



# WLCG Technical Coordination Board Meeting #3

A. Di Girolamo (CERN) and J. Letts (UCSD) WLCG <u>TCB#3</u> - April 8, 2025

### Welcome to TCB #3



Welcome to the third meeting of the WLCG Technical Coordination Board!

This is a hybrid event, at CERN and on Zoom. Please remember best practices acquired during the Pandemic: Raise your hand to comment or ask questions, even in the room, and balance participation between Zoom and in person. We will not record the meeting, but please help take live notes here.

Our main goal for the next three months, to be presented to the WLCG LHCC Referees in June LHCC Week: Prepare the outline of the WLCG Technical Roadmap (TR) document including an outline and format of chapters, and a prioritized list of topics.

Goals for today:

- Discuss and agree on the draft introduction, chapter formats
- Discuss and agree on the list of major sections, chapter topics.
- Choose chapter editors and discuss the path forward (getting others involved, scheduling topical OTF meetings in the future or meetings in other forums)
- Discuss goals for the TCB session in the WLCG Workshop in May



## Recent and Upcoming Events

### **Recent Events: OTF#4 at the HEPiX Workshop**



OTF#4 was hosted at the <u>HEPiX Workshop</u> on Tuesday, April 1st with a focus on medium to long-term facility evolution. Live notes can be found on <u>Indico</u>.

#### **Executive Summary**

WLCG held <u>OTF#4</u> hosted at the <u>HEPiX Workshop</u> in Lugano on Tuesday, April 1st. The scope of the session was to deepen the strong connection between WLCG and the facilities and explore the main issues about facilities that should be addressed in the WLCG Technical Roadmap. We learned that many of the R&D efforts ongoing are focused on understanding analysis use cases including user support needs as a key pillar. We heard from Italy, Germany, Spain, and US ATLAS about plans for distributing or concentrating compute and storage and integrating HPC resources. The UK does not have HPC capacity at this time but would find concrete requirements from the experiments useful to help argue for funding. US ATLAS has moved in the direction of using OpenStack/OKD for more automated site management, enabling job submission through K8S API, as well as deploying tape to a Tier-2, and considering the possibility to serve also user analysis. There are many efforts to optimize data placement and data and workflow management on heterogeneous and distributed architectures. Proliferation of differing interfaces and access policies at HPC facilities is seen as a challenge, the nature of the HPCs (constantly pushing the technologies limits) implies the need to foresee expertise in our community to integrate them. Security implications of new infrastructures and authentication methods were discussed.

### **Open Technical Forum - Next Dates**



- OTF#5 WLCG Workshop in Orsay, France, May 5-9
  - We want to have a full session (3 hours) dedicated to the TCB and the WLCG Technical Roadmap preparation, tentatively scheduled\*\* for Wednesday.
  - We would like to have your input on the key areas we need to discuss.
- OTF#6 @CERN Tue & Wed afternoons, June 24-25
- OTF#7 @CERN Tue & Wed afternoons, September 9-10
- OTF#8 Co-located with FTS/xrootd workshop, October 13-17
  - TBD with organiers, tentatively 3h session
- OTF#9 TBD, tentatively late November or early December

Please let us know of major event conflicts!



## Focus of Today's TCB Meeting

### **Introduction & Structure of the Chapters**



As agreed at the last TCB, we wrote a <u>first draft</u> of an introduction to the Technical Roadmap (TR) document. Please let us know if you need access to it.

Major ideas:

- Set the scene for technical evolution the motivation & opportunity of LS3
- Purpose of the TR document itself within and outside of WLCG
- Common format of chapters
- List of major sections, individual chapter topics to try to have a coherent flow to the TR document.

We also received a draft chapter from DOMA on Data Management, thank you! This is very helpful and can be found <u>here</u> in the <u>TCB Shared Folder</u>.

### Feedback on Topics, Scope of the Technical Roadmap



- WLCG Services:
  - Software major "section", and how to we handle packages developed by external projects e.g., EGI, EOSC, HSF, OSG? Similarly to how we consider CERN-SFT?
  - Considering the WLCG service deployment model, now everything from RPMs on bare metal to site-run k8s instances, and what it might best look like in the future? OTF focus?
- Networking:
  - Outline of important topics from Shawn already a chapter topic outline?
  - Implications of uneven evolution of networking capacity in different regions?
- Technical impacts of funding or political risks?
- Consider sustainability and standardization in all chapters? Or only at the end? Or summarize near the end?
- Where can we discuss the implications of new types of workflows (e.g., interactive analysis or ML training) on infrastructure design and will we need specialized facilities and services to access them?

### Today's Agenda



Remainder of the goals for today:

- Discuss and agree on the draft introduction, chapter formats
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- Choose chapter editors and discuss the path forward (getting others involved, scheduling topical OTF meetings in the future or meetings in other forums)
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AOB (to consider before closing today):

- Do we want to have a short TCB meeting in late April, before the Workshop?
- N.B. There will likely be a token transition task force meeting on April 29th at 16:00 (this time slot) ... perhaps this is enough to focus preparation for the WS?

Now let's look at and discuss the draft introduction and list of topics here.



## **Backup Slides** (for information)

### **For Information**

TCB TCB Tetelet MC Cargoting Frid

There are 3 relevant CERN <u>e-groups</u>:

- wlcg-technical-coordinators (to contact Ale & James)
- **wlcg-technical-coordination-board** (currently with *ex-officio* members included only, to be populated with the membership of the TCB after the next MB)
- wlcg-open-technical-forum (open to self-subscription, please join!)

and two new Indico categories (both public):

- WLCG Technical Coordination Board: <u>https://indico.cern.ch/category/18888/</u>
- WLCG Open Technical Forum: <u>https://indico.cern.ch/category/18889/</u>

The GDB e-groups will eventually be archived but for now we are also using project-lcg-gdb to publicize OTF meetings.

- TCB shared folder (please ask for access if you don't have it already.)
- TCB <u>charge</u> from the October 2024 WLCG MB