

Partner report - CESNET

Jan Pospíšil

SA3.1 Integration and packaging

- patch #2848: Cumulative update for LB 1.9.1
- task #9135: [LB] preparation of the LB 2.0 release
- Build issues on alt. platforms (Deb., OS X), SL5 OK (32/64)
- Standalone (Etics-less) build and "tagging" (in CVS/Etics)

SA3.2 Testing and certification

- task #7510: [LB] test plan - **finished**
- task #7773: [LB] writing tests - **finished**

SA3.3 Support, analysis, debugging, problem resolution

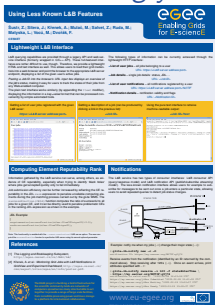
- many bugs, LB supporter Zdeněk Salvat

SA3.4 Interoperability & Platform support

- task #7774: [LB] standards - **closed** and split into:
- task #9538: [LB] BES and JSDL interactions, PGI-WG ...
- task #9539: [LB] DAI
- task #9537: [LB] WS Notification

SA3.5 Activity Management

- Local joint JRA1 and SA3 CZ cluster meetings
- SA3 phone conferences
- Poster for UF09 (03/03/2009) and CHEP09 (26/03/2009)
"Something you may have wanted to know about L&B"



The screenshot shows a web page with the following sections:

- Using Less Known L&B Features**: Header with the EGEE logo and authors: Bhatia, P., Dhillon, J., Khanna, A., Mohai, M., Baheti, Z., Bhatia, M., Bhattacharya, S., Choudhary, R., Dhillon, P.
- Lightweight L&B Interface**: A section with text and a small table.
- Computing Element Republiability Rank**: A section with text and a diagram showing a network topology with nodes and connections.
- Notifications**: A section with text.
- References**: A list of references.
- Footer**: Includes the EGEE logo, the website URL www.eu-egee.org, and a small logo.

- CyGrid - Training the Trainers event (06/05/2009) *"LB service usage lesson"*

L&B patches:

- patch #1803 - cumulative update for L&B 1.9.0 - **in production**
- patch #2848 - cumulative update for L&B 1.9.1 - **in certification**
- L&B 1.9.2 planned in May (poor-man support for MSG)
- L&B 2.0 will be released as part of gLite 3.2 (more details were at the JRA1 session)

L&B builds:

- L&B builds (without ETICS) and works on SL(C)4/5, SuSE 10/11, Debian 4, 32/64bits
- ETICS builds only on SL5, both 32 and 64 bit (SL5 32bit still has wrong project configurations)
- we are willing to support full build on Debian and eventually on OSX, but we need **correct project configurations**

L&B Testplan was published at the beginning of November 2008 together with the L&B documentation here:

<http://egee.cesnet.cz/en/JRA1/LB/>

Though agreed that such a document is sufficient, we were forced to rewrite it to a "bright new (again) wiki format" (available since the middle of December 2008), now

<https://twiki.cern.ch/twiki/bin/view/EGEE/LBTestPlan>

- *Well ...*
- We preferred working tests rather than "controversial formal requirements" and hence
- L&B is now probably **the first major gLite component that has a testplan fully implemented.**

- We have a set of cca 10 scripts that automatically check basic functionality of the whole L&B.
 - No feedback on the existing tests so far (except from Gianni, whose requests have always been accommodated for), we consider them appropriate and fully functional.
 - Unfortunately, it seems that no one is actually using them, except for us - **L&B has a good product team**
- Deployment and functionality tests:
 - install on clean virtual machine
 - follow L&B testplan and run all the scripts
- Highly used in the L&B 2.0 release preparation.
- If new tests wanted they might be added to the testplan and implemented. We are open to all **reasonable** suggestions.
 - new tests will probably follow the L&B development roadmap, see <http://egee.cesnet.cz/en/JRA1/LB/>
- Performance and stress tests - Megajob for L&B 2.0 in progress, see <http://egee.cesnet.cz/mediawiki/index>.

A sample session with all L&B server **local** tests:

```
$ grid-proxy-init
$ export PATH=$PATH:/opt/glite/examples:/opt/glite/bin/
$ export GLITE_WMS_QUERY_SERVER=skirit43.ics.muni.cz
$ export GLITE_WMS_NOTIF_SERVER=skirit43.ics.muni.cz:9000
$ export GLITE_WMS_LOG_DESTINATION=skirit43.ics.muni.cz:9002
$ export CVSROOT=:pserver:anonymous@glite.cvs.cern.ch:/cvs/glite
$ cvs checkout org.glite.testsuites.ctb
$ cd org.glite.testsuites.ctb/LB/tests
$ ./lb-test-binaries.sh
$ ./lb-test-logger-local.sh
$ ./lb-test-server-local.sh
$ ./lb-test-job-registration.sh
$ ./lb-test-event-delivery.sh
$ ./lb-test-logevent.sh /tmp/lbte_logd.log
$ ./lb-test-job-states.sh
$ ./lb-test-notif.sh
```

- many bugs, main L&B supporter is Zdeněk Salvat
 - bug #47090, VOMS_Init() breaks handling of new-style cert. proxies in Globus libraries
 - bug #47040: WM terminates upon uncaught exception during recovery
 - bug #40573: [yaim-lb] config_info_service_lb should be included
 - bug #36336: GLITE_LOCATION_VAR set wrongly on LB 3.1 node
 - bug #27055: All LB daemon startup scripts don't support chkconfig
 - bug #39691: [yaim-lb] YAIM version for yaim lb
 - bug #40570: [yaim-lb] clean glite-lb.pre variables
 - bug #40571: [yaim-lb] %config should be used in the spec file for node-info.d files
 - bug #40572: [yaim-lb] config_gip_service_release should be included
 - bug #43982: [yaim-lb] YAIM packages
 - bug #44906: [yaim-lb] yaimlog is missing argument in config_glite_lb
 - bug #44910: [yaim-lb] Duplicated paths in the grid environment
 - bug #28782: LB rpms should have proper description/summary fields
 - bug #47350: glite-lb-(notif-)interlogd accounts sent events incorrectly, fails to purge event files
 - bug #34649: edg_wll_NotifDrop(): invalid prototype
 - bug #41820: glite-lb-purge problem
 - bug #43767: edg_wll_JobStatus: bad event: type 24 (ResourceUsage)
 - * bug #47642: LB HTML interface usability improvements
 - * bug #47774: unnecessary LB indexed query limitations
 - * bug #47776: most errors are ignored in edg_wll_InitContext()
 - bug #48025: Proxy renewal problem (WMS node) when using short FQANs
 - bug #33697: proxy renewal should try all configured VOMS servers per VO
 - * bug #48164: (notif-)interlogd keeps copy of undelivered messages in memory
 - * bug #45480: Subjobs of live collection can be purged from LB proxy or server
 - * bug #48281: glite-lb-(notif-)interlogd needs tuning to handle large number of destinations (* still open)
- L&B, proxy-renewal, and gsoap-plugin support, performance tuning (suggested WMS-LB configurations, interlogger improvements), ...

Task [LB] standards (#7774) closed and from the comprehensive list of standards were chosen the following three directions that are of L&B interest:

- task #9538: [LB] BES, JSDL interactions, PGI-WG activities
 - OGSA-BES defines a basic state model + some specializations
 - Massimo Sgaravatto (CREAM CE): *"BES and JSDL not really usable for production activities"*
 - TODO: look at OGF PGI-WG activities
 - **lowest priority** from the L&B point of view
- task #9539: [LB] DAI
 - WS-DAI specifies a collection of generic data interfaces that are made available as WS
 - esp. WS-DAIR (relational realisation) might be of interest
 - a short summary provided and now investigated by L&B developers
 - **medium priority** from the L&B point of view

- task #9537: [LB] WS Notification
 - WS Notifications is a family of OASIS standard specifications
 - The task is to evaluate the possibility to deliver L&B notifications in WS-Notification conformant way
 - WS-BaseNotification and WS-BrokeredNotification will be considered as possible solutions, discussion with L&B developers still in progress
 - **high priority** from the L&B point of view
 - planned to be implemented in L&B 2.1 (Q3 2009)