GOCDB ADVISORY GROUP

Minutes of Meeting held at EGEE09 on 23rd September 2009

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John Casson	Helene Cordier	Mingchao Ma
Claire Devereux	Dimitri Nilsen	Paulo Veronegi
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Dusan Vudragovic	Etienne Urbah	Christian Peter
Hakan Bayindir	Ruben Diez	Cyril L'Orphelin

Chair and minutes: Claire Devereux. Presentations: Gilles Mathieu and John Casson.

Apologies: John Gordon.

AGENDA

1. Recent implementations
2. Requests received
3. GOCDB Failover reports
4. GOCDB Programmatic interface and direct database connections
5. Transition plan to GOCDB4
6. Feedback from test regions
7. AOB

Welcome and recent implementations.

Gilles started the meeting by giving an overview of the regular activities of the GOCDB Advisory Group (GAG).

Requests received.

Tasks list: some items date back to last year. GM would like to drop items assigned to us without clear reasoning.

- To allow user deregistration in GOCDB3 – no way to do via website, no easy way in GDB3. Idea that this will be closed as GDG3 in last stages. Can move to GDB4 requests.
- Role request and certificate changes. There are no notification emails at present to tell ROC manager to approve requests. Need to sort out how we notify users to do this.

Sched/unsched downtime notification – new discussion about how to classify downtimes is ongoing at ROC managers level. Current model based on wLCG rules. Proposal to simplify this to 24h rule. If declared more than 24h its sched, less its unsched. Notifications implemented in CIC portal (voluntary registration).

Support list:

Suggestion to have a new outage type for downtimes. In the past there were 4 categories, now 2 – at risk, outage. Suggestion to have 3rd, degraded, for facilities that aren't fully ticking box (when certain functionality may be broken but this won't affect most users). GM OK about adding it but doesn't know how it will impact on metrics. Would like a consensus to give a recommendation. Rolf, degraded is clear for the site admin, but doesn't inform user to what extent and if there are consequences. Helene, that's why we went from 4 to 2. Degraded could mean when facilities are working but not at top speed. Other use cases e.g CASTOR, something which will have short term impact without long term implications. Gilles/Helene, 3rd state should be a "node information". Keep the "at risk" add info such that what parts aren't working. Thoughts about only one real downtime, other 2 (at risk and degraded) are information, e.g., during next 2 hrs something may fail (at risk), at the moment not all bits are working (degraded). Gilles proposes to change name of at risk to "special status" or something and add info to what. Helene – what about notifications. Special status notifications should be different to those for downtimes. Gilles – case for change in CIC portal? It could be a broadcast. Gilles – for now keep the "at risk" notifications the same.

Storing public key of user cert in GOCDB. So can send encrypted messages. GM – we cannot take responsibility of making sure info is up to date etc. request is from supporter not user, for supporter to contact user. GM – most users won't add info, those that do may not keep it up to date. Mingchao Ma this is an old request, hasn't heard recently for a use case.

Action on Mingchao to check with OSCT if there is a use case, within GAG give it v low priority.

GOCDB failover report.

June – machine room migration at RAL, one week planned downtime. Germany did web front end, db on UK replica instance. It worked. It was only down during the transfer times. The episode allowed us to identify SSL discrepancies in the two portals. Unplanned outage in August (RAL air con failure), 12th August. Did emergency failover, issues getting latest data as data transfer at down was not complete. Outage midnight to 8am, read only for one day then back to read-write. Direct db connection down 34 hrs. It wasn't perfect but it was better than the 5 days we wouldn't have prior to the resilience measures being in force. Direct db access was hardest to recover, but in future this won't be needed. When running on CNAF saw ways of optimizing the systems for working on lower performance hardware. Now working on automation of data transfer. GOCDB failover activities will continue till end of EGEEIII. After that need to consider funding for the failover instances.

GOCDB Programmatic Interface and direct database connection.

Direct database connections stop in 4 weeks. GM has chased people in last few days. 25 tools connect to GDB 3. Three months ago the migration status was that 3 had already moved to PI, 14 not started, 8 IP. Now 9 not done, 8 IP rest done. This is progress but is still worrying. 17 need to migrate in next 4 weeks. Not all are critical in terms of daily ops, some not accessing GDG regularly. But some are import: ops portal (IP – in good shape to just make deadline), Gridview (no info), Gstat (have not started and not in their list of priorities - communication problem within the team). Extending deadline is not a solution as it will lead to delays in the release of GDB4, delays in regionalisation, knock on effects on OAT milestones… Can we afford having Gstat offline for the time it will take them to produce a solution? We have been advertising for 6 months and reminding people fortnightly. There followed a discussion within the GAG group about the issues surrounding delaying us or continuing and risking Gstat. Q: what effort is needed to switch current Gstat to PI? GM: could be done within timeframe if work on it is started now. Not one of the more complex tools. Agree that we continue with our plan. It has already been escalated to Maite. We will report that the migration for Gstat should be feasible within the given timeframe, they have had plenty of notification so we should not delay and miss our milestones.

GOCDB3 authenticates with user cert, authorizes based on roles. GM would like a more simple way to separate the information in GOCDB4 – as long as valid cert can see all bar sensitive info (e.g. security info). There was agreement from the GAG that people would like security contacts to be seen. Mingchao Ma – there are two viewpoints, either user sees all security contacts or just sees their own. If they need further contacts this could go via their own security contact. JC – why do we hide this information now? The information in itself is not sensitive and can be retrieved from the BDII. MM – OSCT don't deal with users directly normally. GM: the other hidden information is for users that have a certificate but no role in GOCDB so they can't see personal emails. GM proposes that read only info is not hidden. Info is available elsewhere accessible with just a certificate, unless OSCT has strong objections. Level of protection in PI will be either same as web portal or higher.

ACTION: MM to take issue of hiding security contacts information to OSCT.

GOCDB3 to GOCDB4 transition plan.

OAT milestone to make the transition by the end of October, in reality it will be done by 4th November. In terms of regionalisation: R1 – installed at region, R2 – central store, R3 – different system. At release all will be R2. R1 and R3 pilots will test by end 2009, and deploy early in 2010. UK, I, Germany, and possibly Italy are R1. HGSM will be R3. Test and finalise by December. HGSM is the production database for SE Europe.

There needs to be a smooth transition GOCDB3 to 4.

Option 1. Have a planned downtime, switch off GOCDB3 and bring up GOCDB4.

Option 2. Bring GOCDB4 up, make it the official GOCDB. Leave 3 on in background.

Option 3. Bring GOCDB4 up as test system. Leave GOCDB3 as the official production system, allowing updates to 4. When we are sure it works properly switch and turn GOCDB3 off.

Real diff between 2 and 3 is which version is the reference system. Both need one to update the other.

O1: pros, clean transition, people know where they are. Users are clear as there is only one GDB. Downside, may not be possible to roll back. High risk. Not a smooth migration. Tight timeline

O2: Smooth transition, v3 is still there as a back-up. Data synchronisation is technically difficult. Still tight timeline. Users may be confused, not knowing which version is correct. Rolf – remember there are 2 types of users, tools and people. GM – we're talking about the web portal now, the programmatic interface will be a clean switch. Another GAG member noted that it requires reverse migration so unless its very easy it's a waste of effort. It could reduce confidence in this solution.

O3: We already have system to migrate from v3 to v4, this will be used to migrate data at the change over and will be used to migrate from HGSM to GDB for region 3 cases. Cons: data synchronising needs consideration, how often should it be done and what if user updates 3 then checks 4? Could be confusing to people. But website will be self explanatory. The official url will show which is in production and there will be a message on the test version. John and GM clarified it's the central (read only) instance they're talking about. The interface for R1 will be separate.

So if we test Read Only version first for the central version. Then the emulation for the R2 so R2 can update data. Before the big switch regional instance must be tested and ready.

AGREE OPTION 3. Date: early November for testing, beginning of December for it going into production

Feedback from the regions.

Then followed a round table discussion and feedback session from regions who have tested R1, R3.

Germany. Dimitri. Because of the lack functionality its difficult to comment. RPM issues. Ability to declare “middleware type”. GM – one push for the new schema is so regions can customise without breaking functionality for EGEE, e.g. Germany specific information. Comments from audience that this is very useful, if not essential.

GM – suggest that if there are common requests across regions these are centrally co-ordinated (e.g. field for middleware) to save each region doing same thing over and over from scratch. Could be a wiki type tool.

GM – The latest version of test package was released last week, and includes increased functionality such as user management.

Italy. R1 scenario. The Oracle requirement could be an issue. Could it migrate to MySQL? Possibly, GM difficult to give timeline, beginning of next year. Shouldn’t take too long but should be spring next yr. Q – should we place higher priority on the MySQL, would mean reducing effort on tuning whole system? Italy – early next yr would be OK. GM – can run on Oracle express, free, little Oracle DBA knowledge required. So could test using Oracle Express, and roll onto MySQL for production in spring. Italy thinks this is a good solution. To be discussed internally. Oracle Express has easy web interface for setting up table.

SE. possible R4 case! Many types of sites. i.e. inverse of region 3 that publishes out to HGSM or other tools. Providing HGSM can read info we publish. Therefore need to find out from HGSM if possible to receive data.

DONM: We plan a few phone conference calls in the interim then F2F at the end of Jan, probably 26th-28th in conjunction with the ROD forum etc.