CESNET report

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Shallow resubmission again

The bad scenario I was not able to recall yesterday

- ...
- job starts execution, both JW and LM log *Running*
- job grabs the token, JW logs *ReallyRunning*
- network connection breaks
- LM resubmits, logs **Done/Fail** and *Resubmission*

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The problem

- *Done/Fail* gets higher sequence code hence L&B would report *Done* state instead of *Running*
- **Done/Fail must not be logged unless LM is sure about job failure**

L&B in gLite 1.4

The steps towards the release tag

- HEAD contained L&B proxy
- stable branch (1.0 – 1.3) merged on HEAD
- shallow resubmission branch merged on HEAD
  - includes API extensions
  - lb.client-interface, lb.client, and lb.common major numbers incremented
  - shared libraries major numbers incremented
- branch for 1.4 forked
- last minute fixes on the branch (IL protocol compatibility)

Job Provenance

Primary storage

- job registration and file upload support – done
- user tag setting – done
- single job attribute retrieval – done
- ftp backend – done
  - different Globus versions incompatible
  - needs testing and tuning
- batch queries – done, need testing
- incremental feed logic – partially done
  - design hole discovered
  - incremental feed semantics clarified
  - data schema must be extended

Job Provenance (2)

L&B data feed

- using simple maildir implementation (before interlogger-NT is ready)
- job registration – done
- dump file split and upload – done
- L&B JP plugin – partially done
  - reads and parses L&B events
  - infers some JP attributes
  - must re-run job state machine to get consistent final state

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Index server – development started

- detailed design, clarified flexible attribute schema
- implementation of "bones"
- support library for handling generic attribute types

Job Provenance (3)

Main TODO's

- full L&B plugin functionality
- complete index server implementation
- integrated tests
- **feed with realistic data now**
  - use `https://scientific.civ.zcu.cz:9000` as IT/CZ testbed L&B server
- feed with input sandbox files from NS/WMproxy
  - "fire and forget" API call will be provided
  - arguments: jobid, filename, user proxy
  - **can this be integrated in gLite 2.0?**

Job statistics

Short term

- use L&B dumps produced on server purge
- negotiated JobRecord schema
- started work on dump converter
- recent news – SA1 wants to use R-GMA to publish these data
  - evaluation of the proposal necessary

Long term

- integrate with JP
- already happening – dump converter based on L&B-JP plugin

L&B in VDT

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Immediate plans (September)

- work on L&B head in gLite CVS to avoid more repositories
- do minimal changes to allow L&B build in VDT
- prepare VDT build script
  - checkout given L&B tag from gLite CVS
  - setup enviroinment (mimic "ant init")
  - run "make" and "make install"
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Medium and longer term

- develop Condor → L&B event mapper (December)
- fit Condor state machine into generic L&B scheme