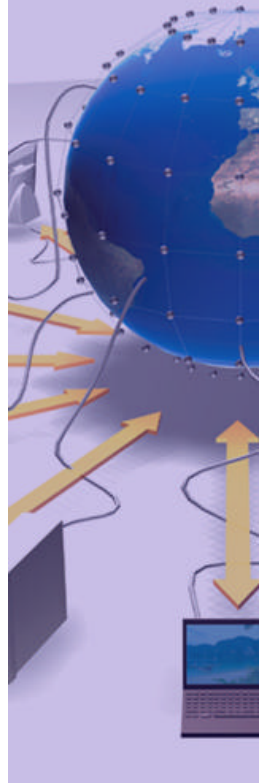


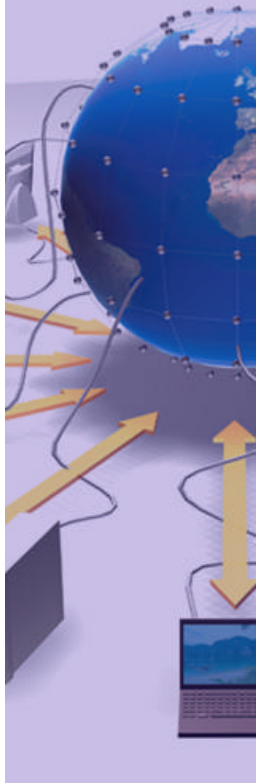
Dashboard for the LHC experiments

Irina Sidorova CERN, JINR

On behalf of the Dashboard team
J. Andreeva, A. Ivanchenko, B. Gaidioz,
G. Maier, R. Rocha, P. Saiz



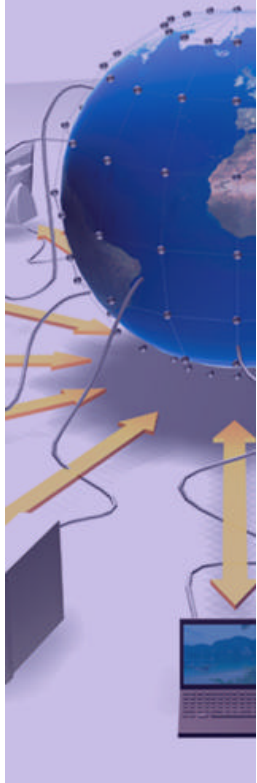
- The goal of the experiment Dashboard
- Common requirements for Grid monitoring from the VO/User perspective
- Experiment Dashboard concept
- Evolution of the project
- LHC experiments activities covered by Dashboard
- Conclusions



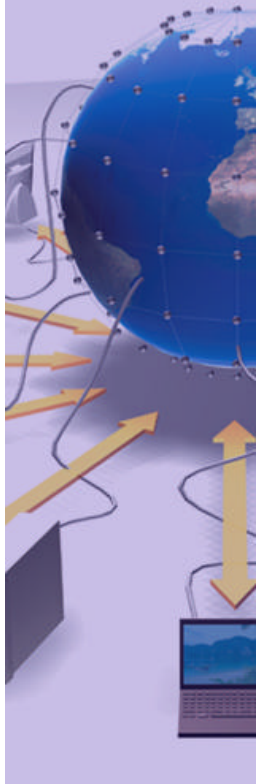
The goal of the Experiment Dashboard is to monitor the activities of the LHC experiments on the distributed infrastructure, providing monitoring data from the virtual organization (VO)/user perspectives.

The LHC experiments use various Grid infrastructures (LCG/EGEE, OSG, NDGF) with correspondingly various middleware flavors and job submission methods.

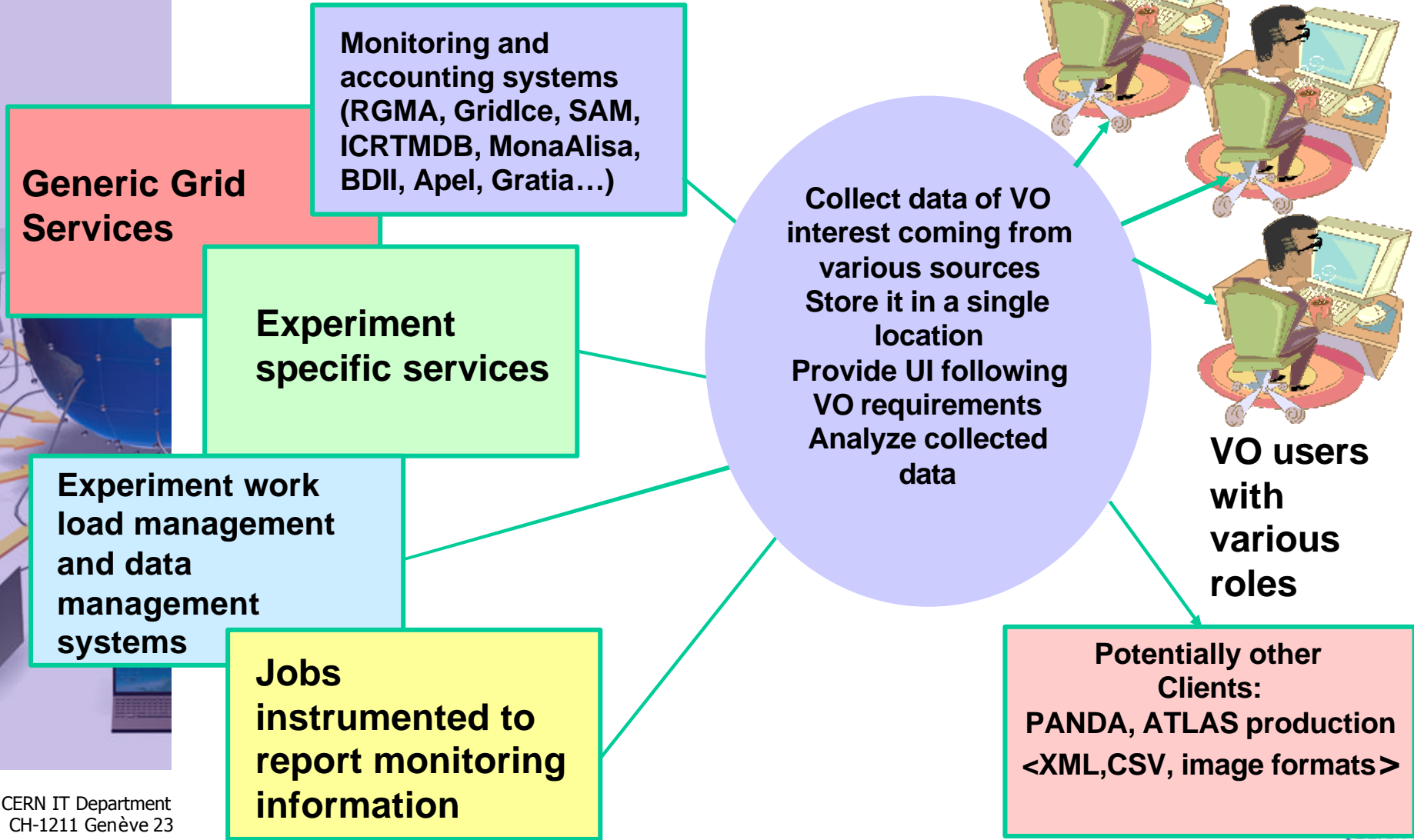
Providing a uniform and complete view of various activities like job processing, data movement and publishing, access to distributed databases regardless of the underlying Grid flavor is the challenging task of the Experiment Dashboard.



- Provide transparent and complete picture of the experiment activities on the Grid regardless the underlying infrastructure where the actual job/transfer/service is running
- Combine Grid monitoring data with experiment/application/activity specific information of the VO interest
- Be able to identify problem of any nature (Grid or application)
- Satisfy users with various roles (various areas of activities, different scope)
- Provide high level of flexibility to allow rapid integration with the new requirements
- Scale and perform well



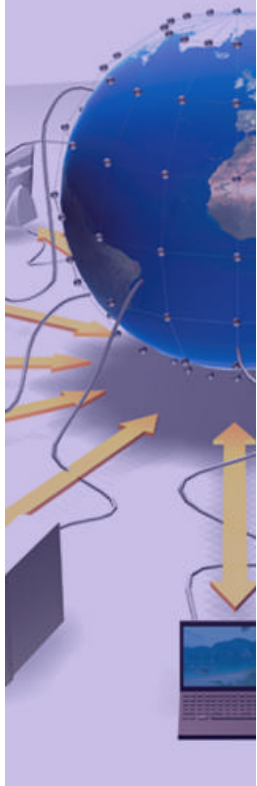
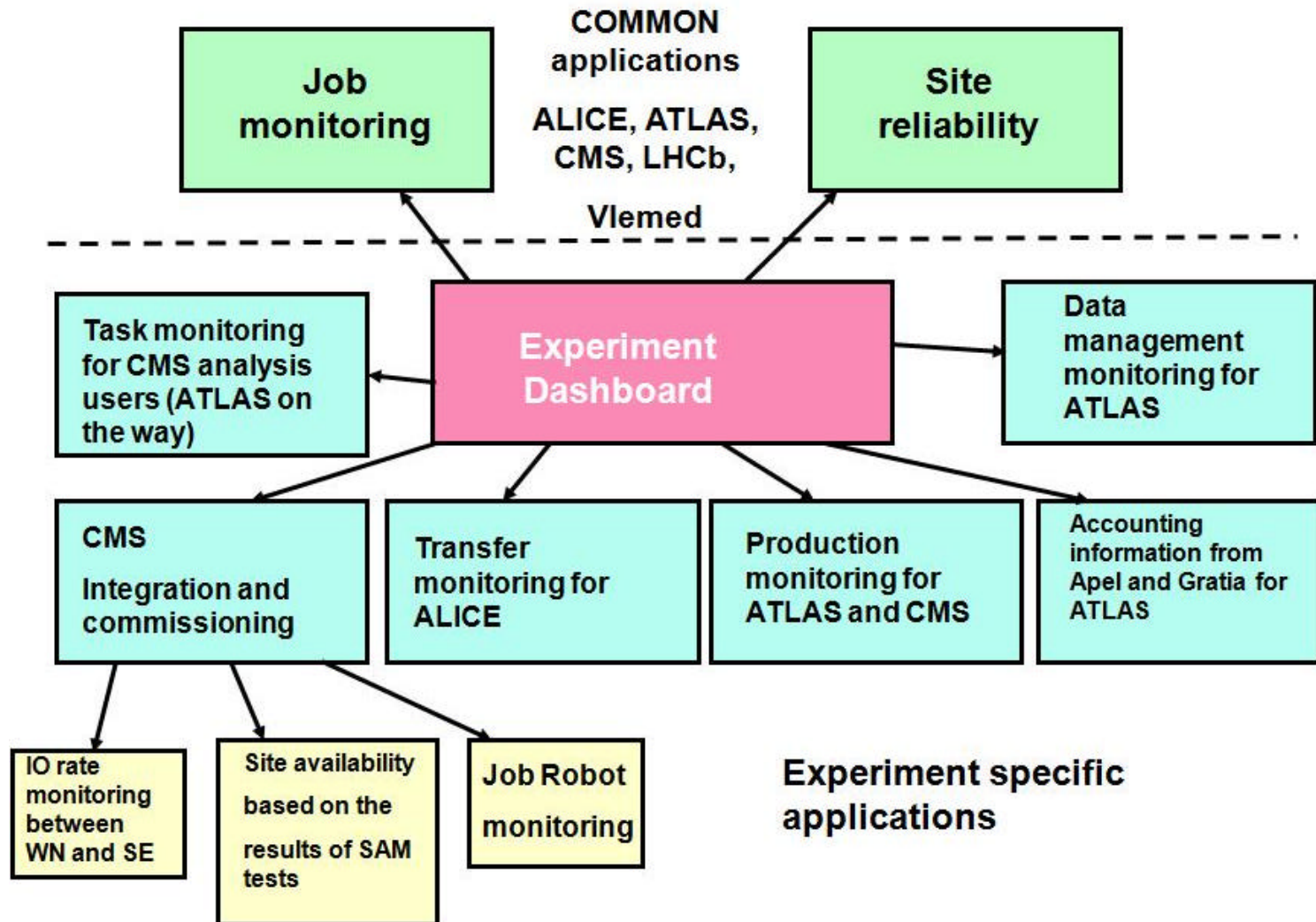
Information sources



- Project was started by ARDA group in collaboration with MonAlisa team on request of the CMS experiment in August 2005. First prototype was ready by the beginning of October 2005. Main focus on job monitoring. Current version is in production since May 2006. CMS Dashboard is the most advanced one comparing to other Dashboards regarding job monitoring, since all CMS submission tools are instrumented for the dashboard reporting.
- ATLAS Dashboard started in yearly spring 2006. Job monitoring part has a lot in common with CMS. So the first prototype was ready by the beginning of May 2006. Still some effort required to instrument ATLAS analysis job submission tools (GANGA, PANDA) for the Dashboard reporting. Important part of the ATLAS Dashboard is Data Management Monitoring (ATLAS specific).
- Job Monitoring for ALICE and LHCb were put into production at the beginning of 2007. Then Site/service availability applications were deployed (CMS).

- Dashboard is the main tool for monitoring during CCRC'08.





- Experiment Dashboard is used by all 4 LHC experiments and evolving very fast to match their requirements
- Job Monitoring and Site Reliability applications are in production for VLEMED VO outside LHC community
- The tool proved to provide reliable and useful VO-oriented monitoring data, with needed level of details, available in various formats.

Give it a try!

<http://dashboard.cern.ch>