LABORATORI NAZIONALI DEL GRAN SASSO

SEMINAR ANNOUNCEMENT

Computing and Network Service
(LNGS)

"U-LITE Unified LNGS IT Environment: a proposal for scientific computing at LNGS"

The Computing and Network Service at LNGS has developed a proposal for U-LITE, a centrally managed computing and storage infrastructure for the future experiments hosted by LNGS.
The system we propose includes, for each experiment requiring it, storage of experimental data, on-tape backup and/or off-site archiving, front end servers devoted to interactive login, and a computing infrastructure devoted to the execution of data analysis jobs, numerical simulations, and other computing jobs. The physical computing infrastructure will consist of a shared computing cluster, following a Grid-based approach, while job execution, drawing inspiration from the cloud computing paradigm, will be based on virtual machines.
In our proposal, the overall U-LITE management is accomplished by the LNGS computing service, relieving the burden of managing the IT hardware infrastructure from the collaborations . Concerning the financial aspects, each collaboration provides a share of IT infrastructure, with the guarantee to always have at its disposal the resources it contributed.
The aim of this project is to reduce purchase, maintenance and management costs for the computing and storage infrastructure of the experiments, thanks to the sharing of resources and their integration in a unified system." for this discrepancy, and we determine the associated WIMP parameters.

SEPTEMBER 13, 2011 – 14:30 PM
LNGS - "B. PONTECORVO" ROOM