



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, therefore will provide only partial solution in the future
- Storage space accounting ongoing work in APEL will cover only EGI sites and implies dependency on APEL client

Requirements

- 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 from the experiments has been discussed at the WLCG Accounting Task Force meetings and GDB. It is summarized in the storage resource reporting proposal (discussed at the data session)
- **The main goal of the WLCG Storage space accounting is to provide high level overview of the free and used storage space with the granularity of VO storage shares at the sites with possible split of those shares by areas for some dedicated usage**

High level overview of the used and available space

- Total used and total available for all distinct spaces available for the experiments

(should be available by at least one non-SRM protocol)

- 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

Implementation

- Implementation is based on the storage resource reporting proposal discussed at the data session
- The same way of querying storage for free/used space for accounting and operations
- CRIC for description of the storage topology
- MONIT infrastructure for data flow (data transport, data repository, UI/API)
- Do not wait for all storage types to enable data reporting. Start first with SRM and experiment-specific systems as information sources.

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 way information will be provided. Naturally, we have to align with all storage providers. Next step will 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?