## A workout at the Mu2e Offline software using a framework "art"

A tutorial to learn art/G4/FHICL language

Create a TestRelease in the Workbook dir.

Link to the exercise:

http://mu2e.fnal.gov/atwork/computing/Workshops/2012\_August/Workbook\_save.shtml#gettingstarted

 It seems that the setup.sh in the Workbook has some problems with the "scons" command and files may be altered.

```
<mu2egpvm01.fnal.gov> source setup.sh
Base release directory is: /grid/fermiapp/mu2e/Offline/v2_0_1/g4_4942
MU2E_SEACH_PATH: /grid/fermiapp/mu2e/Offline/v2_0_1/g4_4942/:/cvmfs/mu2e.open
sciencegrid.org/DataFiles/
ilERROR: Product 'art' (with qualifiers 'mu2e:prof'), has no v1_00_08 version (or
Umav not exist)
ERROR: Product 'geant4' (with qualifiers 'gcc46:prof'), has no v4_9_4_p02 versio
n (or may not exist)
ERROR: Product 'g4neutron' (with qualifiers ''), has no v3_14 version (or may no
Lt exist)
"ERROR: Product 'g4emlow' (with qualifiers ''), has no v6_19 version (or may not
⊡exist)
VERROR: Product 'g4photon' (with qualifiers ''), has no v2_1 version (or may not
lexist)
FERROR: Product 'g4radiative' (with qualifiers ''), has no v3_3 version (or may n
ot exist)
ERROR: Product 'heppdt' (with qualifiers 'gcc46:prof'), has no v3_04_01 version
(or may not exist)
ERROR: Product 'scons' (with qualifiers 'gcc46'), has no v1_3_0b version (or may
 not exist)
MU2E SEARCH PATH: /mu2e/app/users/chenyg/Offline/Workbook/:/grid/fermiapp/mu2e
 Offline/v2_0_1/g4_4942/:/cvmfs/mu2e.opensciencegrid.org/DataFiles/
```

- Setup.sh from Offline to avoid "scons: cannot found"
- Scons on the module file returns

```
Reading SConscript files ...

KeyError: 'LIBSIGCPP_INC':

File "...", Line #...

raise KeyError(Key)
```

- Exercise 1, 2: ex01(02).log ends with 9 instead of 0
- Ex01(02).fcl has the normal content as indicated in the tutorial
- I'm guessing maybe either the setup.sh is messed up, or
   I have used a wrong TestRelease

- Make histograms with root (Ex. 03)
- Same error in the out/ex03.log file (ends with 9)
- out/ex03.root is not created
- Otherwise the root display should work straightforward
- I am trying to clean the old TestRelease and rebuild one