
Subject: Convert a byte array to a structure?

Posted by [mikef](#) on Thu, 17 Jan 2002 20:10:47 GMT

[View Forum Message](#) <> [Reply to Message](#)

Does IDL have a simple and/or elegant way to convert a byte array into a structure?

I could write a brute force approach like:

```
proc arr_to_struct_1, arr, struct, idx
  ntag = N_Tags(struct)
  If (ntag Eq 0) Then return ; Not a structure
  If (N_Params() LT 3) Then idx = 0

  For i=0, ntag-1 Do Begin
    sz = Size(struct.(i), /STRUCTURE)
    Case sz.TYPE_NAME Of
      'STRUCT': Begin ; Recurse to convert
        tmp = struct.(i)
        arr_to_struct, arr, tmp, idx
        struct.(i) = tmp
      End
      'Byte': Begin
        If (main.N_DIMENSIONS Eq 0) Then Begin
          struct.(i) = arr[idx]
        EndIf Else Begin
          struct.(i) = Byte(arr,idx,DIMENSIONS[0], $
            DIMENSIONS[1],DIMENSIONS[2],DIMENSIONS[3],
            DIMENSIONS[4],DIMENSIONS[5],DIMENSIONS[6],
            DIMENSIONS[7])
        End
        idx = idx + sz.N_ELEMENTS
      End
      'Int': Begin
        .
        .
        .
      Else: Begin
        ;Some error message
      End
    EndCase
  EndFor
end
```

Or I could thrash the filesystem.

```
proc arr_to_struct_2, arr, struct
```

```
Openw, lu, 'trash.tmp', /GET_LUN
Writeu, lu, arr
Free_Lun, lu
Openr, lu, 'trash.tmp', /GET_LUN
Readu, lu, struct
Free_Lun, lu
end
```

But is there a better, platform independent, way?
(Windows NT/2K, Linux, and Solaris)

--
--

Mike Fitzgibbon MRFitz@ns.arizona.edu
UofAz, LPL phone:(520)626-4791
Systems Programmer, Pr. fax: (520)621-6783
