



National Supercomputing Infrastructure for EuroHPC

The EuroHPC PL project aims to build a specialized general-purpose infrastructure for large-scale computing, enabling the undertaking of research challenges in the key areas from the point of view of the Polish society, scientific community and economy.

EuroHPC PL provides availability of the supercomputing platform, data storage systems, specialized accelerators, software and necessary expert knowledge to design and implement world-class innovations.

Contemporary environmental, technological and social challenges require efficient processing of ever-larger data sets. This applies, among others, to forecasting climate change, predicting the anthropogenic impact, as well as shaping artificial intelligence. The speed of obtaining precise results of complex analyzes and the possibility of performing multi-faceted simulations increasingly determine the effectiveness of new types of therapies. They can also influence decisions made in crisis situations or become an element of building a competitive advantage of a modern enterprise.

Since EuroHPC PL offers the most modern tools focused on large-scale data processing, it becomes a technological bridge leading Polish science and economy towards the future.

The EuroHPC PL project is a Polish part of the European High Performance Joint Undertaking (EuroHPC JU) – a pan-European initiative aimed at building a supercomputing infrastructure competitive to the most powerful systems of the USA, China and Japan.



computing power for innovation



data storage systems



specialized software



cloud computing



wide range user support



training and experts



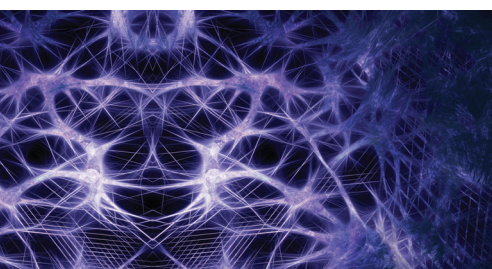
The technologies of tomorrow available today

The EuroHPC PL infrastructure mainly contains supercomputing resources allowing to perform within hours the calculations that otherwise would last many years. The supercomputing platform is supplemented by neuromorphic accelerators used to shape the artificial intelligence, the quantum computing platform, the personalized medicine platform, as well as data storage systems and the necessary application and system software.



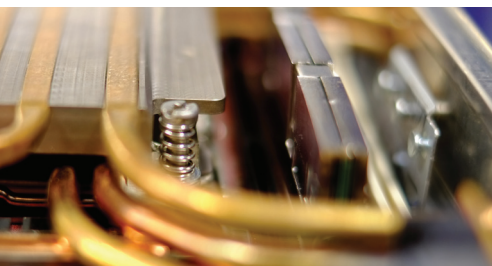
Benefits for science and business

The use of EuroHPC PL resources allows to save time and decrease the cost of conducting research, production and implementation processes. More effective prototyping of physical products as well as the design of complex processes translate into savings in workload and finance at later stages. It is especially visible in advanced experimental research, the work with new materials or optimization of energy or logistics processes.



Did you know...?

HPC usage generates revenues and cost-savings, as shows a recent study conducted by Hyperion Research Ltd. According to the research – the investigated 763 projects show on average 47 USD of profit or cost savings per 1 USD invested in HPC in 2020. In turn, the Grand View Report predicts that the compound annual growth rate of the HPC market will reach 6.5% from 2020 to 2027. These findings indicate a high profitability and development potential of the commercial use of the EuroHPC PL infrastructure.



Examples of supercomputing applications

The use of supercomputers is crucial for the development of many fields of science, such as meteorology, nuclear physics, molecular chemistry or nanotechnology. Access to EuroHPC PL resources is also particularly important for areas of broad social significance, for example: predicting climate change, renewable (clean) energy resources, efficient resource management, integrated transport, creating personalized medical services and medicaments.



How can you take advantage of the EuroHPC PL infrastructure?

EuroHPC PL experts help in the effective use of infrastructure resources, already from the stage of planning dedicated solutions for research teams, enterprises and representatives of public administration. We ensure a clear cooperation policy and competent user support. For more details, please visit the project website.



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