LAr Tutorial @ Uvic

24th/31st Jan 05

- setting up your account
  -requirements file and cvs server at CERN

- running few examples

Introduction

- enviroment at UVic different from CERN

  /afs/cern.ch/atlas/software/dist/9.0.2 /hepuser/atlas/atlaskit/9.0.2/dist/9.0.2

- external software (Gaudi, SEAL)

- tutorial given at CERN not 100%
  same when given at UVic

- even different ATLAS_RELEASE different

Prerequisites

- problems with 9.0.3:
  tries to set variables like MYSQL++ROOT, fixed

- 9.0.2 seems to be ok, later more

- will use 9.0.0 on fate-1 (rh7.3),
  set it up, run few examples

- for fate-2 and fate-3 (SLC3) all paths will
  contain rh73 or redhat73, that's ok (for now)

Running the Tutorial with 9.0.2

- the recommended way to run the tutorial is to use the same version as in the tutorial
- if you want to start from a more recent version, you might want to adjust the tags of the packages you check out
- some packages might only for very few releases !

accessing the atlas cvs repository @ CERN

- open a window in lxplus and on fate-1

  fate-1: cd .ssh

  fate-1: ssh-keygen -t rsa1 with empty passphrase !

  creates identity.pub and identity

- copy identity.pub to lxplus

  fate-1: scp identity.pub seuster@lxplus.cern.ch:

- then on lxplus:

  lxplus: cat identity.pub >> .ssh/authorized_keys

  lxplus: /afs/cern.ch/project/cvs/dist/bin/set_ssh

accessing the atlas cvs repository @ CERN

- try log on from fate-1 to lxplus.cern.ch
  fate-1: ssh -1 lxplus.cern.ch
  fate-1: ssh -1 atlas-sw.cern.ch
- small 'problem' logging on to lxplus (tokens)
- edit .ssh/config on fate-1
  fate-1: cp ~seuster/Tutorial/ssh/config ~/.ssh
  (change to your login name !)
- change on fate-1:
  fate-1: export CVSROOT=:ext:atlas-sw.cern.ch:/atlascvs
  fate-1: export CVS_RSH=ssh

Running Jobs @ UVic

- 2 big Clusters at UVic : muse/mercury

- muse: RHEL34 O(50) CPU's
  login machines fate-1 (RH73) fate-2/3 (SL3)
- mercury: RH73 (?) O(200) CPU's
  login machines mercury.uvic.ca (RH73)
- mercury2: RHEL34 O(40) CPU's
  login machines mercury2.uvic.ca

Muse Cluster

- RHEL has few pitfalls:
  -missing libssl.so.2 ? (gone in 9.0.2)
  ⇒don't submit jobs, but run your jobs interactively
  (only during Tutorial !!)
  -TZPAW: requested memory not found
  switch to ROOT as your histogramsvc
  -AFS not mounted, use local copies of files

Recent pitfalls ...

- database

  recently, many changes wrt the database have been made, bottom line, you should include

```
RDBAccessSvc = Service( "RDBAccessSvc" )
RDBAccessSvc.HostName   = "pdb01"     // for atlas data
 # RDBAccessSvc.HostName   = "devdb"     // for testbeam data
```

  to your jobOption file, or

```
include ("RDBAccessSvc/RDBAccessSvcPdb_jobOptions.py")
```

- MYSQL++ROOT:

```
export CMTPATH=`pwd`:${CMTPATH}
```

  in your work directory does the trick

where to get information

Wiki pages:

https://uimon.cern.ch/twiki/bin/view/Atlas/AtlasComputing

How-To:

http://isscvs.cern.ch:8180/cgi-bin/viewcvs-all.cgi/*checkout*/offline/AtlasDoc/doc/sit/UserDev_HowTo.html?rev=HEAD&only_with_tag=HEAD&cvsroot=atlas&content-type=text/html

Atlas Software mailing lists:

https://weba5.cern.ch/listboxservices/simba2/free/atlas/atlas.aspx

and here, atlas-sw-developers

where to get more information

CVS repository:

http://atlas-sw.cern.ch/cgi-bin/viewcvs-atlas.cgi/

LXR:

http://atlassw1.phy.bnl.gov/lxr/source/atlas/

see Interesting links