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PhEDEx - main component in data management system in the CMS experiment

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Many tens of petabytes of data from the CMS experiment at over a couple hundred sites around the world need to be managed. This represents more than an order of magnitude increase in data volume over HEP experiments in a pre-LHC era. The Physics Experiment Data Export (PhEDEx) project was chosen to fulfill this need. It deals with different storage systems, interacts with the CMS catalogues, handles replica information and allows sites and users to subscribe/move datasets. It is implemented as a series of autonomous, robust, persistent processes called agents. They are running at sites and exchanging information via a central database. PhEDEx provides a safe and secure environment for operations.

There will be given an overview of PhEDEx architecture and its advantages. The PhEDEx configuration at the T1_RU_JINR and T2_RU_JINR sites will be presented along with arguments in support of particular changes made to some of constituent agents.

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