

Proposal for an HTTP* deployment Task Force

*where “HTTP” refers to the protocol group HTTP/HTTPS/WebDAV

Motivation

- All the pieces are now in place for HEP exploitation of the HTTP protocol.
- Atlas and LHCb (at least) are developing their HTTP infrastructures.
- The majority of storage systems are able to offer an HTTP interface.
- ROOT support is available via davix, and studies have shown that this can allow HTTP to reach a performance comparable with that of the xroot protocol.
- Projects are exploring how cloud data resources could be exploited, and in many scenarios this involves HTTP (S3), so the time is right to shake out the last problems.
- At the moment there are many site misconfigurations and instabilities which could be tracked and fixed at the WLCG level for all experiments
- A Task Force could take advantage of a number of tools, including a SAM probe, already developed by the CERN SDC group for assessing support and diagnosing problems.

Possible Mandate

- Define the minimum set of useful functions which must work for a site to "support HTTP for WLCG". Put in place the necessary monitoring and validation tools.
- Summarise advice for sites on implementing support. Create baseline version information for the storage systems. Identify necessary changes to SEs or supporting services.
- Track and support the deployment on the infrastructure until the point where maintenance is transferred to standard experiment operations.