
Subject: Re: Problem with ASSOC,/PACKED
Posted by [davidf](#) on Wed, 01 Mar 2000 08:00:00 GMT
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Brian Jackel (bjackel@phys.ucalgary.ca) writes:

- > I've run across a bug(?) using ASSOC,/PACKED
- > This appears under v5.3 for Win9x, and v5.2 on
- > SGIs.
- >
- > If anyone has spare time, could you look
- > at the following demonstration script to see if
- > I'm doing anything obviously wrong. Tests
- > on other architectures or versions would also
- > be welcome.

This is the first time I've run across this new PACKED keyword, so I really couldn't tell you how it works. But on the face of it (and given 12+ years reading IDL documentation) this appears to be an unfortunate explanation in the documentation. I don't have much to go on except a little voice in my head that goes, "Naaah, that's not how it works."

Here is what I think is happening. I think the PACKED keyword is for reading data structures that have been packed one byte after the other into a file, rather than following the normal structure output rules, which often result in adding bytes here and there to make fields align with memory boundaries. This kind of packing may occur, for example, if the user didn't write the actual structure, but each **field** of the structure one after the other.

In any case, when IDL **writes** a structure to a file it **certainly** follows the usual structure rules, and there will be added bytes here and there. So the chances of reading a structure written by IDL back using the PACKED keyword would, I believe, almost never work with a real structure with many fields. I think you are proving this conjecture with your example.

The statement that using PACKED "acts like READU" sounds like a technical writer translating a concept he got from an engineer without fully understanding the implications of that statement to a user.

I'd follow the usual take-what-you-get-with-a-grain-of-salt rule here. But I would be willing to bet a couple of bucks I'm pretty close to being right. :-)

Cheers,

David

--

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

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Subject: Re: Problem with ASSOC,/PACKED

Posted by [davidf](#) on Thu, 02 Mar 2000 08:00:00 GMT

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Folks,

I wrote yesterday:

```
> Brian Jackel (bjackel@phys.ucalgary.ca) writes:
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```

Well, my explanation sounded good, but was the usual nonsense, according to the people who really know how this works.

It turns out this is a bug in IDL that shows up when you have structure fields in structures. The ASSOC function counts the structure as "1", instead of the number of actual elements in the sub-structure. The fix has already been placed in the IDL 5.4 code.

Sorry for any confusion. And my sincerest apologies to any technical writers whose feelings I may have bruised. :-)

Cheers,

David

--

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