

M. Altunay, J. Basney, L. Betev, F. Carminati, S. Cholia, M. Dias, B. Holzman, R. Iope, M. Livny, J. Newby, J. Porter, A. Roy, I. Sakrejda, P. Saiz, A. Singh Rana, D. Skinner, R. Soltz

Enable ALICE production on OSG Facility

The primary goal of this work is to enable ALICE to adopt the standardized job control tools of OSG that will facilitate job reporting and level of service requirements stipulated in the World LHC Computing Grid (WLCG) Memoranda of Understanding definitions for Tier-1 and Teir-2 computing centers. This software will be used in production on the VO-Boxes in the ALICE-US sites participating to the ALICE Computing Grid.

A proof of concept has already been setup using the following sites



Other sites are already in the process of connecting, like:

Ohio Supercomputer Center

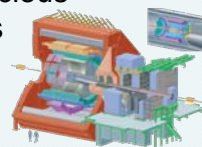
Empower. Partner. Lead.



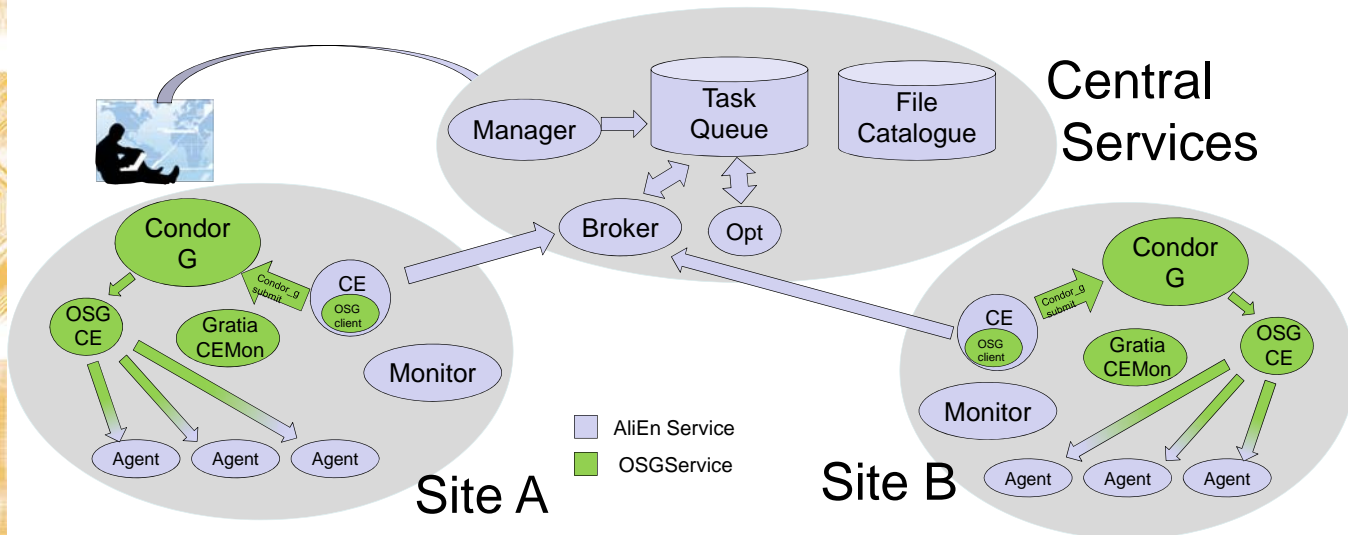
Bringing Grids Together



ALICE is a heavy-ion detector to exploit the unique physics potential of nucleus-nucleus interactions at LHC energies.



Once the experiment starts running, it will collect several petabytes per year



While testing the system, several opportunities for improvements were found. In particular, the following items will be further investigated to ensure a perfect interaction of the components:

- Security incidents: All the communications are done with X509 certificates. A possible upgrade would be to use Aladdin etokens.
- Accounting: Sites should be aware of the users that use the resources, and ban specific users.
- Opportunistic resources: Thanks to the flexibility of the system, a condor_g instance could submit jobs to non-ALICE sites.

We have implemented an interface that allows ALICE to use OSG resources. The proof of concept has already been deployed in several sites, and we will start a stress test imminently

For more info:

<http://alien.cern.ch>

<http://www.opensciencegrid.org/>