



- When:
Wednesday, 21 October, 2015

EGI – PRACE – EUDAT Coupled Computing and Data Analytics to support Science

Towards the convergence of Compute, Data, Knowledge and Scientific Instrum

Room 11, 21/10/2015 (09:50-10:35)

In more and more scientific and industrial domains the increase of performance of large-scale instruments (synchrotrons, telescopes, satellites, sequencers, network of sensors, scanners), supercomputers and open data archiving facilities is now leading to a convergence between HPC, High throughput Computing, networks and Big Data. In science, digital instruments generate data at rates of gigabytes/s while simulations run on the largest supercomputers have the capability to generate arbitrarily large numbers of big data sets. In both cases, the number and rate of data produced in any particular discipline with strong issues on Volume, Velocity, Variety and Value is starting to exceed our ability to treat them individually, leading to the development of a new field called High Performance Data Analytics. The idea is to support Open Science by coupling Data Analytics (statistical and probabilistic methods applied on complex datasets) with Computing for the development of new data centric-architectures using optimized components (smarter memories and file-systems, better networks, optimized workflows and data management tools, Cloud provisioning) and efficient in-situ data analysis methods. This session organised by PRACE together with EGI and EUDAT will connect experts from European computing and data infrastructures, and representatives from scientific user communities, to explore ways in which major European e-infrastructures can work together to better support Open Science.

Agenda

EUDAT will be also supporting open science at the [e-Infrastructures Stand in European Village EV4](#) on 21 October 2015 from 8:30 am to 1 pm CET

- Where:
Lisbon, Portugal