

Contribution ID: 173 Type: Demonstration

neuGRID - A Grid-Brained Infrastructure to Understand and Defeat Brain Diseases

Please indicate your preferred day to give a demo.

No preference

Project(s) or EGEE activity presenting the demo or poster (project or activity names only)

European FP7 neuGRID project: www.neugrid.eu Platform available at: http://neugrid.healthgrid.org

Special requirements other than the set up mentioned in the CfA text.

A regular Internet connection

Abstract

Launched early 2008 by the EC Research Infrastructure Unit, the neuGRID project aims to establish a distributed e-Infrastructure interconnecting major clinical research centres in Europe, ultimately supplying neuroscientists with the most advanced ICT to defeat Alzheimer's disease and neurodegenerative pathologies in general. Based on EGEE gLite, neuGRID is pioneering a harmonized and powerful environment to develop and assess new disease markers. The recently deployed infrastructure already offers a promising algorithm pipeline, i.e. the analysis of cortical thickness from 3D magnetic resonance brain images, as a demonstrator of its underlying computing engine capacity. The proposed demonstration will show the results of neuGRID's current analysis challenge which consists in using the grid to execute the former pipeline on the large US-ADNI dataset to assess this imaging disease marker. This will be the 1st time such a challenge is undergone in the neuroscientific community.

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