



Version 1.11-2

Amendments history

Name	Area	Date
Jeremy Coles	All – full edit -> v1.0	21st March 2007 4 th April 2007
Jeremy Coles	All-Minor updates ->v1.1	1 st May 2007
John Gordon	Minor changes section 1	13 th March 2007
Jeremy Coles	Summary and attendees	13 th March 2007

Minutes of the meeting

CERN Prague, ~~4th April~~ 7th March 2007

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Agenda: ~~<http://indico.cern.ch/conferenceDisplay.py?confId=8470>~~
<http://indico.cern.ch/conferenceDisplay.py?confId=8471>

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Minutes: Jeremy Coles

Attendees: Please refer to list at the end of the minutes

Meeting Summary

Prepared by ~~John Gordon~~ Jeremy Coles

Many thanks to Milos Lokajicek and FZU AS CR for hosting this meeting of the GDB.

The pre-GDB meeting covered HEP and particle physics in the Czech Republic, FZK support for Tier-2s together with overviews of computing in Poland and Hungary.

The main GDB meeting took place on Wednesday 4th April.

Introduction (SAM tests)

Future meeting topics were requested. Some suggestions – Monitoring, aggregate top 5 experiment issues, WMS, gLite CE, T1-T2 interactions and testing, new FCR features and accounting policy approval.

Issues with the SAM availability tests were raised which indicated that a SAM BDII was actually responsible for 2-10% of the loss of availability seen at some UK sites through their SE and SRM test results. A ticket has been raised via GGUS.



LCG Grid Deployment Board Meeting



Some updates on working groups were presented by Michel Jouvin the first on Quattor was a GDB working group update. The second on FileSystems was a report on a new HEPiX group.

Quattor

Michel gave a history of the working group and the makeup of Quattor itself. The group now has 5 main active contributors with Michel now taking over the lead from Cal Loomis. Quattor has been quite successful with takeup in over 40 sites. Two issues for follow-up were raised. Firstly is there a need for an update to the group's mandate to cover dissemination? Secondly the group have relied on configuration options of service components listed in an xml file which is no longer to be supported. A request for other documentation options is therefore to be taken to the TCG.

Filesystems

A HEPiX group was setup to look at filesystems following an autumn 2006 request from the IHEPCCC to report on distributed file systems (what is to follow AFS?). The group mandate is to understand how storage is accessed and used across sites, review existing solutions (including price/performance). A questionnaire on this has been sent to T1 sites already (<http://hepox.caspar.it/storage/questionnaire1.php>) The first group report will be at HEPiX in Spring 2007. It was thought that there should be more experiment input to this working group.

SL4 status

Laurence Field gave an update from SA3. The iterative Build-Install-Test cycle was described. The status of the components was listed as: WN – released 2nd April onto PPS. UI has been tested by Integration & Certification and has 4 packaging problems, 15 configuration problems and 4 runtime problems. The WMS is in testing – there is work being done to address packaging issues. The LB, MON, CE and BDII are “ready to test”.

Castor status

Tony Cass reviewed the status of Castor. He showed that performance had been demonstrated in many areas but there are two significant software weaknesses: limitations in the scheduling of requests and support for the “disk1” storage class. The first is being addressed with an LSF plug-in (stress testing to start next week) and the problems underlying the second are understood but this is not currently a priority area. It was also noted that there is an inadequate stager hardware platform at CERN (new hardware is being deployed now) and the software build and release process is complex (there needs to be a bug fix release and a separate release with new functionality). ATLAS problems are currently being addressed. Demonstrating support for mixed experiment loads is a high priority.



LCG Grid Deployment Board Meeting



Security policies & updates

Dave Kelsey gave the update. A new Grid site operations policy (iterations presented at previous meetings) is to be approved in the next month pending suitable coverage on an area recently raised – Intellectual Property Rights. Several other policy documents are under development and require feedback: Grid Security Policy and the Logged Information Policy. Other areas under development: The Audit Policy and a new VO Policy document. The request from the meeting was for the GDB to approve the Grid Site Operations Policy (V1.3) when Dave emails the list shortly.

Job priorities

Jeff Templon gave an update on the implementation of the Job Priorities work at the T0 and T1s – this was coupled with an overview of why VOViews were required (in particular to move away from VO-specific queues). Most sites are now publishing though some specific questions remain against 4 sites (see slide 3 of the talk). During the meeting it was noted that in the short-term there will be a need for both VOViews and VO specific queues.

LCG planning

Harry Renshall showed the new planning spreadsheet with installed capacity figures now being used in place of available capacity. ATLAS noted that the figures presented in the spreadsheets were off by 3 months – Harry agreed to update the slides and spreadsheet. There were questions surrounding the need for mid-term updates – probably these are needed until April 2008.

Storage accounting

Greig Cowan from GridPP presented recent work of the GridPP storage group covering such areas as optimisation tests on the WAN and LAN for T2 sites, more information on storage availability tests and issues with them. He also spent some time talking about the implementation of storage accounting and current issues with double/triple accounting depending on how disk is allocated at sites.

Operational issues for production storage

This talk was not given due to a VRVS connectivity problem.

VOMS coordination



Dave Kelsey gave this talk on behalf of John Gordon. He wanted to propose a revised mandate for the VOMS group. Some alternative suggestions for rewording point 2 on slide 3 were given. A revised mandate will be circulated when John returns.

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Introduction (John Gordon)

~~Future Meetings: Prague 3-4 April. Tuesday afternoon will showcase the local region. Vancouver 31 August. Transport and agenda will need coordinating with WLCG workshop. Arrive on 30th for early start on 31st. It wasn't discussed in the meeting but I give notice that I plan to hold the March 2008 GDB away from CERN to avoid the Motor Show. Suggestions welcome for either of the two GDBs to be held outside CERN in 2008.~~

~~Consultation: Pre-GDB agendas will remain flexible depending on content which will be defined well in advance. No proposal to move Face to face MB.~~

~~Countries with Tier1s should nominate a second (non-voting) representative from their Tier2 community. This is to engage these, sometimes large, sites and get their input, not to improve the information flow out to them. Will progress suggestion to delegate task of further engaging the Tier2s.~~

~~Accounting: the reaction to the MB decisions has been disappointing. Almost no feedback on how well APEL reports Tier1 use or on success of Storage accounting. JG has started comparing 2006 manual reports with APEL and will circulate a paper.~~

SL4 (Markus Schultz)

~~Markus reported that there had been some progress since the February GDB. There was now a buildable WN and UI release but it was not yet installable straight from ETICS. With tweaks it had been installed and the WN tested with an SL3 CE which will likely be a common configuration. The SAM tests were successful on 1/3.~~

~~The tarball workround advertised in February had not been installed at many sites. Only 9/210 were advertising SL4.~~

~~A solution for WN and UI looks to be in sight but the other nodes will take longer. Data Management is seen as the next priority since new disk servers which run this are also requiring SL4. In general the experiments seemed less agitated than in February. One commented that they were unhappy but realised they could not force sites to use the current solution. Many people were concerned that we could still have components running SL3 when it stops being supported in October, just before LHC data taking starts.~~

~~Another major decision will be required if the gLite WMS or CE are not considered acceptable to the experiments. Continuing with LCG versions will require porting to SL4. This is currently not planned and will take considerable effort. The GDB will continue to~~



track but MB is also advised to monitor this situation closely. Ian's proposal on specifying performance criteria gives MB something to monitor progress against.

Markus also described the issues around providing 32bit gLite on 64bit nodes. He suggested 3 options: Provide 32bit versions of the interpreters which means managing external packages; do this only for Python using the Application Area Python version and forget Perl; ask the SL4 team to add the 32bit binaries to the distribution. Markus favoured the third.

BDII (Laurence Field)

Laurence reported on issues with the Information Service which has recently appeared to be a bottleneck and cause of many job and test failures. He highlighted load problems with sladdp and timeouts on the top level BDII. He showed correlations of timeouts with numbers of simultaneous queries and data size. Short term fixes include running the site level BDII on a standalone machine, running the CE information provider on the site level BDII and introducing regional top level BDII's. This last suggestion has been widely implemented (60 top level BDII's) but not all clients point to their regional instance. Also the CERN catchall region is too large. Longer term improvements include more caching in the client and separation of static and volatile information. Long term scalability also needs considering.

VOMS

There were three related talk on deployment of VOMS aware middleware. In a wider discussion on VOMS it was felt that there were two cases for continued coordination: firstly in user issues like registration and secondly in coordination across implementations (storage, batch, ACLs, generic attributes, etc) so that users don't see differences in behavior between sites. This would also help put an agreed WLCG view including OSG and NGDF to the TCG. I will work with people to prepare a mandate for such a group.

Job Priorities (Jeff Templon)

Mainly what was reported to MB the previous day so I won't repeat. Got agreement from most TIs to deploy this by the end of March so we should have some progress to report to April meeting.

Access Control for Storage (Maarten Litmaath)

Maarten had investigated how VOMS roles/groups could be used to control creation of, and access to, files in the various storage systems of interest to WLCG. In summary DPM and StoRM have full support now, dCache has significant support, Castor has minimal support, and BestMan (DRM) has none. We cannot expect grid wide consistent VOMS-ACL support this year for files or space tokens.



Accounting (Dave Kant)

~~Dave reported that accounting by Primary FQAN (the same as used by Job Priorities) has been deployed in APEL but to work correctly requires a patch which is currently in certification. While the UserDN information is encrypted the FQAN is currently not. While it was foreseen that VOs might eventually want to conceal their work patterns by group it was agreed that there was no reason to encrypt it just now as this would delay deployment.~~

Detailed minutes

~~These minutes do not capture everything discussed and are somewhat raw in places as they were taken alongside chairing the meeting.~~

1. Introduction (John Gordon/Jeremy Coles on behalf of John Gordon)

~~Feedback was requested on the proposed schedule of meeting in 2008. Jeff wondered if there was any possibility of having the meetings closer to the weekends.~~

~~There was some discussion on whether the SAM tests a SAM BDII pointed to by WNs. UK experience suggests that there is an issue in this area. Michel believed that LAL do not see any problems in this area. A ticket raised to the SAM developers led to a response that they hope to improve the BDII they use. The topic was touched again later in the meeting by Greig Cowan.~~

~~John welcomed everyone to his first GDB as chairman. Due to this new role he announced that the new UK representative at the meeting would be Jeremy Coles. He asked to be informed of any other changes in representation.~~

~~The meeting moved on to look at future meeting dates. If anyone would like to volunteer to host a GDB John asked them to get in contact with him. For the Prague meeting the pre GDB will be based on items of interest from the Czech Republic and the neighbouring region and will not be just a technical meeting. The plan is for the GDB to finish at 16:00 on Wednesday 4th April.~~

~~Michel Jouvin asked if there will also be any pre GDB discussions ahead of the main meeting on the Wednesday itself. John said nothing is planned for this slot at the moment.~~

~~The Vancouver meeting is scheduled for 31st August at Triumf. The WLCG workshop is then 1st 2nd September. There will also be an MB the evening before the GDB since it is at the Tier 1.~~



~~Action 0603 1: John to check MB time with Les Robertson and agree intention at the MB.~~

~~Since the last meeting John has consulted countries/representatives about Tier 2 representation at the GDB. The proposals put forward were:~~

- ~~1) Invite all countries with a Tier 1 to nominate a second attendee to attend on behalf of their Tier 2s.~~
- ~~2) Progress the suggestion of an individual with the task of consulting and engaging the Tier 2s. (A Tier 2 Tsar)~~

~~The consultation will continue. It is likely that different representation models will suit different countries depending on the level of engagement between Tier 1s and Tier 2s and whether a given country has a Tier 1.~~

~~There are a number of open GDB actions related to accounting. Issues with normalisation issues etc. are still to be tackled. John will write a paper comparing the manual accounts for 2006 with the APEL data. He will circulate this to T1s. Tier 2 accounting will be looked at from April. Everyone is encouraged to react to the existing actions!~~

~~Gilbert noted that some sites are publishing both grid and non grid work into APEL. It is useful for the experiments to know the grid vs non grid proportions.~~

~~Kors reminded the meeting that there is still a need to follow up on some policy documents in this area. Action 0703 2 John to follow up on accounting policy documents~~

~~2. SL4 status and plans~~Quattor (Markus SchulzMichel Jouvin)

~~Michel gave an overview of why Quattor was needed and the history/progress since 2004. He pointed out that the information used for option setting of the components is to be dropped (i.e. the xml) – responsibility for decisions here now rests with the Grid Deployment group (slide 17). However, YAIM only implements a subset of options. The developers should provide a description of components plus a list of valid option choices.~~

~~Jeff: Is this not a question about the decision to stop using python. You are not using python in Quattor. You only need the descriptions. Ian: Agreed this is something that can be taken back to the developers in the form of requested documentation. Action 0704-1: Michel to update slide 17 and formulate a request for documentation in this area. This can then be given to the TCG who can take up the matter. Perhaps a standard template can be used to ensure the information in the documentation is what is needed.~~

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Michel asked whether the Quattor mandate should include an element of dissemination. There were no strong thoughts on this from GDB members.

The update given was similar to that presented to the MB yesterday. For one week now successful UI builds have been possible. Still a lot of work required to get a fully working versions of the UI and WN middleware. There is also significant work needed to “clean” the code. Modifications of YAIM (making it more component based) are in progress.

Jeremy asked about the plans in respect of the LCG RB and gLite WMS. Tony added that support for SL3 ends in October. Markus replied that there were currently no plans to port the LCG RB and that such porting would slow down the move to software which has a longer term future. In addition the added pressure to make the WMS and gLite CE work may be useful. Ian confirmed that if there was a decision to port the LCG RB then it is not clear from where the resources/effort would come. The CE is more critical.

John: Which do we want to rely on for data taking? Are there any other components in this situation and can we set a deadline for decisions in this area? In data management for example. Markus: Work is competing with requirements for data management. The list of functional improvements currently competes with work on hardening. Jamie: I am nervous with a date in October. It is close to the accelerator start date. Markus: We will not have SRM... and everything on 64 bit in the summer. Jamie: Should we not take the accelerator schedule into account? Markus: The discussion on the CE needs to be started to allow time after any decision is made. Ian: We need to do an assessment in the MB or GDB twice a month. A recent (MB) document mentioned the performance criteria required by the middle of the year and also for the end of the year, and also for the WMS (which was pushed back to INFN) the criteria for burning this into certification. We need to follow up every other week otherwise the developers feel no pressure.

John: One month ago the experiments were unhappy with the timescales. Is this still the case? Matthias: ... what about schedule/milestone dates? Markus: For slide 9, the times are from today. Matthias: The planning all seems effort based and not milestone based. Markus mentioned that the developers are in a close loop and meeting with others (like SA3) twice per week to track progress. Ian: They are not here having to defend themselves. Although Claudio sits in the TCG, the developers are generally shielded. John: Then you have the backing of this meeting to re-iterate the feeling of this meeting to Claudio and the developers. Jeff: I suggest you invite Bob Jones to participate in this discussion!

Markus continued with the second part of his presentation on the 64 bit challenge.

John: Who has deployed the interim solution and are the experiments happy or unhappy with it? Markus: About 9 sites are publishing SL4 [a comment was made that not all sites are publishing correctly so there may be 12 sites running on SL4]. Matthias: CMS are a



~~little unhappy but we can not force sites to use this interim solution. Markus: There is an update on the PPS. John: I know from the UK response that sites are not happy with multiple moves to SL4. Ian: The tarball was available for some time. John: But it uses different installation methods to what many sites have now adopted. Michel: We [LAL] are running our configuration for over 1 year now. No problems from the experiment side. Main issues are with the middleware. The main problem with VO software was running on 64 bit machines. We can run the CE with some 32 bit machines. Markus: It is inevitable with users and sites having a mixture with various groups moving forward at different rates. John: The grid should be adaptable. The problems come with the data being at a site that does/does not upgrade as needed by the users.~~

~~Gonzalo: Is this the SL3 middleware on SL4? Markus: Yes, packaged in two ways — in tarballs and rpms. For a while the rpm package had a problem with updates but this is now fixed and the solution is being tested on the PPS. Gonzalo: So if a site goes to this mixed state does it need to setup special software repositories for the experiments? Markus: We need to come up with a correct convention to publish this in the information system. Jeff: What about running with other Linux variants? Markus: Use the libraries widely published by LAL~~

~~3. BDII — the EGEE Information SystemFilesystems (Michel JouvinLawrence Field)~~

~~Michel gave a second presentation, this time on a IHEPCCC Filesystems working group that has been setup and is to report at HEPiX.~~

~~Jeremy asked for feedback to which Dario noted that there were no users in the group doing the assessment, much like happened with the Grid and many other groups. Michel thought there would be no problems adding new members – the group uses a HEP mailing list. It would be useful for a normal user to join and add their experiences. Jeff: I'm surprised at Dario's comment as most groups are dominated by users. Take the baseline services group for example. We need to make sure both sysadmins and users are represented.~~

~~4. SL4 Status (Laurence Field)~~

~~Laurence gave a remote presentation over VRVS.~~

~~Simon: When will we get 64-bit gLite on SL4? Laurence: It is difficult to give a time for that. Simon: When you say 80% build in your slides, what are the reasons for failing? Laurence: Often packages are missing.~~

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Fabio: Is there any time after which we do not deploy? Ian: There is no deadline, we have to deploy and the question is how soon can we make it ready. Once it is ready then deploying is up to the sites.

Jeremy: Information has been collected by the EGEE operations meeting group on SL4 needs across sites. Do you know how this information is being used? Laurence: No!

5. CASTOR (Tony Cass)

Tony reviewed the status of CASTOR pointing out that performance in many areas was found to be good.

Jeff: Slide 8. Why not use ETICS? Tony: We have moved Lemon already so we could do it this. Jeff: Slide 10. Where does the limit come from – use of sockets? Is the problem with rootd and not xrootd? Tony: Yes – rfiio and rootd.

Jeff: In the summary CASTOR review the success/failure depended on the DB architecture and the scale in 2009. Where are we now? Tony: In the review there were some issues with the DB and hardware, but there is no question about whether Oracle is used. Jeff: Based on the DB? Tony: The transaction rate could raise and lead to instabilities. Trying to do more in this area. Similar things were seen in the SRM interface. Things are changing rapidly and that will be followed by tuning of the scheduler to balance user needs. At the moment we are waiting for the plug-in.

Simon: I have a Tier-1 concern. At the moment the T0 has problems too. What should we do. In what ways will he T1 be supported? Tony: CASTOR (or HPSS, dCache etc) at remote sites is a requirement of the experiments. CASTOR is not packaged like IBM products. If a lot of effort is spent with little advancement then CERN can provide input as happened at RAL and CNAF and PIC. ASGC working on remote configure setup, network configuration and domains will face similar problems to the others. Simon: And if there is no progress? Tony: The CASTOR team will help but as 3rd level support. Simon: Do you have contingency planning? Tony: Yes and no. Basic list functions – no. But even if it is inefficient T0/T1 transfers can use dedicated instances. But then how to size the tape layer? ... we also have the Twiki and any issues that come up can be and are logged in Savannah.

Jeremy asked Dario a question on behalf of John Gordon: Are you (ATLAS) happy that the ATLAS problems as described are what you are experiencing and that work is in progress to fix them? Dario replied that there has been much progress on ATLAS issues recently so no need to have further discussion on this at the moment.

Questions were received at various points during the talk... John: My impression was that most regions in EGEE have a top level BDH. The question is how to get resources pointing (leg utils and RBs etc) at them. Is this for regional coordination? Steve Traylen:

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We asked the sites to do this recently. User's select their own top level BDII so they are more difficult to change... ATLAS mentioned that they changed their approach last week —i.e. away from the default configuration on UIs and batch workers. Users can override default settings. One reason users sometimes select alternatives is that some top level BDHs contain extra sites.

Kors: ATLAS checks the top level BDII in region and then goes to the CERN BDII. Users try the default setting first. Fabio: Are all regional top level BDHs supposed to refresh from same source? Lawrence: Yes—from the FCR. This is just a web page so should scale—it only needs to support the number of top level BDHs (about 60).

John: Ian put forward a document suggesting 200,000 jobs per day per large experiment by the end of the year. Can it cope? Lawrence: I looked at the accounting yesterday. The problem is the clients all querying the same BDII. With deployment changes we can meet these requirements. Ian: Is there something we can do in the next few months to split the load between the static and dynamic information? Lawrence: It depends on priority and effort but could be done. For queries the work needs to be done on the client side so we need to rethink the site level BDII. John: Change clients to talk to site BDHs? Query more locally? Ian: Like a squid cache. John: And this helps because in the LHCb example many of the queries are for static information like the port for gridFTP. Lawrence: And the priority of slapd is so low that when the CE gets loaded it [slapd] gets killed. John: Regional BDHs also get overloaded. Ian: So we should cache information at sites so queries are not going toJohn: So you have a top level and bottom level querying mechanism, will there be a timing issue?

Olivier van der Aa: Is the gLite CE still running the MDS? Lawrence: Yes, we would like to use the BDII. John: What is the action plan? Lawrence: On slide 18—we have started already on the short term issue. Medium term will start soon. Ian: Some items are done—caching for example... leg utils and gfal changes will be done after SRM 2.2 changes. Kors: Is there any region without a top level BDII? Steve: No. But some countries under CERN, like Canada can have a large number of sites.

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~~VOMS~~

~~4.6. Job priorities Security Policies (Jeff Templon Dave Kelsey)~~

~~There is a new issue (identified by Bob Jones) to be taken into account with the Grid Site Security Policy concerning Intellectual Property Rights. Wording will be incorporated to deal with this issue. After that the document will be ready for approval. Other policy~~

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LCG Grid Deployment Board Meeting



documents are coming: Logged information, Site operations, Audit and VO policy related.

Jeff: VOs at CERN link to the HR DB. Is there concern about how much information they suck out? Dave: No, but we should make absolutely sure. Jeff: You can do this by asking for a dump of the DB.

Jeff: Some experiment monitoring tools provide things like a giant qstat query and publish it. Dave: This is an operational issue. Jeff: What about application based data? Running tool Y at a site allows a 3rd party to publish.... Dave: Yes, this should be covered. Jeff: And are pilot jobs covered in the VO policy? Dave: The VO specifies the services it needs as a bullet. Jeff: Does the document comment on the definition of "The Grid"? Dave: Each cover note will explain this for the relevant infrastructure.

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Jeremy: There are many policies coming. Do you have pointers for the latest set of which people should be aware? Dave: We have a page for each grid.

Jeff: When someone signs do you track the version including page numbers?

Dave: When we want to change something centrally we engage in a site consultation process so they are aware of changes.

~~Jeff gave an update on progress in the job priorities area. He noted that some of the answers to questions about site setups had strange groups showing up in shares which indicate a country priority (e.g. /ATLAS/country). Fabio questioned what the final stage would be for this "temporary solution". John: This is a short term evaluation of a longer term solution. Jeff: I support what John said. We do not have guarantee this is a final and permanent solution. We are pushing this deployment to avoid mistakes made in the past, which is to design a complete solution before having wider experience. Does it do what is required? ATLAS was clear about the requirements. CMS were similar in their requests. LHCb and ALICE do not care so much (with their generic user ID approach). Frederico: It is not 100% irrelevant for ALICE. A small number of roles are needed but it is not on the critical path. Fabio: Is the CMS information available somewhere? Jamie: It is not known to me (ECM). Fabio: Then we need other roles enabled? Maarten: For the longer term we will probably need something different. There are many worries that this implementation will not scale at all. Do batch systems honour these shares....we needed a workaround for the most urgent issues.... Fabio: I just wanted to make sure this is understood. Jeff: I'm not convinced this will scale -- but this is a prototype.~~

~~Kors: This came out of the requirements we posed to solve a few problems like how to set user Monte Carlo with a lower priority than reconstruction. It solves incidents like that where a general user used many hours of the ATLAS T1 share.~~



~~Luca: CNAF deployed a few days ago. I spoke to the LSF plug in developer who confirmed it was working. [Jeff checked but could not see it]. Gonzalo: PIC are deploying the new information provider in the PPS? John: ASGC information system is setup but not publishing correctly. John: RAL has it implemented but not publishing – say 2 weeks. Ulrich: CERN were late in deploying because we were hit by scalability issues. We have shares in production already. We are not yet publishing but can do this quickly after some more checks on things that may not work. Fabio: What is the scale issue? Ulrich: It was with the plugin when there are 15,000 20,000 jobs in the queue. We needed to filter out local jobs. The new plug in provided by Jeff is 2-3 times faster. Fabio: What is this version and where is it!? Jeff: It is listed as an official patch (g Lite middleware contributed patch) and is now in certification and testing. There is no functionality difference just the way queries are done.~~

~~Jeff: Having just checked, INFN are not publishing but ASGC seem to have fixed some of their problems.~~

~~Action 0703-3: Jeff to send out link to latest patch.~~

~~5.7. Access control for storageJob Priorities (Maarten LitmaathJeff Templon)~~

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~~Maarten's-The gLite WMS is needed to match on VOviews. The views are being rolled out across the TIs. There were some questions on site status. Fabio maintained that IN2P3 was publishing but not correctly – as opposed to “not publishing” (semantics). They require more explanations.~~

~~Jeff: The generic script knows nothing about batch systems. The back end plugins tell me what jobs you have. Condor is just a dumb backend plugin. Condor-G is using a similar process for LCG RB matching. You need to look at VOviews and not CE-blocks. For Condor-G the collector finds the list of sites to submit to. The thing supplying the collector needs modifying. The LCG-RB has no development plans for reading VOviews.~~

~~It was asked if a mixture of jobs is supported. Jeff: The information publisher is still backwards compatible. Q: One queue for all VOs? Jeff: There is a need to migrate from experiment specific queues otherwise the job distribution is bad. Q: What is the recommendation? Jeff: What the experiments are doing in the area of WMS vs RB?~~

~~For ATLAS one group is using the gLite WMS but they are the minority. Ganaga jobs go via the RB. CMS: Production is via the RB. Some analysis parts are using WMS. ALICE: RB is used for production jobs. We are testing the gLite WMS – issue with VOMS proxy renewal. LHCb: mainly RB use. Testing WMS but have hit issues – 1) local scratch area, 2) proxy renewals and 3) connections with the file catalogues.~~



Claudio: WMS proxy renewal being tested. There is still an open issue – the libraries in the VOviews in WMS are not loaded correctly so it is not possible to correct use VOviews. Once this is fixed there will be a new version.

Jeff: We need to accept that in the short term the information system will expand with VOviews plus VO specific queues. This dual setup removes some of the pressure.

8. LCG Planning (Harry Renshall)

_____ New spreadsheets were shown where the available capacity is now replaced with the installed capacity. Tier-1s need to verify the figures. The figures show a need to ramp up in the 4th quarter, double by the 2nd quarter 2008.

_____ Jeremy: Is there now a calendar showing the experiment plans. Harry: In progress. Jeremy: Have you made any progress on the Tier-1 milestones? Harry: No that is still to be done.

_____ Dario: The ATLAS figures are for 4Q 2007 not 1Q 2008. Harry: To be available we expect them to install in the middle of this year. For 2007 the bare minimum in the 3rd quarter is 70% of the 2008 requirement to help with the ramp up planning. The figures are to “have available” by 1st July 2007 and 1st January 2008.

_____ Jeff: It would be useful if people did not keep indicating when sites should install hardware for it to be available and make adjustments for this. It would be good to see when the experiments want it and for others to trust sites to deliver otherwise nobody will believe the numbers. We have capacity available now which ATLAS is not using.

_____ Dario: Because the disks are full. Jeff: The change was a factor of 10 from the July figures. Harry: Scaling up in 1-year is difficult. Jeff: Don’t we need mid-term tables – numbers are for 1st July 2007 and 1st April 2008 with no guide between them. Harry: From April stable running is expected so then there is no need for a 3 month view. Jeff: What about the upgrade capacity from July to April? Harry: Waiting for ATLAS numbers. Likely to be a 4Q change.

9. Storage Management And Accounting (Greig Cowan)

There were questions about the meaning of used space and how double counting occurred. Greig: When two or more VOs share a pool disk then the space used/available on that disk is reported the same for all the VOs. Michel: Can you not collect information per VO? Greig: You can by querying the database where the information exists – at the moment the load for this is not too high but it might become an issue. Jeff: Could use a standard information provider.

Greig requested sites to check the consistency of the accounting information being captured.

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Tony: Why dCache v1.8? Greig: No GIP is available for v2.2, there is a patch (new plugin) for DPM. Tony: I do not understand why the space query depends on this... space is setup as described by the GSSD. If files in used space then automatically there is no space token on srm-get.

Michel: On the SAM issues, it looks like local configuration problems. GRIF does not see these errors. The SE and SRM tests run as jobs on the WNs.

10. Operational Issues for Production Storage (Don Petravick)

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Don was unable to join the meeting due to VRVS difficulties. talk contained the background status and some revealing questions. On slide 4 he mentioned that Grid wide consistent VOMS ACL support is not [expected] for this year. How much [of the functionality] will be required for next year? Can we survive with what we have?

Maarten: At present, only primary FQANs are looked at. John: Compare this with unix where the file is owned by a unix group attached to your shell. But when reading access is based on any of which you are a member....Maarten: It uses the primary group ID unless the directory has a secondary group ID, in which case that is inherited. The ACL says who is allowed to do it but ... Jean-Philippe: For the permission to create a file the primary group and secondary groups are used. For directories, then it is either yours or the parent. For space tokens or namespace, DPM checks all primary and secondary groups. We do not have space tokens—files are in the space where placed at put time. For reading only permissions in the namespace are checked.

Kors: Is there a hierarchy? Can an admin remove files from say the Higgs group. JP: The permission to remove is from the namespace. So for “Group Higgs” only people in that group can remove the file. Maarten: Is it a problem to have ATLAS admins to be a member of all groups? Kors: So, it is impossible for a general Higgs user to write in the production area? JP: Yes by default

The talk continued onto service priorities—privileged groups/roles for QoS, higher bandwidth—and matters such as quotas not being an SRM feature. Maarten was asked if he could circulate the report mentioned on slide 7, he said that Flavia would be forwarding it to the list.

John: I would like to know the experiment requirements—can you work with what is available now? Maarten: There is a monitoring subgroup looking at what is missing too. They should have some interaction. Jeff: Do we define the semantics of glue such that it publishes information or move to an accounting sensor on the SE? This needs a decision.



Maarten: There has been a lot of discussion. We thought we had allowed for these things to be published by the schema. We can do an LCG schema addition but this may create more trouble than it solves and then it is better to have dedicated sensors.

Maria Dimou: A generic attribute was requested to give priority on transfers for VOMS aware services. It is to be used in one case to identify the path to the storage. We have struggled with getting the requirements in this area. The implementation is promised for March. Maarten: We may use generic attributes to implement some of the things discussed. John: We will have a discussion after the third talk.

Kors: Slides 2 and 3 show things we can use. No timescale is given for the others. Maarten: This year we can forget about consistent ACL VOMS management. It is not unthinkable that it could even take another year. To get an impression, how nasty would it be if had to wait for availability everywhere? DPM is fine, but the T1s will not have certain features for a while. JP: Different SEs will not support ACLs for example. For this year we provide a service to replicate ACLs from one SE to another.

6.11.Accounting Using VOMS roles and groups
Coordination (Dave Kelsey – for John Gordonant)

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The matter raised was really about the mandate for the future VOMS group. Claudio asked why this coordination was needed, he was not aware of any issues in this area. Ian: As you said this is not a problem with VOMS but recognition of the need for a new coordination group to deal with issues between VOMS and VOMRS as they arise.

Several people questioned the wording of point 2 in the mandate, especially the use of "... tailor...". Oxana observed that it was not as generic as they other points. Ian agree to talk to Maria after the meeting

Action 0704-2: Ian to follow up on VOMS coordination group mandate wording with Maria Dimou

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POSTSCRIPT: Jeremy presented some meeting summary slides along with some postscript slides from John Gordon. John had asked the question "Are any topics that people would like covered at future meetings?" Jeff: A report on the CE situation would be useful.

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Encrypted data is now implemented at FZK and RAL

John: In Maarten's talk, there were things in the glue schema about who was allowed access to storage space. Can that be used? Dave: Yes we would extract it. John: Into something like a Tier 2 tree view? Dave: I need to look into it.



Ian: This issue of encrypting the FQAN. Has anyone posited this as a problem that needs to be solved? Is there a requirement for doing this? John: It is up to the experiments. The information can be used to identify individuals. Also this would show how much CPU individual physics groups are doing. When will you [the experiments] be worried? Is it a requirement at all? Luca: It could be an FQAN for only one user! Maria: Everyone understands, it was never said the user DN itself should not be public. Ian: The role group part. Maria: In VOMS today the information is viewable! Ian: From the FQAN can you determine the user? Is it a real risk? Do we want to get stuck on this? If worried then we will need to encrypt. John: nobody wants it short term. Maarten: Probably in the longer term we will want to encrypt.

Jeff: If it is implemented it is important to have the full chain whether encrypted or not. There is proliferation of groups and it will be unpredictable what a first FQAN will be. The APEL system, LCMAPS, gPlasma and DPM will all interpret the outcome slightly differently. LCMAPS uses the first group but wild carding is also possible. DPM starts with the primary and steps through the FQANs until it matches. There are different frameworks for matching so the outcome is arbitrary. Maarten: How can APEL then tell anything at all? It has to be the primary! Jeff: It is obvious to me need to use the same mapping route. John: We need VOMS use cases that have to specify the role they want to take. I want to run this job in role of production manager. It is what the user specifies. The middleware should not be taking account of all possibilities

Jeff: If you provide a list of different FQANs the request may come into a site where there is an exact match on the primary one. At a second site there is not an exact match. Some things have wild cards that will match /ATLAS/*. Storage may look at the second or third FQANs and come up with different results.

Discussion:

Maarten: It is important sites do this mapping. Users should not be able to shop around if there is not an exact match. In LCMAPS, if it can not be mapped then a fatal error results. We should require other such matching mechanisms to have the same result. JP: For permissions to have correct ownership it must consider all primary and secondary FQANs. Accounting must only be done on the primary group. Permissions must be done using all FQANs.

John: How is the situation viewed by the experiments? Lat: We have a problem with proxy renewal but this is not really VOMS. Maarten: It is a bug being fixed. Stephen (ATLAS): We have a secondary groups issue much of the time. John: Secondary groups here means those you are a member of but not using. Ian: You are perhaps referring to DPM which supports VOMS but not secondary groups which is in a new version. John: This is implementing ACLs across the site. Jeff: It is also a user education issue. Writing alone is not enough, the user also needs to turn it on when using a proxy. JP: Secondary groups are all FQANs except the first. Nick (LHCb): We want glexec so we can select priorities.



~~John: Back to the ATLAS issue. There is no public explanation for a third dimension/view covering the funding agency. What is the use case? Stephen: I think this came up in conversation with French members where they request resources to be set aside. Site resources are not all pledged in MoU and they want to set some aside for specific users. Maria: Attributes were introduced to represent this dimension. It was a surprise but implemented. The problem is how it will work given such a vague requirement. John: The attribute is a random string that can be attached to an individual and this is persistent when a VOMS proxy is obtained. Gilbert: This dimension may also be a physics group — for example for a physics conference. John: We can not do “French and Higgs Group” scheduling but can deal with “French Higgs group”. Maria: LHCB wanted it [general VOMS attribute] to associate the user DN with their AFS login ID ... after this other VOs were asked if they would use it. Then came nine months of silence. Now everybody wants it but for different reasons. CMS want to use it to give access to specific web pages, perhaps ALICE do not want anything. John: How do you use VOMS proxy on the web? Maria: ... Stephen: A Tier 2 site also asked for priority for their users. John: Are multiple attributes allowed? Maria: Just one — that can have different parameters for each VO. Jeff: This underlies the importance of what I was saying. We need one implementation. Tacking on attributes may not be implemented outside a given region.... Kors: It is important to get something out with basic functionality to test — that is — prototype early. Maarten: Most users will use one VOMS proxy, it is a sparse matrix. Most users do not have Admin needs. There may be 20 groups but any individual may be in 2 perhaps.~~

~~John: Is there still space for a coordination group. There was an action for a group to come up with a new mandate.~~

~~Action 0703-4 John Gordon to follow up on a VOMS coordination group mandate.~~

~~John: Are we happy? The TCG is well defined but missing Nordugrid and OSG etc. Are the experiments happy that all things are being fed through? The TCG is more about setting priorities but does not commission work too.... Ian: It does!~~

~~Niek: The requirements from the GDB could be useful expressed directly to the TCG. John: How do we take this forward. Set up a sub group? Ian: The issue here is that there are different people in the TCG and GDB representing the same group, so the two see different priorities based on the personal input. It is good to see the GDB requirements but then we need to avoid the TCG experiment representatives coming up with different priorities. John: How do we formally take this forward? There are no volunteers to setup sub group. Maria: At a workshop last week the smaller VOs did not know about the TCG as being the place to submit requirements. John: The meeting here is essentially for WLCG stakeholders, it is not a GDB for everyone. Ian: NA4 is setup for smaller VOs — Cal is vocal in the TCG about opinions expressed to him. John: Maria, perhaps this is feedback for Cal.~~



Action 0703-5: John to refer Cal to Maria concerning the representation of some smaller VOs.

~~7.GDB March 07 News of reporting and resource tables (Harry Renshall)~~

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~~There was a brief discussion about using the Tape1Disk0 terminology in respect of ALICE. Harry agreed to change slide 3 wording. [His point was that ALICE manage tape space and that impacts disk but they do not manage the disk —point 3].~~

~~For the ATLAS tests: RAL — has not said when it will be ready. It is currently testing CASTOR with ATLAS. ASGC will be in but taken out for a power upgrade.~~

~~Gonzalo: PIC disk put in place gets filled quickly. It is now at 99% used.~~

~~On the CMS part:~~

~~Fabio: Is it the responsibilities of sites to clean tapes?~~

~~Harry: The experiments will not recycle tapes so this is up to the sites. They will clean the catalogues but I am not sure about disk.~~

~~Gilbert: Not all T2s have signed the MoU. Can we get a clear view on those that have yet to sign?~~

~~8.Grid Storage System Deployment (GSSD) (Maarten)~~

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~~There will be a continuation of the storage classes working group with an enlarged scope.~~

~~John's postscript on topics for future meetings:~~

- ~~-We hope SL4 is not an issue next time but would like to hear that —status report.~~
- ~~-Taken an action to review working groups. An update on the status of the Quattor working group is overdue.~~
- ~~-Progress towards SRM 2.2~~
- ~~-Progress on job priorities~~
- ~~-Mechanism for GDB input to reach the TCG/developers~~

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~~9.12. AOB~~

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LCG Grid Deployment Board Meeting



There was no other business.

MEETING CLOSED AT 16:0016:50

Actions:

Item No.	Description	Owner	Status
0602-4	Phrase the requirement on how to use policies in the WLMS	Cal Loomis	Open
0603-3	Follow up to ensure all sites in country are publishing accounting data or contact John Gordon with issues preventing this happening	Country representatives	Open
0604-6	Drive forward discussions on the VOMS and protocol issues	Ian Bird	Open
0605-3	Provide feedback (with reasons) to Dave Kelsey or Kors Bos on whether the security policy presented by Dave is acceptable.	All	Open
0605-4	Tier-1s to report back to GDB on what proportion of their current WLCG work is not reported/accounted within WLCG	Tier-1 managers	Open
0606-7	Take up and discuss technical solutions for removing shared credentials from the VO boxes	Markus Schulz	Open
0607-9	Ensure the default YAIM is properly configuring lcas lcms for the sgm accounts (and that it works!)	Jeff Templon	Open
0609-1	Follow up on NDGF security policy position	Les Robertson	Open
0609-2	Look up statistics for automated on-call system and send information to GDB	Bruce Gibbard	Open
0609-6	Send storage type sampling script to John Gordon.	Jeff Templon	Open
0609-7	Move accounting to work in decimal units	Tier-1s/sites	Open
0610-5	Provide more detail on who is supposed to sign the site policy for each "organisation" mentioned in the security policy document	Dave Kelsey	Open
0610-6	Send the site operational procedures policy to the list again for comment ahead of approval and ensure lawyers at sites have a chance to review the document	Dave Kelsey	Open
0701-3	Check the CPU and storage accounting figures being published for the site	Sites	Open
0702-3	Discuss the future of a VOMRS-VOMS task force and consider possible mandates for the group	Dave Kelsey, Maria Dimou et. al.	Open
0702-4	Check Harry' resource tables and understand what they mean	Tier-1 sites	Open
0703-1	Check the Victoria MB time with Les Robertson and agree intention at the MB	John Gordon	Open
0703-2	Follow up on accounting policy documents	John Gordon	Open
0703-3	Send out a link to the latest patch	Jeff Templon	Open
0703-4	Follow up on the VOMS coordination group mandate	John Gordon	Open
0703-5	Refer Cal Loomis to Marian Dimou concerning the representation of smaller VO requirements in TCG discussions	John Gordon	Open

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LCG Grid Deployment Board Meeting



Item No.	Description	Owner	Status
0704-1	Update slide 17 of presentation and formulate a request for documentation to be provided by the middleware developers to explain options with components (needed by Quattor maintainers)	Michel Jouvin	Open
0704-2	Follow up on VOMS coordination group mandate wording with Maria Dimou	Ian Bird	Done

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List of Attendees

X means attended
V means attended via VRVS

Country	Member		Deputy	
Austria	Dietmar Kuhn	X	-	
Canada	M Vetterli		R Tafireout	X
Czech Republic	Milos Lokajicek		Jiri Kosina	
Denmark	John Renner Hansen		Anders Waananen	
Finland	Klaus Lindberg		Jukka Klem	X
France	Fabio Hernandez		Dominique Boutigny	
Germany	Klaus-Peter Mickel		Holger Marten	
			Jos van Wezel	
Hungary	Gyorgy Vesztegombi	X	Dezso Horvath	
India	P.S Dhokne		B. Vinod Kumar	
Israel	Lorne Levinson	V	-	
Italy	Mirco Mazzucato		Luciano Gaido	
Japan	Hiroshi Sakamoto		Tatsuo Kawamoto	
Netherlands	Jeff Templon	X	Ron Trompert	
Norway	Jacko Koster		Farid Ould-Saada	
Pakistan	Hafeez Hoorani		-	
Poland	Ryszard Gokieli	V	Jan Krolikowski	
Portugal	Gaspar Barreira		Jorge Gomes	
Russia	Alexander Kryukov		Vladimir Korenkov	
Spain	Manuel Delfino		Xavier Espinal	
Sweden	Niclas Andersson		Tord Ekelef	
Switzerland	Christoph Grab	X	Marie-Christine Sawley	
Taiwan	Simon Lin		Di Qing	X
United Kingdom	John Gordon		Jeremy Coles	
United States	Ruth Pordes		Bruce Gibbard	
GERN	Tony Cass	X	-	

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LCG Grid Deployment Board Meeting



Country	Member		Deputy	
ALICE	Alberto Masoni	X	Yves Schutz	
-	Federico Garminati	X		
ATLAS	Gilbert Poulard	X	Laura Perini	
-	Dario Barberis		-	
CMS	Lothar Bauerdick		Tony Wildish	
-	Stefano Belforte	X		
LHCb	Ricardo Graciani		Andrei Tsaregorodstev	
-	Nick Brook	√	-	
Project Leader	Les Robertson		-	
GDB Chair	Kors Bos	X	-	
GDB Secretary	Jeremy Coles	X	-	
Grid Deployment Mgr	Ian Bird	X	Markus Schulz	X
Fabric Manager	Bernd Panzer		-	
Application Manager	Pete Mato Vila			
Security WG	David Kelsey		-	
Quatter WG	Charles Loomis			
Networking WG	David Foster	X		
Planning Officer	Alberto Aimar	X		

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Country	Member	Present?	Deputy or Technical Assistant	
-	-	-	-	-
Austria	Dietmar Kuhn	-	-	-
Canada	Reda Tafirout	-	Mike Vetterli	-
Czech Republic	Milos Lokajicek	X	-	-
Denmark	John Renner Hansen	-	Anders Waananen	-
Finland	Klaus Lindberg	-	Jukka Klem	-
France	Fabio Hernandez	X	Dominique Boutigny	-
Germany	Klaus-Peter Mickel	-	Holger Marten, Jos van Wezel	X
Hungary	Gyorgy Vesztergombi	X	Dezso Horvath	-
India	P.S Dhekne	-	-	-
Israel	Lorne Levinson	-	-	-
Italy	Mirco Mazzucato	-	Luciano Gaido	-
Japan	Hiroshi Sakamoto	-	Tatsuo Kawamoto	-
Netherlands	Jeff Templon	X	Ron Trompert	-
Norway	Jacko Koster	-	Farid Ould-Saada	-
Pakistan	Hafeez Hoorani	-	-	-
Poland	Ryszard Gokieli	-	Jan Krolikowski	-
Portugal	Gaspar Barreira	-	Jorge Gomes	-
Romania	Mihnea Dulea	-	-	-
Russia	Alexander Kryukov	-	Vladimir Korenkov	-

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LCG Grid Deployment Board Meeting



Spain	Jose Hernandez	-	Xavi Espinal	-
Sweden	Leif Nixon	X	Tord Ekelof	-
Switzerland	Christoph Grab	-	Allan Clark, Marie-Christine Sawley	-
Taiwan	Simon Lin	X	Di Qing	-
United Kingdom	Jeremy Coles	X	John Gordon	-
United States	Ruth Pordes	-	Michael Ernst	-
CERN	Tony Cass	X	-	-
ALICE	Alberto Masoni	-	Yves Schutz	-
	Federico Carminati	X	-	-
ATLAS	Kors Bos	-	Stephen Gowdy	X
	Dario Barberis	-	-	-
CMS	Matthias Kasemann	X	Patricia McBride	-
LHCb	Ricardo Graciani	V	Andrei Tsaregorodstev	-
	Nick Brook	V	-	-
Project Leader	Les Robertson	-	-	-
GDB Chair	John Gordon	-	-	-
GDB Secretary	Jeremy Coles	X	-	-
Grid Deployment Mgr	Ian Bird	V	Markus Schulz	-
Fabric Manager	Bernd Panzer	-	-	-
Application Manager	Pere Mato Vila	-	-	-
Security WG	David Kelsey	X	-	-
Quattor WG	Charles Loomis	-	-	-
Networking WG	David Foster	-	-	-
Planning Officer	Alberto Aimar	X	-	-

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Others present

[Michel Jouvin](#) – LAL
[Oxana Smirnova](#) -NDGF
[Grieg Cowan](#) – GridPP
[Jan Svec](#) – Prague
[Tomas Kouba](#) – Prague
[Jiri Chudoba](#) – Prague

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Also present in the meeting room:

[Steve Traylen](#) (CERN)
[Matthias Kasemann](#) (CMS/CERN)
[Michel Jouvin](#) (France)



LCG Grid Deployment Board Meeting

GDB

~~Oliver Keeble (CERN)~~

~~Jamie Shiers (CERN)~~

~~Stephen Gowdy (ATLAS/SLAC)~~

~~J Knobloch (CERN)~~

~~Luca del'Agello (INFN CNAF)~~

~~Gonzalo Merino (PIC)~~

~~Harry Renshall (CERN)~~

~~Ulrich Schwickerath (CERN)~~

~~T Kleinwort (CERN)~~

~~Fabio Hernandez (CC-IN2P3)~~

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Other on VRVS

~~Jose Hernandez — Madrid~~

~~Frederique Chollet — Ancecy~~

~~Marek Domaraeky — Bern~~

~~Olivier van der Aa — London~~

~~David Colling — London~~

~~Dave Kant — RAL~~

~~Pete Gronbech — Oxford~~

~~Gabriel Stocica~~

~~Lief Nixon — Linkoping~~

~~Luca Dell'Agello~~

~~F Chollet~~

~~Richard Gokieli~~

~~Juergen Knobloch~~

~~Harry Renshall~~

~~Lukas Fiala~~

Additionally on VRVS PM:

~~Pierre Girard — Lyon~~

~~Paul Gelissen — Bern~~

~~Jos Van Wezel — Karlsruhe~~

~~Les Robertson — CERN~~

~~Elizabeth Sexton Kennedy — Switzerland~~

~~Helene Cordier (Lyon)~~

~~Owen Synge (DESY)~~

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