

Enabling Grids for E-sciencE

Status update and release plans for the WMS

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Enabling Grids for E-science

- …"the purpose of the releases has changed from introducing <u>major functional changes</u> to implementing bug fixes and stability enhancements."
 - True for the WMS as well, from 3.2 on, which also showed high stability.

I would also add:

- The purpose of the release has also moved to working harder on integration
 - as we see with WMS 3.3: issues with new platforms, upgraded externals, work on MPs...
- About stability, we must not lose what has been achieved
 - Work on the software process in tight cooperation, as a PT
 - Improve testing procedures
 - Find a good balance with implementing new functionality



Tasks for the WMS (I)

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Bug fixing/support from 2008-04

- 148 savannah "bugs" (IC Fix certified)
- 75 GGUS "gLite Workload" tickets in terminal state (out of total 143)

WMS-UI

- release 3.3/3.4
 - #9432 porting to x86 64 SL5
 - #9435 implementing support for load balancing and client-side failover mechanisms (#7732 about HA)
 - #9434 enable JSDL-based submission (#7731)
 - #9433 implementing support for Gridsite delegation 2.0 (#7730)
 - The WMP code is ready since the first restructuring
 - It requires WMS 3.3
- Plans for the next months:
 - be ready for a 3.5 when we collect enough bugs and for Ipv6 based load balancing (RFC 3484 rule 9)
 - 3.4/5 for Debian 5 (at least)



Tasks for the WMS (II)

WMS release 3.2

- #9793 ISM: restructuring of the II purchaser
- #9428 parallel Match-making
- #9459 redesign of the WM "core"
- #9427 Optimisation/review of the algorithm for matchmaking with data and for generating the "brokerinfo" file
- #9426 Implementation of "cancel" request for collections (#7734)
- #11245 release 3.2.11 (unscheduled)



Tasks for the WMS (III)

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#9781 release 3.3

- #9429 porting to SL5 x86_64
- #12977 enable the selection of virtual machine images to be run on the WN ('parameter passing' to CREAM/BLAH)
- #12979 enable rescheduling through a fixed timeout threshold (Removetimeout → Condor periodic_remove_expr)
- #12977 enable the selection of virtual machine images to be run on the WN (parameter passing to CREAM)
- #12983 improve error reporting of what happens in the jobwrapper
- #11229 Improve job status changes detection in ICE
- TDB yaim and release notes

#9875 release 3.4

- #12980 implement a general and adaptive feedback mechanism to migrate jobs stuck in blocking queues
- Bug fixing



Tasks for the WMS (IV)

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General tasks

- #9431 improving documentation and creating/mantaining a dedicated web-site
- #13101 Review copyright and license attributions in each module
- #13005 Test full IPv6 compliancy of WMS 3.3 +LB 2.1
- Test WMS 3.3 + LB 2.0 in co-hosting

Pending tasks

- #9430 integration with the gLite authorisation framework
 - Could go in 3.4, or in a potential 3.5 for SL5 if there's time
- #7945: MPI jobs on multicore/SMP machines

Other possible releases

 Preference is to work on WMS release 3.3/4 for Debian 5 and WMS-UI release 3.4 for Debian5, MacOs, Fedora, ...

Some trivial comments

- start/end dates in savannah tasks could be split into planned and real
- Take into account dependencies among tasks

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- The major problem comes from upgrading to OpenSSL 0.9.8b (gLite 3.2)
 - Gridsite bugs #56974 and #56238, now fixed/under testing
 - Proxy renewal registration still fails
- Condor 7.4.1
 - Fixes "Globus error 10: data transfer to the server failed" (#55452)
 - It will probably require an unscheduled release for SL4
 - Where we can add "parameter passing" to CREAM
- Pre-certification/Certification
 - new bugs were added in the meantime
 - estimate: another month