

Partner report - CESNET

Jan Pospíšil

SA3.1 Integration and packaging

- patch #1803: First cumulative update of LB 3.1

SA3.2 Testing and certification

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

SA3.3 Support, analysis, debugging, problem resolution

- many bugs, LB supporter Zdeněk Salvat

SA3.4 Interoperability & Platform support

- task #7774: [LB] standards

SA3.5 Activity Management

- This joint JRA1 and SA3 meeting

First cumulative update of LB 3.1

- quite complicated certification and release
 - bug in UI and bad synchronization with WMS patch
- affected all LB modules
 - see release notes

LB test plan published together with the LB documentation here:

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

- The old EGEE I version rewritten a lot
- So far it contains:
 - service ping tests
 - system functionality tests
 - performance tests

Service ping tests implemented:

- `lb-test-logger-local.sh`, `lb-test-logger-remote.sh`
- `lb-test-server-local.sh`, `lb-test-server-remote.sh`

System functionality tests:

- `lb-test-job-registration.sh` implemented
- `lb-test-event-delivery.sh` implemented
- about 10 more proposed (esp. the non-normal behaviour)

Performance tests (aka Megajob tests):

http://egee.cesnet.cz/mediawiki/index.php/LB_and_JP_Performance_Testing

```

bug #26575: yaim config_lbserver_db balks if MYSQL_PASSWORD contains a single quote
bug #29165: Times in job status history downloaded from LB are schifted
bug #32390: Not all job conditions in event query are favoured
bug #36470: glite-lb-interlogd and glite-lb-notif-interlogd refuse to stop
bug #37069: memory leaks in LB client library
bug #37074: LB client library does not handle closing of kept-alive logd connection correctly
bug #37081: LB client connection pool locking bugs
bug #37084: LB client library can cause segfault when credential expires
bug #37213: glite-lb-logd needs space in /tmp when not really necessary
bug #37215: glite-lb-logd: --noIPC option breaks synchronous event delivery semantics
bug #37335: LB server's WS GetVersion return tracks code instead of interface version
bug #37366: Connection errors not propagated via soap fault in the gsoap-plugin
bug #38820: glite-proxy-renewd crashes when trying to renew proxies with a short FQAN
bug #39208: [wms] Broker helper: no compatible resources
bug #39209: Unknown variable in LB when using Service Discovery to query job status
bug #39210: LB fails to to query job status when service discovery is used
bug #39301: [WMS] /etc/init.d/gLite restart doesn't work
bug #39928: Job info given by glite-wms-job-status is messed up
bug #39934: some error messages keep repeated in syslog
bug #40583: parent and all its nodes Submitted forever
bug #40982: When a collection is aborted the "Abort" event should be logged for the sub-nodes as well /2
bug #41404: [ yaim-lb ] glite-lb-purge.cron default retention period should be 90d
bug #41506: locallogger restart doesn't work
bug #41820: glite-lb-purge problem
bug #42670: some query attributes are not fully implemented in LB
bug #42672: event queries with time attribute use only tv_sec out of struct timeval
bug #43545: messed up user DN logged by WMPProxy
+ LB support, performance tuning (suggested WMS-LB configurations, interlogger improvements),
YAIM (new service discovery support), ...

```

Standardisation of job tracking systems and interoperation with similar services in other Grid infrastructures.

- Job related standards: JSDL, OGSA-BES
- WS standards:
 - General: WS-I-BP, WS-Addressing, WS-Naming
 - Data Access and Integration: WS-DAI (WS-DAIX, WS-DAIR)
 - WS Notifications
 - WS Reliable Messaging
 - WS Security
 - WS Transactions
- Other (IPv6, SNMP, UTF-8, GridFTP, etc.)

[JSDL] Job Submission Description Language (JSDL) Specification, Version 1.0, OGF Recommendation GFD-R.136

<http://www.ogf.org/documents/GFD.136.pdf>

- specifies the semantics and structure of JSDL and includes the normative XML Schema for JSDL

[JSDL-exp] Implementation and Interoperability Experiences with JSDL 1.0, OGF Experimental Document GFD-E.140

<http://www.ogf.org/documents/GFD.140.pdf>

- good summary of different JSDL implementations and interoperability experiences

[OGSA-BES] OGSA Basic Execution Service, Version 1.0, OGF Proposed Recommendation GFD-R-P.108

<http://www.ogf.org/documents/GFD.108.pdf>

- defines a basic state model with states: pending, running, finished, terminated, failed (last three terminal states)

[WS-DAI] Web Services Data Access and Integration - The Core Specification, Version 1.0, OGF Proposed Recommendation GFD-R-P.074 <http://www.ogf.org/documents/GFD.74.pdf>

- specification for a collection of generic data interfaces that are made available as WS
- describe basic concepts (data service model, interface, data access, lifetime) and data service properties and messages (static and configurable data description, data access and factory messages)
- this is general specification, see particular proposals to access relational [WS-DAIR] and XML [WS-DAIX] representations of data below

[WS-BaseNotification] Web Services Base Notification 1.3, OASIS Standard http://docs.oasis-open.org/wsn/wsn-ws_base_notification-1.3-spec-os.pdf

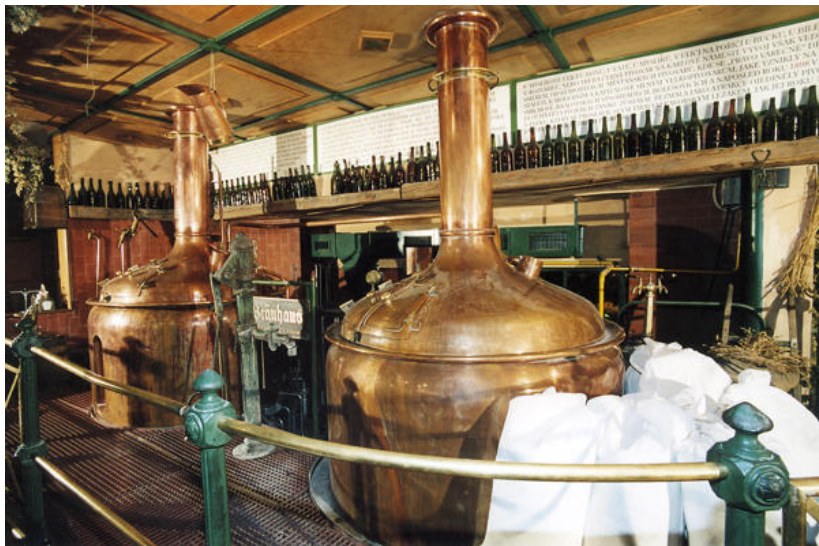
- standard message exchanges to be implemented by service providers that wish to participate in Notifications
- defines notification consumer and producer interface

[WS-BrokeredNotification] Web Services Brokered Notification 1.3, OASIS Standard http://docs.oasis-open.org/wsn/wsn-ws_brokered_notification-1.3-spec-os.pdf

- standard message exchanges for a notification broker service provider (allowing publication of messages from entities that are not themselves service providers)
- a notification broker is an intermediary between message publishers and message subscribers

[WS-RM] Web Services Reliable Messaging 1.1, OASIS Standard
<http://docs.oasis-open.org/ws-rx/wsrn/200702/wsrn-1.1-spec-os-01-e1.html>

- describes a protocol that allows messages to be delivered reliably between distributed applications in the presence of software component, system, or network failures
- see also <https://www.ibm.com/developerworks/webservices/library/specification/ws-rm/>



Apart from the usual stuff...

- LB 2.0 release
 - see also Ales Krenek's talk next door at the JRA1 meeting
- Discussion of what standards will be really implemented in LB (post 2.0 release) and how
 - we start next week