## Subject: Re: IDL/DLM segmentation fault on reset Posted by Haje Korth on Tue, 31 Aug 2010 15:24:02 GMT

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Hi Karl,

thanks so much for your reply. You are exactly right, the variable input to putenv is a static char\*, and your description of what is going on makes sense. I will give setenv a shot later today and report back.

Cheers, haje

On Aug 31, 10:54 am, Karl <karl.w.schu...@gmail.com> wrote: > On Aug 30, 6:34 pm, Haje Korth <hajeko...@gmail.com> wrote: > >> Have an interesting problem for DLM programmers out there. I have a C >> code for Linux that sets an environment variable using putenv() within >> a DLM. The code executes as designed but when I issue >> a .full session reset I get a segmentation fault and IDL exits

- >> ungracefully. I run the same code (with slightly different calling
- >> convention) under Windows without problems. Does anyone know why? Do I
- >> need some sort of exit handler for the DLM (similar to IDL\_Load for
- >> startup)?

> >> Haje

>

- > The putenv() function just puts a pointer to the string in the
- environment. It does not make a copy of the string.

> The full session reset unloads the DLM. Your string argument to

- > putenv() probably resides in a static var in the DLM. The environment
- > is just a list of pointers to strings. When the DLM got unloaded, the
- > environment is left with an invalid pointer to a string. I can't say
- > exactly what was going on when the segmentation fault occurred, but it
- > is easy to imagine that some system routine running during the session
- > reset was probably walking the environment strings and hit the bogus
- > pointer.

>

>

- > You might try using setenv() instead. The setenv() function allocates
- > heap memory for environment strings, and thus avoids the string memory
- > from getting unallocated by a unload of a module or an automatic
- variable going out of scope. >
- It worked on Windows because Windows probably stores the environment
- > strings differently.

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