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Subject: External development: Populating a complex array in C

Posted by [dg86](#) on Sat, 25 Jul 2015 18:08:28 GMT

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Dear Folks,

I'm trying to write a DLL in C that returns a complex array to IDL.

I can create the (temporary) array with no trouble:

```
char * pd;
IDL_VPTR idl_array;
IDL_MEMINT dim[IDL_MAX_ARRAY_DIM];

dim[0] = 512;
dim[1] = 512;
pd = IDL_MakeTempArray(IDL_TYP_COMPLEX, 2, dim, IDL_ARR_INI_ZERO, &idl_array);
```

Next, I'd like to populate the `idl_array` with values, ideally using `memcpy` for speed and clarity. Attempts resembling

```
memcpy(pd, src, 512*512*sizeof(float));
```

seem not to change the data in `idl_array`. Does anyone know the right way to copy floating point data from the C `src` array to the `idl_array`?

Alternatively, does anyone know how to convert two `IDL_TYPE_FLOAT` arrays into one `IDL_TYPE_COMPLEX` array along the lines of the `COMPLEX(real,imag)` function in IDL?

Many thanks,

David

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