

Eviden provides the modular data center to host Europe's first exascale supercomputer

Paris, France – January 23, 2024 – [Eviden](#), the [Atos](#) business leading in advanced computing, today announces it has been awarded a contract by Jülich Supercomputing Centre (Germany) to build the modular data center to host the EuroHPC JUPITER supercomputer, Europe's first exascale system. This contract follows [the recent announcement](#) of Eviden leading the consortium to manufacture the JUPITER system, in October 2023, a renewed mark of confidence from Jülich Supercomputing Centre.

Through a unique conception, Eviden will bring together a set of about 50 pre-built and interchangeable modules – amongst which are 20 IT containers, 15 power feed containers and 10 logistic containers (lobby, workshop, warehouse etc.) – over 2,300m² to form a complete turnkey data center. Key benefits for the client include the fact that this modular solution brings more flexibility and agility in the long term by facilitating smoother updates or replacement of single modules, independently from the rest of the system. Unlike current systems with which the dismantling of an obsolete system and upgrading the datacenter to support new technologies can take weeks or month and incur long unavailability, with this system all it takes is to remove a module and replace it by one featuring an upgraded IT configuration. The same is true for the power sub-system and the logistic area.

Compared to traditional 'brick and mortar' datacenters, this innovative and flexible approach shows once again Eviden's integration capabilities to deliver a full end-to-end HPC solution with costs cut by 3 and a delivery time reduced by 50%. Manufactured in Eviden's factory in Angers (France), the JUPITER HPC racks will be integrated into the containers along with cooling, power, networking and cabling directly on the factory floor, before client delivery. This key step dramatically speeds up the installation process and reduces the risk of default discovery once on the customer's site.

As the overall eco-efficiency of any HPC system has become a key concern, this modular data center will also help reduce energy consumption, improve the recycling of the material used and will globally improve the energy efficiency. Through Eviden's free cooling technology integrated with the supercomputer's patented direct liquid cooling, the heat generated by the Exascale system will also offer an improved capacity to reuse within the Jülich Research Center.

Prof. Dr. Dr. Thomas Lippert, Director of the Jülich Supercomputing Centre, Forschungszentrum Jülich highlighted: *"JUPITER will be perhaps the most powerful AI supercomputer in the world! Its modular computer architecture enables a particularly high level of energy efficiency. However, its enormous computing power comes with demands on the energy supply that no scientific data centre in Germany has been able to meet so far. I am pleased that the modular data centre will now allow for such a supply infrastructure to be created very quickly, which will*

also offer the possibility of using the thermal energy generated during cooling to heat the Jülich campus."

Emmanuel Le Roux, SVP, Global Head of HPC, AI and Quantum at Eviden, Atos Group said *"This new contract which is to the benefit of Europe's scientific and economic sovereignty as well as to its competitiveness brings us great pride. We are extremely honored to be part of Europe's exascale journey by leading the JUPITER manufacturing consortium and now by delivering the data center to host the system. These two key strategic contracts demonstrate Eviden's position as a trusted partner as well as its commitment to a unique and innovative technological performance with reduced energy consumption."*

About Eviden¹

Eviden is a next-gen technology leader in data-driven, trusted and sustainable digital transformation with a strong portfolio of patented technologies. With worldwide leading positions in advanced computing, security, AI, cloud and digital platforms, it provides deep expertise for all industries in more than 47 countries. Bringing together 53,000 world-class talents, Eviden expands the possibilities of data and technology across the digital continuum, now and for generations to come. Eviden is an Atos Group company with an annual revenue of c. € 5 billion.

About Atos

Atos is a global leader in digital transformation with c. 105,000 employees and annual revenue of c. € 11 billion. European number one in cybersecurity, cloud and high-performance computing, the Group provides tailored end-to-end solutions for all industries in 69 countries. A pioneer in decarbonization services and products, Atos is committed to a secure and decarbonized digital for its clients. Atos is a SE (Societas Europaea), and listed on Euronext Paris.

The purpose of Atos is to help design the future of the information space. Its expertise and services support the development of knowledge, education and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.

Press contact

Constance Arnoux – constance.arnoux@atos.net – +33 (0) 6 44 12 16 35

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