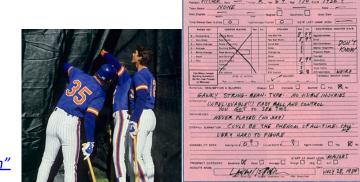


FIFE News

KH, LG FIFE Meeting 1 Apr 2021

1 Apr 1985: Sports Illustrated publishes "The Curious Case of Sidd Finch"



News

- Virtual CHEP 2021 week of May 17. Free registration, but required
- Inclusion Matters 2021 <u>schedule</u> available
- <u>2021 FCRSG review</u> was this week
- Managed proxy certs will be swapped (renewed) next week. Please contact Shreyas
 if that's a problem for your experiment, or you want to change the registered owner of
 your cert



Today's Agenda

- Highlights of jobsub 1.3.3 (Dennis/Shreyas)
- Discussion of jobsub_submit defaults
- Summer workshop/school possibilities



Notes on jobsub_client v1_3_3

- Release: April 7, 2021 noon CDT (tentatively)
- Big feature: Resilient tarballs → tarballs distributed via CVMFS (RCDS) by default
- Since release of jobsub 1.3, multiple emails sent to liaisons of experiments that use resilient feature of jobsub asking to test
 - Got good feedback, fixed a few bugs
- Possibly one outstanding issue (which D. Box is looking into)
- Relevant links:
 - Release notes:
 https://cdcvs.fnal.gov/redmine/projects/jobsub/repository/revisions/master/entry/doc/releas-e.notes
 - RCDS:
 https://cdcvs.fnal.gov/redmine/projects/jobsub/wiki/Rapid_Code_Distribution_Service_via_CVMFS_using_Jobsub
- Legacy/discouraged except where really needed: Override default by using new flag --use-pnfs-dropbox to use old behavior (resilient dCache tarballs)

4/1/21

Differences in job structure

- For example command: jobsub_submit -G my_experiment <other args> -tar_file_name dropbox:///path/to/mytar.tar <other_args> file:///path/to/myscript <script_args>
- Resilient dCache: Tarball/directory available in \$CONDOR_DIR_INPUT/\${_CONDOR_JOB_IWD}, depending on use of -tar_file_name/-f flags
- CVMFS/RCDS: Tarball unwound on CVMFS, symlink created in job, directory available at \${CONDOR_DIR_INPUT}/mytar
- To test:
 - \$ setup -t jobsub_client
 - \$ jobsub_submit <args> --jobsub-server=jobsubdevgpvm01.fnal.gov -tar_file_name=dropbox:///path/to/my/tarball.tar <other_args> file:///path/to/myscript <script_args>



Changes to jobsub_submit defaults?

- At FCRSG we saw that in the next year expt requests will exceed FermiGrid capacity
 - OSG available, but plenty of users don't even try (especially analyzers)
 - The defaultif you don't
- With broad Singularity deployment (>99% of slots), *environments are exactly the same on-site and off-site*. No more problems with missing libraries, etc.
 - Using RCDS for tarballs will also reduce I/O loads to remote sites
- Proposal: make DEDICATED, OPPORTUNISTIC, OFFSITE the default
 - Users would still be able to control as they do now
 - Drawbacks: probably want to enforce working Singularity in job requirements
 - Automatically Add to default job requirements in jobsub?
 - If yes, would need a way to disable that when testing new sites.
 - Others?



Future FIFE Workshops

- Time to start thinking about the summer workshop
 - Late June/early July avoids most of vacation season and conferences (though no Neutrino this year).
- During FCRSG, there was a brief discussion about bringing back some kind of user-focused workshop/school
 - Recall we used to do this as part of the FIFE meetings, but attendance had become very low (5-ish new people last time) so we dropped it.
 - Something larger (with community support!) may be of interest again
 - What do experiments think?
- Heidi prepared some slides with some ideas
 - Not taking any decisions today, but we should start a dialogue



General idea for a short IF computing summer school

- 4 modules
 - Move from general theory of computing to specifics for IF experimentss
 - Taught by a mix of computer people and experiment people
 - Pointers to documentation from HSF etc.
 - 4 half-days? Virtual or in person?



Proposed modules for a general IF computing summer school

- Basics of operating systems
 - general theory of OS
 - Linux
 - Bash
 - release management and build tools
 - disk, tape, CPU, cvmfs ...
- Basics of coding
 - What is a compiler
 - debuggers
 - python and C++ tips and tricks
 - ROOT?
 - configuration languages like fcl/json ...



continued

- Basics of frameworks
 - what is a framework and why do we care?
 - Art in particular
 - Larsoft/dunetpc
 - cafana/Highland
 - database interfaces.
- Basics of batch and data management systems
 - theory of batch systems
 - Condor/GlidenWMS
 - sam/Rucio
 - POMS
 - debugging your batch job



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