

JRA1 Technical Status: Next steps.

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EGEE JRA1 Deputy Middleware Manager.*

- Technical Coordination Group. Workplans.
 - Workplans, ROC requirements, Restructuring plan.
- Engineering Management Team (EMT).
 - Release procedure, Migration, WMS/CE testing, Vulnerability Bugs, Port Table, Bug Fixing.
- SRM 2.2 support.
- Preview Test Bed.
- ETICS.
- Summary.

- Development clusters submitted prioritized work plans.
 - Information Systems.
 - WMS and CE.
 - Security.
 - L&B and JP.
 - Data Management.

- TCG work priority list:

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

- ROC priorities:

https://twiki.cern.ch/twiki/bin/view/EGEE/SA1_TCG

- PMB-driven gLite restructuring plan:

<https://edms.cern.ch/document/840168/1>

- Also NA4, JSPG, MWSG, OSG, Sites, Standardization, Working groups.

- As of May 30th the plan was approved by TCG. Available at:

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

https://twiki.cern.ch/twiki/bin/view/EGEE/SA1_TCG.

1. Better and clearer log system, standard logging format. Store logs remotely like "syslog".
 - Standardized logging from JRA1 general and security point of view circulated. Discussed at MWSG and this meeting.
2. Node-specific admin tools eg. add/remove/suspend a VO from a node.
 - Could this be a web page of instructions/cases? (No Answer seen). We need to improve the interfaces (after restruct)
3. Failover in clients and user tools. eg. enable user data management tools and SD to use redundant BDIs.
 - This could be a configuration issue.(No Answer seen).
4. Documentation: release notes should contain all information on:
 - Configuration changes, detailed deployment instructions
 - Bugs fixed and new functionality introduced by the update
 - See new release process section...

5. Fine grained list of RPMs per service component. Not only per node/service

- Should include all dependencies both internal and external.
- Should be available at an official and stable url.

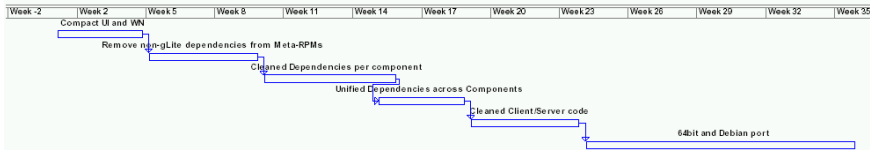
- **How about**

<http://glite.web.cern.ch/glite/packages/R3.0/deployment/>

6. New services should come with clear and complete error messages.

- **This should be part of the SA3 Developer's Guide or checklist.(No change).**

The PMB officially approved this plan after the EU Review.



1. Compact UI and WN.
 - 4 weeks (including testing)
2. Remove non-gLite dependencies from Meta-RPMs.
 - 5 weeks (including testing)
3. Reduced and disentangled dependencies per component.
 - 6 weeks
4. Unified Dependencies across Components.
 - 4 weeks (1 week can be in parallel with item 3 above)
5. Cleaned Client/Server code.
 - 5 weeks (including testing)

- Compact UI and WN. Responsible: **SA3**.
- Overall Goal: Remove obsolete components from the repository.
 1. Clean up the repository by removing obsolete components. **Done**
 2. Start with the UI and WN to build a list of the release components. **List to TCG**
 3. Remove dependencies related to obsolete components on (WN,UI). **Waiting for 2.**
- So far JRA1 has:
 - Listed module dependencies.
 - Removed and rationalized some, agreements between activities.
 - Awaiting the “dependency challenge”.
 - **Must continue to look towards the unified dependencies across components (Milestone 4).**

Engineering Management Team (EMT), JRA1 joint with SA3 (chair).

- Twice-weekly meetings to report/track current issues.
Recent special areas:
 - Special tracking of WMS/LB and gLite-CE issues.
 - General migration of gLite 3.1 to ETICS.
 - Security vulnerability bug follow-up.
 - Specific bugs tracked.

- New release procedure:
 - Link problems to bugs
 - Link fixes to patches
- Bugs are collected into patches.
- Provides a logical connection now. (although we did have the QF's in EGEE...)
- More strict usage of Savannah → better documentation of fixes. Addresses ROC priority #4.
- MW released to PPS (and above) now fixable by patches only.

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Cooperation between SA1/SA3/JRA1.

Need to move all MW to the gLite 3.1 environment (SL(C)3/4, VDT-1.6.0).

- **gLite 3.1 WN to PPS 05/06/07 (gLite 3.1 on 18/06/07?)**
- **Some components do not build here:**
 - eg. APEL, AMGA, e2emonit problems.
- At some point we MAY need to inject binaries from the gLite 3.0 into the gLite 3.1 environment.
- Need a (semi)-automated procedure for this (As platforms multiply).
- Currently Juha H. /Joachim F. are informed and RPMs added by ETICS team.

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ETICS will produce a method for this task.

- GVSG forwards vulnerability bugs to EMT¹.
- Vulnerability bugs have target dates attached.
- EMT rates on Severity and Priority.
- Bugs are assigned to EGEE developer or external contacts.
 - Long-term bugs get monthly reminders to EMT².
- 15/06/07. There are 20 Vulnerability bugs in JRA1 Savannah.
13-None, 1-RfT, 2-Fixed, Remind RfR In progress Accepted 1 each.
- Some vulnerabilities get disclosed.
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Process in place now.

¹Oliver, John, Claudio

- Available at
`org.glite.site-info.ports/doc/middleware-ports.txt`
- Provides the port setup per {Node:Service}.
 - Specifies From/To for Services and Ports. eg.

LB Server

WMS,UI	C	localhost	9000	queries
Site CE,WMS	C	localhost	9000	logging events
UI	C	localhost	9003	queries

- There have been plenty of updates (v1.10).
- **Any changes in services... please let me know.**

- “Critical” bugs only. June 12th.

Month	Remaining/Submitted		
April 06	22/30	RfR	21
May 06	18/26	RfT	36
June 06	8/24	Int	8
July 06	10/17	IC	8
August 06	6/17	IP	6
September 06	7/11	Acc	4
October 06	7/ 11	Rem	3
November 06	5/7	None	25
December 06	0/4		
January 07	5/9		
February 07	5/10		
March 07	3/6		
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Total	111/195		

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Keep up the good work.

- WMS testing now moved to “experimental services” at CNAF.
- **Resulting WMS pronounced “fit for use” by CMS².**
 - Bench-marked for 30k job/day.
 - With $\approx 2\%$ failure rate (15% site failures rate)
- gLite 3.1 WMS version under SA3 certification now.
 - Reliability testing.
- Need to reproduce the results of the experimental services WMS instance in the gLite 3.0 environment (SL(C)3,VDT-1.2.2,Condor 6.8.x).
- gLite 3.1 As of 15/06/07. Still problems getting same results. Needs meticulous tracking.

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Continue support for this effort.

²EMT minutes 18/09/06

- gLite-CE still under experimental service testing by SA3.
- Dedicated meeting every two weeks (SA1/SA3/JRA1).
- Waiting for the BLAH version that uses glexec.
- Incidental news:
 - CREAM CE has withstood flood (max WMS delivery) of jobs.
 - Long jobs to keep the system busy.
 - As of 18/06/07 withstood three days.

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 - Long jobs to keep the system busy.
 - As of 18/06/07 withstood three days.

Continued support for these efforts.

Preview TestBed as of June 15th 2007.

Number	Node Type
<hr/>	
CESNET(Prague)	
<hr/>	
1	"exp" gLite 3.1 WMS
2	gLite 3.1 L&B
1	JP (PS)
2	JP (IS)
2	GLITE 3.1 LB
2	GLITE 3.0.1 CE (Torque)+ WN
1	GLITE CREAM CE
<hr/>	
INFN(CNAF)	
<hr/>	
3	GLITE 3.0.1 CE (Torque)
1	GLITE 3.0.1 WN (Torque)
2	GLITE 3.0.2 WN (Torque)
1	GLITE 3.1 UI + CREAM Client
1	GLITE DPM 3.0.1 SE
1	GLITE BDII 3.0.1
1	GLITE 3.1 WMS+LB+ICE
1	GLITE 3.1 WMS+LB+GPBOX enabled
<hr/>	
INFN(Padova)	
<hr/>	
1	CREAM CE (Torque)
5	CREAM WN (Torque)
1	GLITE 3.0.2 CE (Torque)
1	GLITE 3.0.2 WN (Torque)
<hr/>	
NIKHEF	
<hr/>	
4 (VM)	CREAM CE (Torque), glexec on WNs
<hr/>	
HIP	
<hr/>	
1	GLITE 3.0.1 CE (Torque)
2	GLITE 3.0.1 WN with glexec (Torque)

- **HIP**: Machines installed. Info system problems. Best effort.
- PTB will become an official activity in EGEE-III.

- Now \approx 350 modules.
- Middleware still built on two systems.
 - gLite 3.0 built on “traditional” gLite build system.
 - ▶ SLC3, VDT-1.2.2, gcc-3.2.3, GT-2.
 - gLite 3.1 IS built by ETICS system.
 - ▶ SLC3 (32 bit), SLC4 (32 and 64-bit), VDT-1.6.0, gcc-3.4.6
 - ▶ **SLC4 64-bit build being worked on.**
- As of 15/06/07:
 - On the 32-bit builds. Mostly stable.
 - **On the 64-bit builds. \approx 50 modules failing.**
- SLC4 32-bit WN built by ETICS is on PPS.
- SLC4 32-bit UI to PPS on 18/06/07.

- VOMS-Admin now a part of the VDT distribution.
 - Supports more O/S and use-cases than gLite.
- VOMS 64-bit build/run-time problems are being addressed.
- VOMS-Admin 2.0.X.Y still being certified.
 - Supports VOMRS.
 - Fixes bug # 27035.
 - Needs to finish certification to be acceptable for VDT.
- VOMS-Admin 1.2.19 currently in VDT.
 - Does not support VOMRS.
 - Needs a non-trivial fix for bug # 27035. → more certification
- **Need to speed up certification of VOMS-Admin (at least MySQL back-end).**

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Need to find a solution.

- **Work plans will be monitored by the TCG.**
 - Work will come from the requirements list.
 - Also the PMB-endorsed restructuring plan.
- **Need to start work for the dependency challenge.**
- **New release procedure in place: running routinely.**
- **General (and Vulnerability) bugs flowing better.**
- **SRM2.2 work ongoing. Understanding the failure modes.**
- **Preview test-bed up and running. Effort on best-effort basis.**
- **Majority of ETICS migration done. ETICS team helpful.**
 - Some new functionality needed.
 - 32-bit builds mostly stable.
 - We have lots of work still for 64-bit.

- Compact UI and WN.
- Overall Goal: Remove obsolete components from the repository.
 1. Clean up the repository by removing obsolete components.
 2. Start with the UI and WN to build a list of the release components.
 3. Remove dependencies related components on long on (WN,UI).
- Responsible: **SA3**.

- Remove non-gLite dependencies from Meta-RPMs.
- Overall Goal: Gain a better understanding of the dependencies of individual components.
 1. Publish the list of Meta RPM dependencies.
 2. Select external dependencies and add them to the build configuration of their components (reformulate) .
 3. Provide test UI/WN (probably based on XEN) for developers for testing their dependencies.
 4. Testing reduced dependencies.
- Responsible: **JRA1/SA3.**

- Reduced and disentangled dependencies per component.
- Overall Goal: Dependencies per component cut down to a minimum.
 1. Challenge dependencies.
 2. Understand what can be removed and what can be handled by a few extra lines of code.
 3. Implement those changes suggested by 2) that can be implemented within 1 week (according to the developers).
- Responsible: **Component Responsibles, Dependency Challenge Team (JRA1/SA1/SA3).**

- Unified Dependencies across Components.
- Overall Goal: Common set of external dependencies.
 1. Compare the dependencies of different components.
 2. Unify dependencies and identify where a component can go static .
- Responsible: **Component Responsibilities, SA1/3.**

- Cleaned Client /Server code.
- Overall Goal: cleaner separation between client and server code.
 - The code use on the clients, servers, and in so- called common parts will be cleaned, aiming at cleaner client / server separation..
 - For each component an assessment has to be made including the list of changes required and the estimate of work.
- Responsible: **Component Responsibles, Dependency Challenge Team.**

- After Milestone 5 has been achieved, the port of the WN and UI to 64bit (x86) and Debian will be addressed. This will be used as an assessment of the success of the restructuring exercise..
- Responsible: **Project.**