LHCC DOMA Review

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GDB
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https://indico.cern.ch/event/876793/

LHCC Review

LHC Experiments Committee (LHCC) needs to ensure preparations for HL-LHC are credible

May 2020 Initial review of ATLAS and CMS plans for common software and DOMA

Overall recommendations to address

1. specific tasks and their associated milestones for **quantifying the potential reductions**
2. **sites** expected to be at the core … are **engaged and play an active role**
3. **tasks and targets** … placed onto a **timeline** … how they **relate to each other** and **relate to** milestones of broader **WLCG and HL-LHC projects**
4. **keep the effort** needed for the **software development** at the right level

November 2021 Next review phase with focus on "Common Software Activities"

Beyond CDRs, TDRs, …

November 2021 review

Our deliverable is a concise document (20-30 pages) by **October 1**

Draft ready by **end of June**

Four major "Common Software Activities"

(1) **Rucio**, (2) **FTS**, (3) **storage interfaces** and **caching layers**, (4) **network** incl. monitoring and SDN

Two potential additions were under discussion, but as of now will be honourable mentions

(5) **CVMFS**, and (6) **Tokens**

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Outline of the document

Planning for HL-LHC
Specific common software activity sections (*Rucio, FTS, GFAL, Davix*)
Storage (*XRootD, XCache, EOS, dCache, CTA, Echo, StoRM*) and network (*Provisioning, Capabilities*)
Conclusions
https://www.overleaf.com/read/gkbppxdvcvvf

Points to address per common software activity

Description of the project
Plans and timelines to deliver the agreed functionality and performance
Project management, incl. priorities, progress, communication
State of development teams, incl. gaps in skills or effort
Risk assessment, incl. gaps in functionality and dependencies

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Early June we held two workshops to gather experiment and facilities feedback

Rucio, FTS and network https://indico.cern.ch/event/1043829/
Storage https://indico.cern.ch/event/1043848/

Major points

Allow to be more flexible with our computing models
Changes in workflows and the effects of more or larger files
Network support / WAN access profiles, QoS awareness across the stack
Storage performance LAN & WAN, Site deployments/consolidation
Sustainability of our human resources

Following the workshop

Several rounds of email feedback
Appropriate changes have been included in the document

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First draft finalised end of June by the editorial team

- Again circulated for comments

We are now approaching the last of the fortnightly feedback rounds

- Again number of comments already received by direct mail
  - Especially risk and mitigation, lack of vision, structure, ambiguities
- Most of them have been processed and resulted in v1.3

The document has been reorganised as well

- Place the commonalities at the start and the details on particular projects later
- Section numbers have changed

Detailed feedback from ATLAS and CMS waiting to be treated

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Next steps

We have made various attempts to clarify points across the experiments and projects
Section are currently under final treatment by the individual section authors
Inclusion of some summary tables have been suggested
Editors will write the final conclusion section

Some final thoughts

We are well on track for document delivery on October 1st
We have started rudimentary cross-check with the other LHCC documents
You still have time for last-minute feedback!
    Especially reviewing and commenting on section 2 would be very much appreciated
    Either via email directly to us, or commenting in the document

https://twiki.cern.ch/twiki/bin/view/LCG/LHCC2021
https://www.overleaf.com/6395194873bdxdvnckftvt