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ALICE moves into warp drive.

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A Large Ion Collider Experiment (ALICE) is the heavy-ion detector designed to study the physics of strongly interacting matter and the quark-gluon plasma at the CERN Large Hadron Collider (LHC). Since its successful start-up in 2010, the LHC has been performing outstandingly, providing to the experiments long periods of stable collisions and an integrated luminosity that greatly exceeds the planned targets.

To fully explore these privileged conditions, we aim at maximizing the experiment's data taking productivity during stable collisions. We present in this paper the evolution of the online systems in order to spot reasons of inefficiency and address new requirements.

This paper describes the features added to the ALICE Electronic Logbook (eLogbook) to allow the Run Coordination team to identify, prioritize, fix and follow causes of inefficiency in the experiment. Thorough monitoring of the data taking efficiency provides reports for the collaboration to portray its evolution and evaluate the measures (fixes and new features) taken to increase it. In particular, the eLogbook helps decision making by providing quantitative input, which can be used to better balance risks of changes in the production environment against potential gains in quantity and quality of physics data. It will also present the evolution of the Experiment Control System (ECS) to allow on-the-fly error recovery actions of the detector apparatus while limiting as much as possible the loss of integrated luminosity.

The paper will conclude with a review of the ALICE efficiency so far and the future plans to improve its monitoring.
This paper will describe how the ALICE Electronic Logbook (eLogbook) is used to recognize the main causes of inefficiency, allowing the Run Coordination team to identify, prioritize, address and follow them. It will also explain how the eLogbook is used to monitor the data taking efficiency, providing reports that allow the collaboration to portray its evolution and evaluate the measures taken to increase it. Finally, it will present the ALICE efficiency since the start-up of the LHC and the future plans to improve its monitoring.

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