings, each 20 characters long. How many
> bytes would this be?

Each character is a byte.

Subject: Re: Binary file created with IDL strings
Posted by [peajai.all.the.way](#) on Wed, 05 Dec 2007 17:00:19 GMT
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On Dec 5, 11:36 am, Vince Hradil <hrad...@yahoo.com> wrote:

> On Dec 5, 10:32 am, peajai.all.the....@gmail.com wrote:
>
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Do I need to account for an extra byte at the end of each string for a
null terminator?

Subject: Re: Binary file created with IDL strings
Posted by [Vince Hradil](#) on Wed, 05 Dec 2007 17:12:44 GMT

On Dec 5, 11:00 am, peajai.all.the....@gmail.com wrote:

> On Dec 5, 11:36 am, Vince Hradil <hrad...@yahoo.com> wrote:

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I should have guessed you were going to ask that 8) I avoided it
because I'm not 100% sure, but I think IDL does NOT write the null
terminator like C. Pretty easy to test...

Subject: Re: Binary file created with IDL strings

Posted by [peajai.all.the.way](#) on Wed, 05 Dec 2007 21:12:59 GMT

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On Dec 5, 12:12 pm, Vince Hradil <hrad...@yahoo.com> wrote:

> On Dec 5, 11:00 am, peajai.all.the....@gmail.com wrote:

>

>

>

>

>

>

>> On Dec 5, 11:36 am, Vince Hradil <hrad...@yahoo.com> wrote:

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> terminator like C. Pretty easy to test...- Hide quoted text -

>

> - Show quoted text -

Easy in theory but not in practice, this problem has been vexing me for 2 days. I tried skipping forward 440 bytes (20char*22strings) and 462 bytes ((20char*22strings)+22nulls) and still did not end up in the right place in the file to correctly read the floats follow. The first string seemed to start 8 characters later than I expected it to, and I cannot tell if I need to add 8 extra characters for each string or if something is just weird at the beginning of strings. Mind you, I have IDL code that reads this same file perfectly so I know the file isn't bad and I am following the same order that the IDL code follows to read the data in.

The IDL code actually just calls readu once and passes it all of the arrays it is expecting to populate and this includes one string array of 22 elements with 20 chars each. If this file was created in IDL and initialized with an array of strings, should there be extra bytes for the array? Or for each string? How would I be able to tell? Would an array of strings take up more bytes than just simply a set of contiguous strings?

Subject: Re: Binary file created with IDL strings

Posted by [Vince Hradil](#) on Wed, 05 Dec 2007 21:46:26 GMT

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On Dec 5, 3:12 pm, peajai.all.the....@gmail.com wrote:

> On Dec 5, 12:12 pm, Vince Hradil <hrad...@yahoo.com> wrote:

>

>

>

>> On Dec 5, 11:00 am, peajai.all.the....@gmail.com wrote:
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> the array? Or for each string? How would I be able to tell? Would an
> array of strings take up more bytes than just simply a set of
> contiguous strings?

Are you sure all the strings are 20 characters? Have you looked at the file in a hex editor?

Subject: Re: Binary file created with IDL strings
Posted by [peajai.all.the.way](#) on Wed, 05 Dec 2007 23:59:51 GMT
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> Are you sure all the strings are 20 characters? Have you looked at
> the file in a hex editor?- Hide quoted text -
>
> - Show quoted text -

I viewed the file in a hex editor and it appeared that I had the 20 characters I was expecting but there was also 8 bytes of 00 00 00 14 00 00 00 14 after each string. So I skipped forward 616 bytes and that worked! I am not sure what those extra 8 bytes are because nothing in the IDL code that was reading the file indicated there were any "extra" bytes.

Thanks so much!
PJ

Subject: Re: Binary file created with IDL strings
Posted by [Vince Hradil](#) on Thu, 06 Dec 2007 00:51:13 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Dec 5, 5:59 pm, peajai.all.the....@gmail.com wrote:
>> Are you sure all the strings are 20 characters? Have you looked at
>> the file in a hex editor?- Hide quoted text -
>
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>
> Thanks so much!
> PJ

Hmmm... 14 octal is FF?
