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The CERN Large Hadron Collider (LHC) is known to be one of the most complex scientific machines ever built by mankind. Its correct functioning relies on the integration of a multitude of interdependent industrial control systems, which provide different and essential services to run and protect the accelerators. Each of these control systems produces a huge amount of data, that holds an important potential value to optimize the entire system in terms of its operational efficiency and reliability. The extremely large control data sets, often termed as 'BigData', cannot be processed through the use of traditional database tools. This is why it is necessary to design and develop new analytical frameworks, data models and data-mining algorithms scalable enough to cope with the huge volume of data; but at the same time they should be capable of fulfilling the timing constraints.

Event published at:

openlab Open Day

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Technical document file:

 [Data.Analytics.on_.Control.Data-POSTER- OpenDay 2015_v4.pdf](#) ^[3]

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