

France-Grilles DIRAC service

Monday, 16 September 2013 09:00 (8h 30m)

Description of Work

In 2009, the DIRAC development team decided to generalize the software to make it suitable for any user community after having the positive experience collected with a production grid system of a large HEP experiment, LHCb. A successful use of the DIRAC middleware in the framework of EELA-2 and GISELA and in the BELLE experiment confirmed the possibility to extend DIRAC application to other user communities. In 2010, DIRAC was offered as part of France-Grilles services portfolio, mainly used during tutorials and for assistance in porting user applications to the grid. Also multiple small communities were interested in the DIRAC service, those that could not afford to maintain their own DIRAC installations. In order to resolve this problem, a general-purpose service with an increased capacity was deployed at CC-IN2P3 to serve multiple applications. The service is operated by the France-Grilles Project with the administrators team distributed over 5 different grid sites.

Relevant URL (if any)

<https://dirac.france-grilles.fr>

Printable Summary

LHC experiments pioneered the massive use of computational grid, developed their own middleware to address the problems of the intensive use of computing resources. DIRAC is developed originally for the LHCb experiment with the goal to integrate all the heterogeneous computing resources available to the community. Today, DIRAC has all the components required to build ad-hoc grid infrastructures interconnecting resources of different types, which allows us to speak about the DIRAC interware. These tools were used to provide a general purpose service in the framework of France-Grilles.

Since its start in June 2012 more than 5 million jobs were executed. Other grid infrastructure projects started to provide DIRAC services for their respective user communities.

In the poster we will present the experience of running DIRAC services provided by the France-Grilles NGI. Specific features needed to support multiple user communities by a single instance of DIRAC service will be discussed.

Primary authors: TSAREGORODTSEV, Andrei (CNRS); LAVALLEY, Claudia (Laboratoire Univers et Particules, CNRS/IN2P3, Université de Montpellier II); BOUVET, David (CNRS); Mr MATHIEU, Gilles (STFC); CORDIER, Helene (IN2P3-CC/CNRS); GARNIER, Jacques (CC-IN2P3); ARRABITO, Luisa (Laboratoire Univers et Particules, CNRS/IN2P3, Université de Montpellier II); SAPUNOV, Matvey (CPPM-IN2P3 CNRS); CLÉMENTIN, Nicolas (Laboratoire Univers et Particules, CNRS/IN2P3, Université de Montpellier II); GAY, Pierre (CNRS); FERREIRA DA SILVA, Rafael (CREATIS); CAMARASU-POP, Sorina (CREATIS); GLATARD, Tristan (CNRS); HAMAR, Vanessa (CC-IN2P3 CNRS)

Presenter: HAMAR, Vanessa (CC-IN2P3 CNRS)

Session Classification: Posters display