

## LArSoft - Bug #19844

### sam\_web\_client, python, SLF7, and larsoft setup

05/01/2018 03:35 PM - Thomas Junk

<b>Status:</b>	Feedback	<b>Start date:</b>	05/01/2018
<b>Priority:</b>	Normal	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	0%
<b>Category:</b>		<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>		<b>Spent time:</b>	0.00 hour
<b>Occurs In:</b>	2018-2-quarter	<b>Co-Assignees:</b>	
<b>Experiment:</b>	DUNE		

#### Description

I think this may be a bug, but maybe I'm just doing something wrong. Setting up larsoft and sam\_web\_client on an SLF7 node creates a python clash. To reproduce, from a bare login on dunesl7gpvm01.fnal.gov and execute the commands below. The first samweb command lists files -- and there is no python set up -- it uses the system python. If I setup larsoft, I get python v2\_7\_14b -f Linux64bit+3.10-2.17 out of CVMFS (64-bit), which may be missing \_socketmodule.so, so python looks in the system python install for it and finds a 32-bit library. Maybe this is one for the service desk and not a larsoft problem?

```
source /cvmfs/fermilab.opensciencegrid.org/products/larsoft/setup
source /cvmfs/larsoft.opensciencegrid.org/products/setup
export PRODUCTS=/cvmfs/fermilab.opensciencegrid.org/products/common/db:$PRODUCTS
setup sam_web_client
export SAM_EXPERIMENT=dune
samweb list-files "file_name like np04%"
setup larsoft v06_75_00 -q e15:prof
ups active | grep python
samweb list-files "file_name like np04%"
```

#### Traceback (most recent call last):

```
File "/cvmfs/fermilab.opensciencegrid.org/products/common/db/./prd/sam_web_client/v2_0/NULL/bin/samweb", line 11, in <module>
import samweb_cli
File "/cvmfs/fermilab.opensciencegrid.org/products/common/prd/sam_web_client/v2_0/NULL/python/samweb_cli.py", line 2, in
<module>
from urllib import urlencode, quote, quote_plus
File "/usr/lib/python2.7/urllib.py", line 26, in <module>
import socket
File "/usr/lib/python2.7/socket.py", line 47, in <module>
import _socket
ImportError: /usr/lib/python2.7/lib-dynload/_socketmodule.so: wrong ELF class: ELFCLASS32
```

#### History

##### #1 - 05/07/2018 10:29 AM - Lynn Garren

- Status changed from New to Feedback

We do not recommend putting common first in your products list. We think if it is last, as intended, you will not have any problems. Let us know if this resolves the issue.

##### #2 - 05/25/2018 03:50 PM - Tingjun Yang

Lynn Garren wrote:

We do not recommend putting common first in your products list. We think if it is last, as intended, you will not have any problems. Let us know if this resolves the issue.

Hi Lynn,

Here is my products list:

```
echo $PRODUCTS
```

```
/cvmfs/dune.opensciencegrid.org/products/dune:/cvmfs/larsoft.opensciencegrid.org/products:/cvmfs/fermilab.opensciencegrid.org/products/larsoft:/cvmfs/fermilab.opensciencegrid.org/products/common/db
```

and I am having the same trouble running samweb on a sl7 machine:

```
samweb
Traceback (most recent call last):
  File "/cvmfs/fermilab.opensciencegrid.org/products/common/db/./prd/sam_web_client/v2_0/NULL/bin/samweb", line 11, in <module>
    import samweb_cli
  File "/cvmfs/fermilab.opensciencegrid.org/products/common/prd/sam_web_client/v2_0/NULL/python/samweb_cli.py", line 2, in <module>
    from urllib import urlencode, quote, quote_plus
  File "/usr/lib/python2.7/urllib.py", line 26, in <module>
    import socket
  File "/usr/lib/python2.7/socket.py", line 47, in <module>
    import _socket
ImportError: /usr/lib/python2.7/lib-dynload/_socketmodule.so: wrong ELF class: ELFCLASS32
```

Here is the python version:

```
ups active | grep python
python          v2_7_14b          -f Linux64bit+3.10-2.17          -z /cvmfs/larsoft.opensciencegrid.org/products
```

If I do unsetup python and use the system python:

```
[dune01.fnal.gov] unsetup python
[dune01.fnal.gov] python --version
Python 2.7.5
```

samweb works again.

### #3 - 05/29/2018 11:21 AM - Lynn Garren

It appears that sam\_web\_client has some parts that explicitly pick up the system python in preference to the ups product. This is a problem for FIFE. I will send an email to the responsible people.

### #4 - 05/29/2018 11:25 AM - Robert Illingworth

Can you try sam\_web\_client v2\_2? I seem to remember trying to address something similar involving SL7.

### #5 - 05/29/2018 11:30 AM - Tingjun Yang

Robert Illingworth wrote:

Can you try sam\_web\_client v2\_2? I seem to remember trying to address something similar involving SL7.

Hi Robert,

I confirm sam\_web\_client v2\_2 works on SL7. Is there a plan to make it the default version?

Thanks,  
Tingjun

### #6 - 05/29/2018 11:31 AM - Robert Illingworth

See Bug [#16658](#) (#1 line on samweb script breaks on sl7 if LD\_LIBRARY\_PATH is set) - this seems like it could have the same underlying cause.

### #7 - 05/29/2018 11:33 AM - Robert Illingworth

I'm not sure why v2\_2 isn't the default already - probably just an oversight.

### #8 - 07/20/2018 10:50 AM - Lynn Garren

I believe that this has been resolved. Tom, would you confirm that?

### #9 - 07/20/2018 10:59 AM - Tingjun Yang

Lynn Garren wrote:

I believe that this has been resolved. Tom, would you confirm that?

```
ups list -aK+ sam_web_client
"sam_web_client" "v1_3" "NULL" "" ""
"sam_web_client" "v1_6" "NULL" "" ""
"sam_web_client" "v1_8" "NULL" "" ""
"sam_web_client" "v1_4_1" "NULL" "" ""
"sam_web_client" "v2_2" "NULL" "" "test"
"sam_web_client" "v1_5" "NULL" "" ""
"sam_web_client" "v2_1" "NULL" "" ""
"sam_web_client" "v1_2" "NULL" "" ""
"sam_web_client" "v1_0" "NULL" "" ""
"sam_web_client" "v1_9" "NULL" "" ""
"sam_web_client" "v2_0" "NULL" "" "current"
"sam_web_client" "v1_7" "NULL" "" ""
"sam_web_client" "v1_1" "NULL" "" ""
"sam_web_client" "v1_4" "NULL" "" ""
```

It seems v2\_0 is still the default one. And I just confirmed the problem on sl7 still persists.

**#10 - 07/20/2018 11:02 AM - Lynn Garren**

Tingjun, would you open a service now ticket asking for v2\_2 to be made current?

**#11 - 07/20/2018 11:15 AM - Tingjun Yang**

Lynn Garren wrote:

Tingjun, would you open a service now ticket asking for v2\_2 to be made current?

RITM0708811

**#12 - 07/20/2018 12:04 PM - Tingjun Yang**

Tingjun Yang wrote:

Lynn Garren wrote:

Tingjun, would you open a service now ticket asking for v2\_2 to be made current?

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2018-07-20 12:00:32 CDT - Robert Illingworth (Additional comments (customer communication))

v2\_2 has an issue that causes some previously valid uses of the command line to break. So I don't think we can make it the default. And releasing a fixed version hasn't been a high priority recently.

**#13 - 07/20/2018 12:06 PM - Lynn Garren**

I think DUNE can press the case for this, provided this is considered a priority fix for DUNE.