



WLCG Storage Accounting

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Motivation

- Currently we do not have Storage Space accounting working on the WLCG global scope
- Existing solutions inside experiments are mostly based on SRM which is not a mandatory service any more, have to understand what we do in the srm-less world
- Current development of the new WLCG topology and configuration system (CRIC) gives an opportunity to properly describe there storage areas which need to be accounted separately.

Requirements (1)

- After the WLCG accounting review in April 2016, some work has been performed to understand the requirements for the global WLCG storage space accounting system
- Input is summarized by Oliver and Alessandro in the [document](#). It was discussed at the WLCG Accounting Task Force meetings and GDB.

Requirements (2)

- There are two main use cases:
 - High level overview of the used and available space
 - Detailed information going as deep as full storage dump
- For the WLCG Storage Space accounting we focus on the first use case
- If considering the way information is provided from the primary source (storage) both use cases can be addressed in a similar way, this would be great

High level overview of the used and available space

- Total used and total available for the following:
 - All distinct “storage areas” available to the experiments
 - Any entity on which quota can be applied (directory or space token)
 - The top level of the experiment part of the name space
 - It can be at the level of the high level quota nodes grouping many of them if needed (EOS user areas)
- Number of files if possible but not strictly required
- Frequency not higher than once per 30 minutes
- Accuracy order of tens GB
- CLI or API for querying

How do we move forward?

The work is going in several directions:

- Define and implement data model for storage services and in particular for storage space areas description in the new WLCG topology and configuration system (CRIC)
- Work in collaboration with the WLCG DM steering group in order to agree on the format of the usage record and the way information will be provided. Naturally, we have to align with all storage providers. Next step would be to coordinate implementation and deployment in order to make possible data collection from all our storage services
- Enable data flow from the primary information source to the central repository and setting up UI/APIs on top of it. More details in the next presentation of Dimitrios.

Questions?