

Coffea-casa: an analysis facility prototype

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Data analysis in HEP has often relied on batch systems and event loops; users are given a non-interactive interface to computing resources and consider data event-by-event. The “Coffea-casa” prototype analysis facility is an effort to provide users with alternate mechanisms to access computing resources and enable new programming paradigms. Instead of the command-line interface and asynchronous batch access, a notebook-based web interface and interactive computing is provided. Instead of writing event loops, the column-based Coffea library is used.

In this paper, we describe the architectural components of the facility, the services offered to end users, and how it integrates into a larger ecosystem for data access and authentication.

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