21st International Conference on Computing in High Energy and Nuclear Physics **CHEP2015** Okinawa Japan: April 13 - 17, 2015

Contribution ID: **188** Type: **oral presentation**

Protocol benchmarking for HEP data access using HTTP and Xrootd

Monday, April 13, 2015 6:15 PM (15 minutes)

The DPM project offers an excellent opportunity for comparative testing of the HTTP and xroot protocols for data analysis.

- The DPM storage itself is multi-protocol, allowing comparisons to be performed on the same hardware
- The DPM has been instrumented to produce an i/o monitoring stream, familiar from the xrootd project, regardless of the protocol being used for access
- The continuous builds of DPM have been instrumented in 2013 with automated testing procedures that regularly produce, and collect metadata stress test information
- The DPM Collaboration involves a number of active grid sites who have made testing resources available. These sites are continuously exercised by a ROOT analysis benchmark several times per day, and comparisons can be conducted in a variety of environments, also involving access through Wide Area Network.

We present the results of our performance analyses of realistic use cases, and discuss their implications for the use of HTTP as a data and metadata access protocol for HEP.

Primary authors: DEVRESSE, Adrien (CERN); FURANO, Fabrizio (CERN); KEEBLE, Oliver (CERN)

Presenter: KEEBLE, Oliver (CERN)

Session Classification: Track 3 Session

Track Classification: Track3: Data store and access