Using the P-GRADE Portal on the Hungarian ClusterGrid

Péter Kacsuk, Gergely Sipos
MTA SZTAKI

Abstract

The ClusterGrid has been serving Hungarian research communities for three years now. The ClusterGrid is primarily used for parameter study applications, although its structure would enable the execution of parallel and workflow-based programs as well. Besides parameter studies, workflow applications are also preferred in countries with more mature Grid user communities. The low reputation of this type of programs in Hungary is probably the consequence of the fact that Hungarian users have not been provided with suitable development and execution tools so far.

P-GRADE Portal has become the user interface of several European Grid infrastructures during the last few years the. The P-GRADE Portal provides an easy to use graphical environment for the development and distributed execution of workflow-based Grid applications.

Because the original version of the P-GRADE Portal has been designed for service-oriented Grids – systems that have been accepted as the standard solution for Grid infrastructures by now – it could not be used on the ClusterGrid. However, during the last year the researchers of MTA SZTAKI and NIIF have developed the ClusterGrid-specific version of the P-GRADE Portal, providing opportunity for Hungarian Grid users to design grid applications in a visual environment and execute those applications on the biggest Grid infrastructure of the country. The aim of the tutorial is to present the P-GRADE Portal to the current and to the potential future users of ClusterGrid and to show them how easily they can solve complex and computational intensive problems on the ClusterGrid bz the Portal. The first and second parts of the tutorial are lectures that introduce the P-GRADE Portal, while the third part is a hands-on training during which the audience can try the ClusterGrid-specific P-GRADE Portal with a few simple application examples.

The tutorial helps not only to broaden the group of ClusterGrid users, but also to open the door for Hungarian Grid users towards large European Grids.

Schedule:

45 min: The ClusterGrid-specific P-GRADE Portal (lecture)
45 min: Other installations of the P-GRADE Portal in Hungary and around Europe. Opportunities for the users (lecture)
45 min: Using the ClusterGrid-specific P-GRADE Portal (hands-on)