

EUROLAB-4-HPC

Towards a European Research Center of Excellence in High-Performance Computing (HPC) Systems

In the last five years, HPC has gone beyond traditional application areas, such as climate analysis, weather prediction and astrophysics, to new applications in social media, big data, biomedicine and many more. Many of these new applications are being pioneered by small and medium enterprises.

Research, science and education are the main pillars to ensure that leading-edge services are delivered in all areas of HPC provisioning. While HPC is well positioned in terms of research and science, the educational HPC horizon remains limited.

Unfortunately, there is currently no common view among leading European educational institutions on the process of expanding curricula to include HPC-specific topics. Standardization in HPC curricula in Europe should start at the basic level, so that the foundational set of ideas, skills and tools are taught to all students.

Mission

The goal of EuroLab-4-HPC project is to join forces among excellent research institutions in HPC system across the system stack towards a long-term research agenda that drives innovation and education in HPC systems. The main objectives of EuroLab-4-HPC are:

- to join HPC system research groups around a long-term HPC research agenda by forming an HPC research roadmap and joining forces behind it
- to define an HPC curriculum in HPC technologies and best-practice education/training methods to foster future European technology leaders
- to accelerate commercial uptake of new HPC technologies
- to build an HPC ecosystem with researchers and other stakeholders, such as HPC system providers and venture capital
- to form a business model and organization for the EuroLab-4-HPC excellence centre in HPC systems.

Duration: January 2015 – December 2017

Project Partners:

- Chalmers University of Technology (Sweden)– Coordinator
- Barcelona Supercomputing Center (Spain)
- FORTH (Greece)
- HLRS (Germany)
- INRIA (France)
- University of Manchester (UK)
- University of Augsburg (Germany)
- EPFL (Switzerland)
- ETH Zürich (Switzerland)
- Technion (Israel)
- University of Edinburgh (UK)
- RWTH Aachen University (Germany)
- Ghent University (Belgium)

Further Information:

<http://www.eurolab4hpc.eu/>

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