EMI proposal for a Storage Accounting Record standard

To enable a shared storage infrastructure, it must be possible to account for and report on the resources consumed by persons and groups in a common format. While usage record formats for computing jobs have been defined by OGF (GFD98) and used for several years, there is no corresponding definition for storage accounting records. The EMI data group, with data experts from ARC, dCache, gLite and UNICORE, has seen the need and defined StAR – a common storage accounting record to be proposed to OGF. The StAR definition describes a format which can account for resources consumed on a storage system. The format allows for granularity on storage system level (e.g. separating disk and tape consumption) as well as reporting on both a per-user and a per-group base. The different properties enable a variety of aggregation scenarios. Due to a general approach the StAR format is not restricted to the usage in a distributed (grid) environment but can be applied in any storage environment. Storage accounting records, as defined in the final StAR specification, will be implemented in ARC, dCache, gLite and UNICORE, thus providing means to monitor and account for distributed storage in a standardized fashion. The ideas behind the StAR definition and the envisioned implementation and usage will be presented.

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