9th International Conference "Distributed Computing and Grid Technologies in Science and Education" (GRID'2021)



Contribution ID: 35 Type: Plenary reports

The ATLAS EventIndex using the HBase/Phoenix storage solution

Monday, 5 July 2021 15:30 (15 minutes)

The ATLAS EventIndex provides a global event catalogue and event-level metadata for ATLAS analysis groups and users. The LHC Run 3, starting in 2022, will see increased data-taking and simulation production rates, with which the current infrastructure would still cope but may be stretched to its limits by the end of Run 3. This talk describes the implementation of a new core storage service that will provide at least the same functionality as the current one for increased data ingestion and search rates, and with increasing volumes of stored data. It is based on a set of HBase tables, coupled to Apache Phoenix for data access; in this way we will add to the advantages of a BigData based storage system the possibility of SQL as well as NoSQL data access, which allows the re-use of most of the existing code for metadata integration.

Summary

Primary authors: ALEXANDROV, Evgeny (JINR); ALEXANDROV, Igor (JINR); BARBERIS, Dario (University and INFN Genova (Italy)); CANALI, Luca (CERN); CHEREPANOVA, Elizaveta (Laboratory of Nuclear Problems); FERNANDEZ CASANI, Alvaro (IFIC Valencia); GALLAS, Elizabeth (University of Oxford (UK)); GARCIA MONTORO, Carlos (IFIC Valencia (ES)); GONZALEZ DE LA HOZ, Santiago (IFIC Valencia (ES)); HRIVNAC, Julius (IJCLab Orsay (FR)); KAZYMOV, Andrei (JINR); MINEEV, Mikhail (JINR); PROKOSHIN, Fedor (JINR); RYBKIN, Grigori (IJCLab Orsay (FR)); SALT CAIROLS, Jose (IFIC Valencia (ES)); SANCHEZ MARTINEZ, Fco. Javier (IFIC Valencia (ES)); VILLAPLANA PEREZ, Miguel (IFIC Valencia (ES)); YAKOVLEV, Alexander (JINR)

Presenter: CHEREPANOVA, Elizaveta (Laboratory of Nuclear Problems)

Session Classification: Computing for MegaScience Projects

Track Classification: 3. Computing for MegaScience Projects