WLCG TEGs:
status as from last GDB

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Suggested mandate and general approach
(for all TEGs)

[CAVEAT: my summary from Ian Bird's document]

Models, paradigms, technologies in **evolution**

- ✦ analysis of the experiences gained in storage management and operations
  - by <u>experiments</u> as well as by <u>sites</u>
- ✦ focus on operational needs, deployability and sustainability of software

Focus efforts on **actual requirements by our community**

- ✦ important input to technology and infrastructure providers

Identify **key topics** and trigger **discussions**

Bring **commonalities** among experiments where feasible

- ✦ between <u>experiments</u> as well as between various <u>Grid infrastructures</u>

Ensure that any evolution will not disrupt our successful operations

Technical Evolution Groups (TEG)

Databases TEG

✦ chairs: Dario Barberis, Dave Dykstra

Data Management TEG

✦ chairs: Brian Bockelman, Dirk Duellman

Storage Management TEG

✦ chairs: Daniele Bonacorsi, Wahid Bhimji

Workload Management TEG

✦ chairs: Torre Wenaus, Davide Salomoni

Security TEG

✦ Romain Wartel, Steffen Schreiner

Operations and Tools TEG

✦ Jeff Templon, Maria Girone

Databases TEG

Scope:

- ✦ NoSQL vs Oracle, MySQL etc
- ✦ Frontier, Squids vs 3D/Streams, GoldenGate, DataGuard etc
- ✦ CORAL, COOL
- ✦ What is the framework for deploying new applications that need a DB
  - e.g. if dev has used a random DB, how is that made into a service?
- ✦ More...

Highlight on organization:

- ✦ plan to have 3 operation phases
  - 1. discussion for 1 month
  - 2. workshop at CERN (7-9 November 2011)
  - 3, more discussion and prepare the report

Status as from last GDB:

- ✦ membership almost defined
- ✦ egroup: *wlcg-teg-database@cern.ch* (open to self-subscription)

Data Management TEG

Scope:

+ Review of demonstrators from 2010
+ Data placement (policy-based or dynamic)
+ Data transfer management (FTS)
+ Transfer and WAN access protocols(HTTP, xrootd, gsiftp)
+ Management of name spaces and catalogues
+ Understanding security requirements/needs

Highlight on organization:

+ Mailing lists, biweekly meetings, and a handful of face-to-face

Status as from last GDB:

+ membership still being defined (12 names so far)

Storage Management TEG

Scope:

- ✦ Experiment IO/usage patterns (and so performance requirements for storage)
- ✦ Our requirements on future storage systems, and how storage will evolve
- ✦ Separation of archives and disk pools/caches
- ✦ Storage system interfaces to Grid (SRM status?)
- ✦ Filesystems/protocols (standards?)
- ✦ Security/access controls
- ✦ as site-run services: storage management interfaces, performance measurements, monitoring, etc
- ✦ More…

Highlight on organization:

- - understand overlap with other TEGs, carefully design cross participation
- - plan to have a kick-off meeting, discussions by mail/phone, F2F later in 2011

Status as from last GDB:

- ✦ membership still being defined (16 names so far)
- ✦ egroup: *wlcg-teg-storage@cern.ch* (open to self-subscription)

Workload Management TEG

[CAVEAT: no report at the GDB - info taken from Ian Bird's document]

Scope:

- ✦ Pilots and frameworks
- ✦ CE's - what is needed from them?
- ✦ WMS? required?
- ✦ Clouds, Virtualisation
- ✦ Security model (MUPJs etc.)
- ✦ Whole node scheduling
- ✦ How to ask for /use GPUs etc. How to make use of parallelism?
- ✦ More...

Highlight on organization:

- ✦ No report at last GDB

Security TEG

Scope:

- ✦ WLCG risk assessment/analysis (primary area of work)
- ✦ AAI on the worker nodes
  - gLexec
  - credential propagation, delegation, revocation/banning
  - network connectivity requirements
  - Glide-in/gateway architectures
- ✦ AAI on storage systems
  - ACLs requirements from the VOs
  - credential propagation, delegation, revocation/banning
  - Identity Federation
  - Usability (security from the user point of view)

Highlight on organization:

- ✦ mostly working by subgroups

Status as from last GDB:

- ✦ membership still being defined (12 names so far)
- ✦ egroup: *wlcg-security-teg@cern.ch*

Operations and Tools TEG

Scope:

- ✦ Monitoring, (SAM, Nagios, etc.), metrics, and analysis of these data
- ✦ Support tools (APEL, GGUS, etc.)
- ✦ Underlying services (ActiveMQ, BDII, etc.)
- ✦ Application software management (e.g. cernvmfs)
- ✦ Operational requirements on middleware
- ✦ Configuration management
- ✦ Deployment management
- ✦ Middleware distribution management

Highlight on organization:

- ✦ kick-off meeting on October 24th
- ✦ plan to use sub-groups
- ✦ proceed by phone meetings, maybe meet just once for deliverable writing

Status as from last GDB:

- ✦ membership still being defined (24 names so far)
- ✦ egroup: *wlcg-teg-operations@cern.ch* (open to self-subscription)

Summary

We have additional CMS names we would suggest to follow specific TEG discussions, and we are contacting them.

If you are interested to volunteer and offer a fraction of your time, <u>please contact Ian and myself</u>.