Why the Need

Large scale computing of month-long production and analysis and Monte Carlo leads to the need for improved tracking of computing progress.

POMS is a project designed to provide a service to assist production teams and analysis groups of experiments in their MC production and data processing. As the quantity of data originated by the running experiments greatly increases, the ability of simplifying the steps in data processing and management has become more and more appealing to the users.

What is POMS

- A service to assist production and analysis of experiments in their MC production and data processing
- A web service interface, enabling automated jobs submission on distributed resources according to customers’ requests and subsequent monitoring and recovery of failed submissions, debugging and record keeping.
- The ultimate goal is the most efficient utilization of all computing resources available to experiments, while providing a simple and transparent interface between users and the complexity of the grid.

POMS a Successful Product

The success of POMS can be seen by its acceptance and continued usage by experiments.

POMS has managed over 9.8 million production jobs in the last year alone. Usage has doubled in the last year.

POMS Clients

"DUNE is currently using POMS for all official large-scale production processing. DUNE has a very positive interaction with the developers and appreciates their willingness to incorporate DUNE’s requirements."

"I find POMS to be an essential tool for managing and running a large-scale production. Its ability to monitor a workflow stage, catch and resubmit failed jobs and then automatically trigger the downstream dependencies via its seamless integration with other FNAL tools is particularly impressive. POMS very quickly became a cornerstone of all official SBND productions."

"The Muon g-2 experiment uses POMS for data processing and MC production. We found it beneficial for submitting, tracking, bookkeeping and monitoring grid jobs. In addition, with POMS we can automate our for our next round of data taking in October 2019. POMS is a great asset to the offline team of Muon g-2 experiment."

Submitted Jobs Dashboard

This manuscript has been authored by Fermi Research Alliance, LLC under Contract No. DE-AC02-07CH11359 with the U.S. Department of Energy. Office of Science, Office of High-Energy Physics.