

“HEP” SSC Homework

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SUPPORT ISSUES

Questions

1. How will the support activity will connect to and coordinate with the other support activities?
2. With the user, user communities, and SSCs?
3. What tools are required to provide the services and how will the support activity interact with them? (E.g. GGUS.)
4. What institutes/projects/teams/NGIs have been contacted about participating in this support activity?
5. Which of those are likely to be funded partners in the support activity?
6. Which are likely to be unfunded partners?

Additional Points

- In addition, each support activity should prepare an initial draft work plan (with activities identified as Networking Activities, Service Activities, or Joint Research Activities). This draft work plan should include an initial estimate of the manpower required (in FTE per year).
 - **This is (partially) done in the context of the “EGI Transition Document”, but clearly is a draft: need (for example) input from LHC and other experiments / target communities;**
 - **Will be rewritten as soon as FP7 templates available.**
 - **Could be (pre-)written according to above [will this help?]**
- Everyone should be prepared to discuss the Direct User Support and VO Support which appear not to have champions for EGI. In particular, we should discuss where these will fit in EGI.
 - **Should we not explicitly include some “champions” in the discussion? E.g. Maria Dimou, Diana Bosio?**
- As a general topic, we should discuss what is the overall procedure for bringing and supporting new users and new communities. How is this coordinated? How do the SSCs fit into this?
 - **See AS notes written for EGI_DS (as well as text in Transition Document)**

Inline Answers

1. How will the support activity will connect to and coordinate with the other support activities?
 - **Through areas of commonality – e.g. common tools, outreach, training, dissemination – as well as a coordinated overall workplan and measured deliverables**
2. With the user, user communities, and SSCs?
 - **Through the projects, e.g. WLCG, and directly to experiments in question**
3. What tools are required to provide the services and how will the support activity interact with them? (E.g. GGUS.)
 - **See e.g. “WLCG Data Taking Operations” & Transition document for a list of core + “HEP” services; coordination roles to operations and to support (2 x 0.5 FTE) are foreseen**
4. What institutes/projects/teams/NGIs have been contacted about participating in this support activity?
 - **Presentation at WLCG Overview Board & Grid Deployment Board: CERN, DESY, INFN, NDGF and other main HEP sites, LHC experiment computing coordinators, several of “related projects”**
 - **Projects such as GridPP, IGI, NDGF also through WLCG OB**
 - **OB asked for their help in disseminating information**
5. Which of those are likely to be funded partners in the support activity?
 - **Centres of gravity for discipline, e.g. CERN for HEP**
6. Which are likely to be unfunded partners?
 - **DESY, INFN (IGI?), PIC?, NDGF?, others?**

“HEP” SSC – Where?

- 1.2.1.2 and / or 1.2.3?
- Apart from other issues, submitting (only) to 1.2.1.1 would preclude a “single” SSC
- But it would not mean that we cannot work closely together – from the planning stage through to execution!
- There is a logical distinction between what we think of more as “WLCG operations” (service deployment etc.) and application support
 - N.B. “WLCG operations” is not the same as EGEE operations either!
- Clearly these need to work hand-in-hand, but they are still not the same...
- Our thoughts are to elaborate a “global” plan and discuss directly with the EU contacts, as was “invited” during the info day (I explicitly checked with Enric and Monika on this point).
- An “obvious” solution would be to perform the separation exactly as proposed in the preliminary information document:
 1. (WLCG) Service deployment in 1.2.1.2 – as part of overall “EGI” proposal
 2. “HEP” SSC – a joint proposal in 1.2.3

SSC PREPARATIONS

Questions

- Contact points within the EGI management structure that are different and/or in addition to those in the EGI_DS Blueprint and Functions documents.
- **Identify "heavy" and/or VO-specific services that are needed by the community to fully exploit the EGI infrastructure.**
 - **Isn't this directly 1.2.1.2? Not sure this grouping is optimal...**
- Identify the institutes/projects/NGIs that have been contacted about the SSC. [**How does this differ to earlier question?]**
- Identify any ESFRI projects that have been contacted.
- Identify likely partners that will be funded. [**ditto]**
- Identify likely partners that will be unfunded. [**ditto]**
- Identify common tools/libraries for porting that will be useful for the community. (E.g. BLAST, LAPACK, ...) [**WLCG AA ?]**
- **Comment: Q2 in particular seems to be in the direction of "operations" vs "application & community support". In this sense distributed funding is both more relevant and urgent (e.g. VO operations manpower needs).**

WLCG Operations

- In recent weeks – through STEP’09 – and in previous years (CCRC’08, Service Challenges etc.) we have built up and demonstrated readiness for LHC Data Taking, Production and Analysis
- This has been done – **by design** – by utilizing underlying grid infrastructures, procedures etc. as much as possible
- But – and as anyone closely involved in e.g. STEP’09 knows all too well – the infrastructure is most definitely **not** sufficient!
- And – whilst it could continue to evolve in this direction – it is unlikely (by design) every to be...
- It is probably not relevant to go through all of the points in the WLCG Data Taking operations document, but this could be the basis for, or at least input to, a proposal covering WLCG heavy users / services
- **It is not an option (not for Europe, not for LHC collaborations worldwide, ... not for other grid communities) that the combination of EGI, SSCs, collaborating grids etc is unable to deliver the services required for LHC!**



“HEP” SSC – Progress?



- We should use “progress” since the last meeting to estimate possible progress until the next...
- Whilst I believe that – technically – there should be no problem to write a good technical proposal and extensively review it we must clearly ring-fence some (considerable) effort for this!
- And... we still do not have full agreement on the scope, partners, call areas etc.
- And... we must factor in summer and other activities



WLCG Operations Conclusions

22. WLCG Operations has reached stability and sustainability. For relatively low but non-zero cost it can be maintained and enhanced;
23. Manpower to support the key operations tools and to fill needed operations roles – both WLCG and experiment-specific – is required. It is expected that this be jointly funded to allow the successful exploitation of the world-class grid that has been built up over many years, together with international partners that make this a truly global enterprise;
24. We believe that WLCG operations experience and procedures can have significant value to other communities and are keen to share this knowledge.

WLCG Operations Requirements

13. The WLCG Service Coordinator role must continue to be staffed. This is mentioned for completeness – it is expected that this role be covered by CERN staff on a rotational basis by a small team (5-8 people), each taking one – two weeks in turn (although in the longer term people from other sites could also usefully participate);
14. The LHC experiments' operations contacts – as a rule of thumb, one person per VO supported by the Tier0/Tier1 site – must (continue to) be staffed. Joint funding (CERN, experiments, sites, external) is considered appropriate here;

15. The basic operations tools that are regularly cited (GGUS, GOCDDB, CIC portal, SAM, GridView, DashBoards, Messaging System etc.) – see [7][8] for a more exhaustive list – must continue to be supported and enhanced based on the needs of the application communities using the grid(s); Again, joint funding is considered appropriate in this area (non-VO-specific);
16. The EGEE operations coordination role – currently fulfilled by CERN in collaboration with the ROCs – will simultaneously move outside CERN (presumably to EGI) and change (to more loosely coordinate a much larger number of NGIs). The close coordination between the WLCG Service Coordination team and EGEE operations, assisted by physical proximity and overlapping functions of the teams, will cease to exist as such. This change must be managed in a non-disruptive fashion. Fragmentation into “WLCG” and “non-WLCG” grids is in nobody’s interest;
17. Both Application and User Support requirements must be satisfied – an estimate of around 1 part per mil of the user community is suggested for (joint funded) application support – this will be covered further in the proposal for a HEP SSC – but is considered to be extremely cost-effective as compared to other mechanisms for providing peta-scale computing;

18. User support is an area of concern: whilst the LHC VOs have pushed for direct ticketing [9] to sites – which considerably reduces the load on TPMs – the evolution from a small number of ROCs to a much larger number of NGIs risks to considerably complicate the task of the TPMs;
19. The “User Support Coordination Role” that has been provided through CERN has and continues to be particularly valuable in directing GGUS developments – such a role, with strong links to the user communities, should be foreseen in the future;
20. Middleware is also a key issue for stable operations: service requirements absolutely must be taken into account for future middleware development and maintenance. This has – regrettably – not been the typical case up until now;
21. [Release issues – see “Transition document”