Grid and Cloud Activites in KISTI

Soonwook HWANG

KISTI, KR

KISTI was an official partner of EGEE, involving many grid-related activities under the framework of EGEE including grid operation, maintenance and even some grid development activities. The EGEE project ended in April 2010 and some Grid-related projects were newly launched. As our efforts to promote the continuity of European Grid Projects in Korea, KISTI has joined both the European Grid Initiative (EGI) and the European Middleware Initiative (EMI) as an official partner. Within EGI, KISTI is supposed to continue to provide a stable and reliable grid operation and production grid service as a member of Asia-Pacific Grid Initiative (APGI). KISTI has been part of the ALICE distributed computing Grid as a T2 since 2006, providing a stable and reliable node in the ALICE Grid. My talk will present Grid operations and production Grid service that we have been offering in collaboration with EGI and WLCG including KISTI's ALICE T2 activities.

KISTI serves as one of the official EMI product teams, responsible for the maintenance and evolution of the AMGA software. Under the framework of EMI, in order to improve the usability of AMGA for user communities, we have developed the AMGA GUI client as an Eclipes RCP application released as part of AMGA 2.1 in November 2010. We are now closely working with the other EMI product teams toward the release of EMI-I scheduled for the April of 2011. I will talk about the AMGA development activities that have been recently going on around EMI and beyond. Like the theme of ISGC2011, KISTI has been keen on the seamless use of heterogeneous distributed computing infrastructures (HDCI) for enabling so-called a big science that otherwise wouldn't be made possible. To this end, we have developed different Ganga backend plugins for having access to different distributed infrastructures: (1) Gridway backend, (2) Remote SGE backend and (3) Cloud backend that enable access to Globus-based resources, KISTI supercomputer and Amazon EC2 resources, respectively. My talk will also cover our research and development activities relating to this wide spread use of distributed computing infrastructures.