LHC Computing Grid Project
Grid Deployment Board
Notes on the GDB meeting 10-03-2003

Alberto Masoni, 10-03- 2003

COUNTRY	MEMBER	Part.	DEPUTY	Part.
Austria	Dietmar Kuhn	Yes		
Canada	Randy Sobie	no	Robert McPherson	no
Czech Republic	Milos Lokajicek	Yes		
Denmark	John Renner Hansen	no	Anders Waananen	no
Finland	Klaus Lindberg	no		
France	Denis Linglin	no	Thomas. Kachelhoffer	no
Germany	Klaus-Peter Mickel	yes	Holger Marten	no
Hungary	Andras Benczur	no		
India	D.D.Bhawalkar	no	P.S Dhekne	no
Italy	Federico Ruggieri	No	Luciano Gaido	Yes
Japan	Hiroshi Sakamoto	yes	Tatsuo Kawamoto	
Netherlands	Kors Bos	No	Arjen Van Rijn	
Poland	Michal Turala	No	Jan Krolikowski	no
Portugal	Gaspar Barreira	no	J. Gomes	yes
Russia	Slava Ilyin	No		
Spain	Manuel Delfino	Yes (vrvs)		
Sweden	Anders Ynnerman	No		
Switzerland	Christoph Grab	No	Allan Clark, Marie-Christine Sawley	no
Taiwan	Simon Lin	Yes		
United Kingdom	John Gordon	Yes (vrvs)	Steve Lloyd	no
United States	Vicky White	Yes	Bruce Gibbach	no
CERN	Wolfgang von Rüden	No		
ALICE	Yves Schutz	no	Alberto Masoni	yes
	Federico Carminati	no		
ATLAS	Gilbert Poulard	Yes	Laura Perini	No
	Dario Barberis	yes		
CMS	Tony Wildish	no		
	David Stickland	Yes (vrvs)		
LHCb	Eric van Herwijnen	No		
	John Harvey	No		
Project Leader	Les Robertson	Yes		
GDB Chair	Mirco Mazzucato	Yes		
GDB Secretary	Alberto Masoni	Yes		
Grid Deployment Mgr	Ian Bird	Yes		
Fabric Manager	Bernd Panzer	No		
Appl. Manager	Torre Wenaus	No	Oxana Smirnova	No
Chief Tech. Officer	David Foster	yes		
SC2 Chair	Matthias Kasemann	No		

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Work Group Tech. Support	David Kelsey, Tony Cass	No		

Apologies received from: Kors Bos, Fabrizio Gagliardi (replaced by Erwin Laure), Michal Turala, Slava Ilyin, Anders Ynnerman.

Minutes of previous meeting and communications

The minutes of the previous meeting were approved

2003 meetings

The schedule for 2003 (proposed at the last meeting) was confirmed

- 10/4 CERN 11-18
- 8/5 CERN 11-18
- 10/6
- 8/7 (RAL)
    - the meeting will be at Coseners House (network connection is ensured) a visit to RAL Tier-1 could be arranged
- 9/9
- 9/10 (Chicago connected to GGF)
- 10/11
- 2/12

Grid Technology Area (GTA): Status & Perspectives - D. Foster (see slides)

The talk covered the current activities in the Grid Technology Area, gave a view of the status of grid technology at the end of the Tokyo meeting of the Global Grid Forum, and finally provided an assessment of the impact that this technology will have on LCG-1 during 2003.

The staffing of this area has now been organised, with Massimo Lamanna joining in May and Kathrin Paschen (from FZK) joining at about the same time. Kathrin has just finished her PhD in computer science. The GTA will then have the breadth of expertise needed to carry out its roles of technology evaluation and assessment, and preparation of proposals for the direction to be followed in exploiting the technology.

The LCG technology baseline has been established with the acceptance of the WG1 report, and delivery of the components expected to be completed by the end of April. This baseline will evolve naturally during year as new components become available from EDG and VDT.

The next step for the GTA in preparing for the longer term is the preparation of an overall architecture for LCG, in collaboration with the experiments and grid community. At the same time, the Grid Applications Group (GAG), led by Federico Carminati, will establish the future requirements.

The GTA must track and understand the emerging grid technologies, including the OGSA work but also the products being designed by industry and other grid communities.

David's assessment of the state of the Globus OGSA release (Globus Toolkit 3 – GT3) is as follows. The "production" release is on track for July, but it is not yet clear to what extent it is fully "backward compatible" with Globus 2 (GT2). Only practical experience will tell, but an evaluation programme with the LHC experiments will not be practical before September.

Although there is considerable industrial activity, it is not yet clear when this will lead to products and what the functionality of these products will be.

His conclusion is that during 2003 we will have no more than GT2 functionality, and this system will have to serve as the basis for the stabilised service during the first half of 2004 – fairly primitive but nevertheless useful if we are not concerned with elegance and complexity. GT3 is likely to establish itself as the successor for base technology, but we should not expect to be using it for services before the second half of 2004.

There are two serious risks for LCG that arise from the current dependence on middleware developed by independently funded development projects. In the short term there are uncertainties over the level of support that can be expected when the current funding stops (as soon as the end of this year for EDG). In the longer term the LCG has no control over the priorities for developing the new functionality on which LCG will depend – at present there is no grid solution that we can live with beyond the end of 2004.

Grid Deployment Area - Status & Perspectives - Ian Bird (see slides)

The first LCG Pilot (LCG-0) has been released and is being installed on the CERN Pilot system, with RAL, CNAF and FNAL scheduled to join by the end of March. This is close to the original schedule. During April Taiwan and Karlsruhe are scheduled to join, with IN2P3, Moscow and Tokyo by the end of May. It has been agreed with the EDG project that CERN will reduce its participation in the EDG Applications Testbed and that the role of this testbed will be taken over by LCG-1 in the second half of the year.

The middleware for the July release will be delivered to LCG by the end of April. The EDG components will include RLS and R-GMA, but MDS will also be available. There is interest in this unified EDG and VDT software from other projects including Babar.

The basic testing framework has been delivered by the LCG testing team, and basic tests are being collected together. VDT and iVDGL have agreed to provide Globus and Condor tests, and GAG is mandated to provide tests for the HEP use cases.

LCG will participate in the European grid support centre initiative, along with the UK and Sweden. Within the LCG Deployment Area there are now two people preparing to provide systems support for the middleware.

Dave Kelsey (RAL) will lead the Security Group, dealing with security policy, strategy and planning. This will work closely with the Site Security Contacts team led by Dane Slow (FNAL).

A number of collaborative activities have been initiated, including 5 projects spawned by the Joint Technical Board of the HICB.

It is hoped that institutes will be found to take prime responsibility for three major activity areas: the grid operations centre, the support centre, security process definition and tool development.

Other effort required from institutes includes:

- additional members of the testing team, including a core group at an institute that can install and operate an extended certification testbed;
- development of packaging and configuration tools following the guidelines agreed with EDG and VDT;
- work on the GLUE schema development.

In addition to these activities, the deployment has the following open positions at CERN. It is hoped that candidates can be found for these using the funding available from INFN and FZK.

- 2 engineers for infrastructure and certification operations support;
- a VO administrator;
- 3 people for the Experiment Integration team.

The use of HEPIX was confirmed as the forum where the technical issues of fabric operation and systems implications of grid deployment will be discussed. Regional centres should try to send there the relevant technical people.

Review of WG5 draft report (User Support) – Klaus-Peter Mickel (see slides and report)

There was considerable discussion on the scope of the support that should be provided by an LCG support centre. The balanceof opinion favoured limiting the scope to the provision of a service for regional centre service staff and expert users, as well as acting as a second level support centre behind community (experiment) or regional centre user support facilities. There are, however, many possible complications and in many cases it will not be obvious how to discriminate between different type of problem. It will be necessary to define carefully appropriate interfaces for distributing and tracking the problems. An email discussion on this has been launched to continue discussion of this.

Other points that were agreed.

- The recommendation for three centres according to the time zones should be changed to "at least three centres" to cater for the uneven distribution of users.

- A number of further steps were recommended (see last slide) that were considered to be outside the scope of the mandate of the working group, being rather the job of the Support Centre itself when that is set up.

It was agreed that the Working Group should perform another round, updating the document on the basis of the received comments.

Regional Centres Status with respect to LCG-1

Presentations were made by CERN, FZK (GRIDKa) Germany, Czech Republic, CNAF Italy, RAL UK, Spain, US Centres. Ssee slides attached to the agenda.

Action Review

The changes in status are marked in **blue bold**.

Action	*Responsible*
The four WGs must issue final versions of their documents, two weeks to be finally approved by email **This was completed only by WG1. The reports of the other working groups were agreed to be final, but the chairs of the Wgs must provide a statement of the outstanding issues for the next GDB meeting.**	WG chairs/ secretaries
Proposal for the data storage and access model for LCG-1 – to be produced by end of March, following discussion with the appropriate experts, and including allocation of responsibilities for implementation. **The proposal will be presented at the April GDB.**	David Foster
Produce a description of the system architecture of LCG-1, including a model of the job execution services.	Ian Bird
Produce a statement of the scope and mandate of the LCG Operations Team, and identify the team members.	Ian Bird
Appoint a leader for an LCG Security Team, as recommended by WG3. **David Kelsey (RAL) has agreed to accept this job. Action closed.**	Les Robertson
Appoint a grid resource coordinator to negotiate planning of data challenges and regional centre capacity. **Bernd Panzer (CERN) has agreed to accept this job. Action closed.**	Les Robertson
Follow-on to Working Groups WG1 – Grid Technology Area Manager to propose and plan evolution of the middleware toolkit for LCG-1, in consultation with the GAG and STAG.	David Foster Ian Bird, Ruth

– Evolution of the information schema to be driven by JTB/GLUE WG2, WG4 – Operations Team WG3 – Security Team in collaboration with the Operations Team **This was the conclusion of the previous meeting. These are ongoing activities. Action closed.**	Pordes Ian Bird Dave Kelsey proposed
Develop the WBSs of the Technology and Deployment areas to take account of the recommendations of the working groups, for presentation at the March GDB.	Ian Bird, David Foster

New Actions

Action	***Responsible***
Produce new version of the WG5 report.	Klaus-Peter Mickel