DUNE Computing/ Organization News

Tom Junk
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Organization News

DUNEification of resources

Group Accounts

Online/Offline interface

Organization News

Subgroups of Software and Computing Being Formed

Tom: Software and Computing head. Need a co-head/deputy, still working this out.

35t Sim/Reco/Analysis Group – This group:
Tingjun Yang
Michelle Stancari
Mark Convery
Tom Junk
   All agreed to co-lead

FD Sim/Reco Group: -- needs to start up meetings
Tingjun Yang
Xin Qian
   Agreed to co-lead this group

FD Reco/Physics Optimization Task Force:
  Lisa Whitehead, leader
  Andy Blake, Slavic Galymov, deputies

FD Physics Performance WG – T. Bolton created it. In process of formation

DUNE Resources

From Steve Timm:

 The DUNE VO (Virtual Organization)
   now exists and is approved on the Open Science Grid

 It is currently listed as "Inactive" however on

https://oim.grid.iu.edu/oim/vo

I have been able to view members and edit entries on the VOMS server.

Steve says we will have to work with the FIFE support group and the OSG user group
to make sure it gets accepted at the various places where the LBNE VO is accepted now.

What users to put in:

New DUNE collaborators applying for Fermilab ID, Services Account, Kerberos Principal,
FNALU account, interactive DUNE account, should be automatically entered into the DUNE
VO. By extension, we should also copy in members of the LBNE VO with currently
active interactive accounts.

DUNE Group Accounts Created

dune   -- for making software releases
duneana
dunecal
dunepro

.k5login entries are the same as the corresponding lbne accounts.

Home directories in /dune/app/home
Same area as /lbne/app/home, just two mounts of the same disk

Eventually the lbne accounts will go away but we require ~2 months transition

DUNE accounts assigned to the roles lbne had
analysis production -- probably need to get another OSG certificate for this one.
calibration -- we never used this role in the past – may need it in the future.
Need to test jobsub with the new VO. But people haven't been added to the VO yet.

Some I didn't know the purpose of: lbnesk, lbnedata.
We also left the lbnedaq account as is.

New Repositories: dunetpc, duneutil

Tingjun and Gianluca worked hard to translate all the old lbnecode directories, source files, gdml files, etc. and make a new dunetpc repository.

Skip: online interface code and directories, and rootfiles.

Otherwise: tranlate lbne -> dune, LBNE->DUNE.

 Use git mv to preserve git history from the LBNE repository to the new dunetpc repository.

dunecode was not a good name to replace lbnecode because there is a ND, beam, physics code, etc. It's really for FD, 35t, protoDUNE, and any possible LArTPC ND.

https://cdcvs.fnal.gov/redmine/projects/dunetpc

https://cdcvs.fnal.gov/redmine/projects/duneutil

Are subprojects of the DUNE project. Members of the Larsoft_Users group are developers in these repositories (all of MicroBooNE, LArIAT, etc.)

New Release Area /grid/fermiapp/products/dune

Has directories for

dunetpc
dune_pardata
duneutil

lbne_raw_data   (kept as lbne so as not to trip up the daq)

Directory and subdirectories owned by dune. The corresponding lbne directories
were owned by Lee Lueking (retired).

CVMFS repository for DUNE Still in Progress

Service desk ticket put in to request CVMFS DUNE repository.
Ran into a hiccup with the VO not being ready or fully functional (currently "inactive").
scisoft.fnal.gov has releases listed under "Packages" for dunetpc and duneutil

35-ton Computing TSW (Technical Scope of Work)

Delineates computing services and support 35-ton needs in order to commission, operate, and analyze the collected data.

Already reviewed twice by the 35-ton group.

TSW Link on SharePoint

Sent to the Computing Sector for review till the end of August
and send out for signatures on September 1.

Computing Sector people for review:

Ray Pasetes, Mitch Renfer, Rob Harris, Adam Lyon, Stu Fuess, Margaret Votava

Online/Offline Interface Computing News

lbnedaq Group Account on lbnegpvm*.fnal.gov
Finally works!

Online data and monitoring plots can be transferred automatically from
lbne35t-gateway01 using the lbnedaq_cron account, which has access to a keytab
with lbnedaq's Kerbers principal, which can be used to transfer files from
a cron script running on lbne35t-gateway01.   Tested!

A similar keytab may need to be set up on lbne35t-gateway02.

Bluearc areas /lbne/data, /lbne/data2, and dCache /pnfs/lbne mounted on
lbne35t-gateway02. Can use the dropboxes in these areas to put data on tape.

/grid/fermiapp (where dunecode and larsoft releases live).
is also mounted on lbne35t-gateway02
Not mounting /lbne/app (=/dune/app) will force us to use only released software online.

Online RAID Disk Array for lbne35t-gateway02

Server is an old CDF online node. 16 AMD Opteron 6134 cores,
just checked – 7 .3 TBytes of available data space in a RAID5 array (eight disks).

So far, four of the eight disks have failed or are degraded, and were replaced under warranty.

We may want to go to RAID6 for added protection. RAID5 choice was made before the disks failed.

RAID5=1 parity bit per data stripe unit, allows tolerance of one disk failure.
RAID6=2 parity bits, less capacity, slightly slower writes,
    equally fast reads as RAID5, and protection against
    simultaneous failure of two disks.