Subject: Passing C enum arguments in CALL_EXTERNAL?
Posted by Matt Francis on Fri, 15 Feb 2013 03:35:01 GMT

I have another CALL_EXTERNAL question. I am trying to call cblas_dgemm (see docs here
http://www.prism.gatech.edu/~ndantam3/cblas-doc/doc/html/cbl
as_8h.html#cbc643095eb54edbffb0c5e9080a2450) which requires, amongst other things, enum
type arguements:

const enum CBLAS_ORDER Order, const enum CBLAS_TRANSPOSE TransA, const enum
CBLAS_TRANSPOSE TransB

Now, my understanding is that enums are equivalent to INTs, which makes them equivalent to IDL
LONGs. I've also checked the cblas.h code to find

enum CBLAS_ORDER {CblasRowMajor=101, CblasColMajor=102};
enum CBLAS_TRANSPOSE {CblasNoTrans=111, CblasTrans=112, CblasConjTrans=113};

So this I thought told me the values to set an IDL INT to in order to successfully call the routine. I
set

> CBLAS_ORDER = 102l

However, calling the routing gives and error and crashes the IDL session. The error is random,
but here is an example:

Order must be 101 or 102, but is set to 31094592Parameter 1 to routine cblas_dgemm was
incorrect

The value '31094592' is different each time, which to me indicates the arguments are not correctly
set. This is actually the first argument, so this shouldn't be caused by one of the other being set
incorrectly. Does anyone know if there is anything trick with C enum? Or possible with const
arguments? (or anything else...).