
Subject: Re: IDL XDR Problem

Posted by [jackel\[1\]](#) on Mon, 07 Jul 1997 07:00:00 GMT

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In article <33C09104.41C6@bom.gov.au> Justin Baker <justinb@bom.gov.au> writes:

> I've got a problem with IDL when reading XDR data generated by a C
> program.
> I can happily read in longs or floats, but IDL gives a strange error
> when I try and read in strings.

Unfortunately, IDL seems to define XDR strings in a peculiar way. According to the IRIX Network Communications Guide, a string should have a 4-byte field which gives the length, followed by the string contents, then enough padding zeros to give a length which is a multiple of four bytes. Consequently, the string "abcde" would be written (in hex) as

```
00 00 00 05  61 62 63 64  65 00 00 00
```

However, according to the IDL users guide "The length of strings is saved and restored along with the string". What they seem to mean by this is that the string length is written `_twice_`, so "abcde" would be

```
00 00 00 05  00 00 00 05  61 62 63 64  65 00 00 00
```

This means that you can't read a standard XDR string in as an IDL string. You'll need to do some kludge like reading it in as a variable length byte array (padded to a multiple of four bytes) , then converting it to a string. Some longword swapping may be required, it's been a while since I ran across this, and the details are a bit fuzzy. Good luck.

Brian Jackel
