

# Optimizing large data transfers for the ALICE experiment in Run 3

*Thursday 21 September 2023 14:00 (20 minutes)*

As the physics scopes of High Energy Physics experiments grow, so do their storage needs increase. Coming with Run 3 for ALICE and LHCb, and Run 4 for CMS and ATLAS, the rate and volume of data recorded through the detectors has increased or will be increased to such a degree that old data management strategies will not make due. Since the beginning of the WLCG each experiment has had its own way of managing data, and this management software has evolved based on the needs of each experiment. Some software being focused on decentralized management based on datasets and data collection, and other software, such as the one in ALICE, being focused on a structured, centralized management infrastructure.

In this article we will present the way in which the ALICE experiment has planned and managed data movement from the raw data processing farm to the different storage mediums, focusing on optimizing and automating data transfers between different storage systems.

**Author:** WEISZ, Sergiu (University Politehnica of Bucharest)

**Co-authors:** Ms ȘUIU, Alice-Florența (University Politehnica of Bucharest); Mr GRIGORAȘ, Costin (European Organisation for Nuclear Research (CERN)); Dr BETEV, Latchezar (European Organisation for Nuclear Research (CERN)); Prof. ȚĂPUȘ, Nicolae (University Politehnica of Bucharest)

**Presenter:** WEISZ, Sergiu (University Politehnica of Bucharest)

**Session Classification:** Session A

**Track Classification:** Grid, Cloud & High Performance Computing in Science