

From EGEE Operations Portal to EGI Operations Portal

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The operations portal of EGEE is undergoing a tremendous back-end evolution to wrap-up the 5 years experience gained on daily grid operational needs about procedures and tools developed for and made available to the different EGEE communities.

This evolution has two main motivations. Firstly, this restructuration enables us to go on providing an up-to date, flexible and scalable integration platform that is easier to maintain. Also, it will be all the like easier to implement the dedicated changes required by the new EGI structure and the operational structures within the NGIs community.

Indeed, the move from EGEE to EGI structure based on NGIs induces a large move from the operations that will rely on a sustainable and largely decentralized model by May 2010. Consequently, the regionalization implies a model that must allow for procedures and tools customization by the regions and in the same time that must allow for coherence with the central layer, in order to provide consistent overview, reports and metrics at the EGI level. Our back-end restructuration enables such consistent evolution for the EGEE Operations Portal features.

Another key evolution for the challenge in the regionalisation relies in the scalability and the flexibility required regarding information source types and information handling. For 5 years, we have developed and maintained a standard-based component that allows us to address both these issues. This open-source tool, named Lavoisier, has been a critical success factor for the operations dashboard, one of the Operations Portal main features. Indeed, it enables coherent efficient and reliable data handling which is customizable and scalable, as Lavoisier is an extensible service designed to provide a unified view of data collected from multiple heterogeneous data sources. Data views are represented and accessed as XML documents through standard languages such as XSLT, XPath. Moreover, scalability and reliability are enforced by a caching mechanism adaptable to specific data sources and use-cases.

We will namely expose how the concept and the implementation enable clear roles separation between plug-in developer, service configuration administrator or end-user. Also, maintainability of the portal code has increased dramatically as the latter is now independent from the data sources technology or from the cache management policies. Finally, integration of data has recently been simplified as the service administrator proceeds now through web interfaces.

The first phase of the restructuration of the Operations Portal has recently been completed with the release of the restructured regional operations dashboard: the gridops regional dashboard. It consists in a regional package including Lavoisier module and a php web portal which allows high flexibility in the customisation.

Also, support of an open source relational database management system fit the requirements of most regions who wish to deal with a standalone implementation of the tool.

The normalised way to add a new source of data in Lavoisier and in the Web Interface will help the community to improve their own tool to cope with the evolution towards the structure of EGI/NGIs.

We will describe the future plans and priorities of the portal developments for the post-EGEE era and of the collaboration with all major existing partners such as GOCDB. Such a collaboration has already been set-up to provide a seamless access to the users regarding the sites' and the VOs' info and to cope with EGI/NGIs requirements through a common advisory group. Namely, the migration and the re-engineering of the existing features of the operations portal recognized as key for EGEE and EGI operations is done according to this joint Operations Tools Advisory Group: OTAG.

As a conclusion, the structure put in place in the background of the EGEE Operations Portal will enable the nations -or their operational entity- to expand or replace the features of the portal by developing Lavoisier plug-ins and a set of php files as in the specific implementation associated to EELA-II use-case. Moreover, Lavoisier plug-ins developed externally - when developed in a generic way- might be reusable so we could integrate them to make them available to the community.