Contribution ID: **106**   Type: **Plenary reports**

Established Educational & Training Grid site in the National University of Mongolia

Thursday 7 July 2016 16:00 (15 minutes)

Powerful supercomputers are required to make such scientific calculations and Mongolia is lacking in the calculation based computational science field, so we rely on outsourcing our massive weather, image processing of geographical, economical, chemical and physical calculations to other countries which is quite costly. Thus, with the help of this research work, we are striving to become a joint educational grid site which is one of our first steps of implementing the calculation grid. Therefore, we have completed work on our internal network, system architecture and implementation process.

The National University of Mongolia have started research on this matter since 2013 and in 2015 we have started a project to join the t-infrastructure of JINR as well as taking t-infrastructure administration courses and suggestions from the people of LIT, JINR in 2012, 2013 and 2016. We have managed to create an internal educational training grid site and joined the t-infrastructure based on gLite of JINR. This has opened up a new direction in our research and allowed our researchers, teachers and students to work and test on a grid site on a practical level.

Summary

Not only have we created architecture of an educational and training grid site, an internal infrastructure and joined t-infrastructure of the LIT, JINR. This year, we are making progress on researching and implementing the hybrid cluster method which uses the GPU and CPU to make calculations and exploring the possibilities of joining the hybriLIT system of JINR. We have the possibility of further researching this matter and implement it in many different fields and universities to create and use a combined database infrastructure as well as explore the possibilities of creating a Production Grid.

Authors: Ms ERDENEBAT, Baasanjargal (SEAS-NUM, Ulaanbaatar Mongolia); Prof. DALANBAYAR, Bolormaa (SEAS-NUM, Ulaanbaatar Mongolia); Ms KHERLENCHIMEG, Zolzaya (SEAS-NUM, Ulaanbaatar Mongolia)

Presenter: Prof. DALANBAYAR, Bolormaa (SEAS-NUM, Ulaanbaatar Mongolia)

Session Classification: Consolidation and integration of distributed resources. Distributed Computing in Education

Track Classification: 5. Distributed computing in education