

## Revision of L&B and JP restructuring

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[http://egee.cesnet.cz/mediawiki/index.php/LB\\_and\\_JP\\_cleanup](http://egee.cesnet.cz/mediawiki/index.php/LB_and_JP_cleanup)

### Phase 1 (conservative)

- February 6, 2007: started
- March 7-9, 2007: first report at the JRA1 All-hands meeting in Catania
- May 25, 2007: finished

### Phase 2 (aggressive)

- May 15, 2007: started
- Jun 18-20, 2007: expected report at the JRA1 All-hands meeting in Helsinki - HERE :)
- September 2007: expected end

## Phase 1 (conservative)

1. Setup functional ETICS **branch** configurations (currently named *module\_branch\_RC31\_3*)
2. start removing redundant dependencies with the following preferences:
  - in configurations
  - in Makefiles
  - in the code
3. be able to build all modules separately as well as to build the whole subsystem, both L&B and JP
4. define procedures for cloning current **branch** configuration into **release** configuration
  - we hoped for working etics-tag configuration for long time
  - finally we use "poor etics" replacement

We are not hacking ETICS, we created only a perl wrapper around the ETICS commands. We use the following strategy:

- We keep (update automatically) the version numbers in CVS (*module/project/version.properties*)
- We create new release configurations **only** by cloning the branch ones using the **poor-etics-tag**

```
usage: ./poor-etics-tag options module.name
-c maj.min.rev-age source configuration
-c branch_XX branch alternative
-v maj.min.rev-age explicit target version
-V target version taken from version.properties as is
-i {maj,min,rev,age} inc.version and commit
-t do not emit cvs tag command
-b do not modify version in the branch config
one form of -c, and either -v, -V or -i are
mandatory
```

What we did:

- removed the *ant* dependencies
- cleaned (removed unnecessary) external dependencies (*expat*, *mysql-devel*, *cppunit*, *c-ares*, *gsoap*, *classads*)
- cleaned (removed unnecessary) internal dependencies (*security.gsoap-plugin*, *wms-utils.jobid*, *wms-utils.exceptions*)
- too much time spent for neverending ETICS issues...
  - we reported about 10 serious bugs ( 24686, 24897, 25331, 25834, 25836, ... ) plus many individual emails with Alberto (the one week man :)
  - first functional release was 0.8.6-1 (available only since May 4, 2007!)
- created the new CVS branches and their ETICS configurations form both L&B and JP and we now successfully clone them to the release configurations

What have we done so far (on HEAD):

- we created a new module `org.glite.lb.types` - contains the \*.T (template) files, esp. `events.T`, `status.T` and the code generator - only Build time dependency on this module
- we removed the module `org.glite.lb.client-interface`, merged into `lb.common` and `lb.client`
- we removed the dependency on `lb.client` in all our server modules (`lb.server`, `lb.proxy` and also `lb.logger`), remains dependency (BR) only on `lb.common`

We created (on HEAD) a new module `org.glite.security.gss`

- it contains the `glite-gss` code (used to be in `security.gsoap-plugin`)
- we want to remove the *globus* dependencies in all L&B and JP modules, the only allowed will be B(uild) and R(un)-time dep. for `org.glite.security.gss`, nowhere else
- wrappers around non GSS globus functions (`globus_libc_gethostname(),...`) will be needed
- migration in progress (est. end July – August)

We created (on HEAD) a new subsystem  
`org.glite.lbjp-common` with modules

- trio – include escaping functions, should resolve dep. on LB
- db – common DB access functions, unif. and cleanup needed
- server-bones – taken as is (hopefully)
- maildir from lb.common – it's used by JP too
- logging library – after the approach is agreed here in Helsinki
- interlogger NT – later
- communication layer (plain, gss etc.) – later, after ILNT requirements are clear
- migration in progress (est. end July – August)



What next we plan to do:

- create `org.glite.jobid`
  - together with Francesco G.
  - probably split C and C++ code in different modules – no need to depend on "ITCZ common" exception base (never happened actually)
  - July, 2007
- unify `lb.proxy` and `lb.server`
  - most of the code is shared (or resides in server) either
  - provide "proxy access" to full server on WMS machine for smaller setups – avoid the overhead of running both on the same machine
  - `--proxy-mode` (server, proxy, both) switch to select functionality, interfaces to listen, purging strategy etc.
  - August, 2007

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