
Subject: Re: IDL to Python bridge and "file-like" Python object
Posted by [lecacheux.alain](#) on Thu, 19 May 2016 20:34:05 GMT
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Le jeudi 19 mai 2016 20:22:26 UTC+2, Jim P a écrit :

> On Thursday, May 19, 2016 at 5:39:55 AM UTC-6, alx wrote:

>> Le jeudi 19 mai 2016 11:53:19 UTC+2, Fabien a écrit :

>>> On 05/18/2016 06:22 PM, alx wrote:

>>>> Of course, as you said, it is possible to cast the bytes variable inside Python, then to transfer it to IDL. But it is a bit laborious (and slow ?).

>>>>

>>>> Does your package support python3? It seems that the bytearray problems

>>>> has something to do with str representations in legacy python.

>>>>

>>>> Cheers,

>>>>

>>>> Fabien

>>>>

>> I am using FDB 1.6, Python 3.4 (both quoted as compatible) and IDL 8.5.1.

>> From my previous post you can check that the FDB blobReader output is a binary bytearray (bytes) within Python, but a string within IDL.

>> Therefore, the issue looks like to not come from Python but from the IDL/Python bridge, which (incorrectly, I guess) converts Python bytes variable into IDL string (as you can see in the Exelis Python bridge documentation).

>> This choice is unfortunate because Python bytes variable (afaik, but I am not familiar enough with Python) can contain zero values.

>> alain.

>

> I assume the actual numeric values stored in the blob are not bytes, but are integers, floats, etc.

>

> In this case, you might need to use a utility like Python's struct to reconstitute your data appropriately. Even if you were to get the data into IDL as a BYTARR() you would still need to perform a conversion to INTEGER, FLOAT, etc., AND concern yourself with endianness.

>

> You may be better off by simply letting the existing Python tools do that work for you first.

>

> This reference may be of use, or there may be better solutions:

>

> <https://docs.python.org/2/library/struct.html>

>

> Jim P.

Thank you Jim P. for your helping trick.

My data are indeed made of 2560 floats (forming the 10240 bytes blob), so that:

```
>>> q = struct.unpack('2560f', r2.read())
```

done on Python side, is doing the job.

However, it would be nice if the translation from bytes/bytearray into string could be improved in further releases of the IDL Python bridge.

alain.
