

# SAFEARRAY parameters

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Hello

I'm stumped. Please forgive me this is more a COM proper than an ATL question.

I have a Dispatch interface that exposes an interface method. (I'll call this 'DI' as not to confuse myself). This interface method accepts amongst other parameters a SAFEARRAY(VARIANT) \* as well as an IDispatch \*.

Its usage involves another process which will invoke my COM Server and pass an IDispatch \* as well as a SAFEARRAY of Variants to my DI.

I marshal the Dispatch Pointer to a stream and make a copy of the SAFEARRAY to a SAFEARRAY \* within a data structure accessible to a worker thread. You can see where this is heading.

My worker thread passes the Marshalled interface pointer and a pointer to the SAFEARRAY \* to another object which calls IDispatch::Invoke on my marshalled interface. Before Invoking the method I reverse the order of my parameters by using SafeArrayAccessData, swapping the elements and unaccessing data.

Observation 1

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If I do not reverse the elements, only the first item in the array is successfully passed to the IDispatch being invoked. Although the call succeeds.

Observation 2

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If I reverse the elements for each call, the parameters will be passed successfully for the first call and the same as in observation 1 for the second call. This behaviour is cyclical 1 call OK, 1 call with 1 bad parameter.

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The SAFEARRAY data does not change during the lifetime of the process.

Any help would be gratefully received!!

Many thanks in advance.

Regards

Ed