
Subject: Re: Error in IDL-Python Bridge

Posted by chris_torrence@NOSPAM on Wed, 09 Sep 2015 15:05:44 GMT

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On Tuesday, September 8, 2015 at 6:20:30 PM UTC-6, Paulo Penteado wrote:

> On Tuesday, September 8, 2015 at 8:20:57 AM UTC-7, Chris Torrence wrote:

>> That sounds like a path issue, either with \$PATH or \$LD_LIBRARY_PATH. That Py_DecRef is part of the C API for Python, and should be found within the python27.so.

>

> Thanks, Chris. That tip pointed me to a fix for that problem.

>

> I had previously checked that all necessary directories were in PATH, PYTHONPATH and LD_LIBRARY_PATH, and I had checked that the matplotlib import worked directly from Python. But given that I could use Python from IDL, and the problem happened only when importing matplotlib, I assumed it was some missing Python library.

>

> Now, I do see that symbol is defined in Anaconda's libpython2.7.so, which is being found:

>

> \$ ldd idl_python27.so

> linux-vdso.so.1 => (0x00007fffe59fe000)

> libpython2.7.so.1.0 => /usr/local/anaconda/lib/libpython2.7.so.1.0 (0x00002adc17360000)

> libc.so.6 => /lib64/libc.so.6 (0x00002adc177a3000)

> libpthread.so.0 => /lib64/libpthread.so.0 (0x00002adc17b63000)

> libdl.so.2 => /lib64/libdl.so.2 (0x00002adc17d7f000)

> libutil.so.1 => /lib64/libutil.so.1 (0x00002adc17f84000)

> libm.so.6 => /lib64/libm.so.6 (0x00002adc18187000)

> /lib64/ld-linux-x86-64.so.2 (0x0000000314c00000)

>

> It is weird that it does not get found when I try to import the library from IDL (even an ldd spawned from IDL did find the library), but a LD_PRELOAD before starting IDL (export LD_PRELOAD=/usr/local/anaconda/lib/libpython2.7.so.1.0) does fix that problem.

>

> Now, the only problem is a segfault when trying to display a plot (doing a plt.show()) in the example...

Hmmmm. A segfault doesn't sound good. I found some online articles about problems with matplotlib 1.3, and people had gone back to an earlier version (1.2?) which fixed it.

Does the problem only happen when using matplotlib from within IDL, or does it occur in Python as well?

What happens if you download anaconda 3.x and try that instead? Not that you necessarily want to convert to Python 3, but at least it would give you confidence that your environment variables were set up correctly...

-Chris
