

Press Release

CLUSSTER: the first French cloud initiative for academic and industrial research in Artificial Intelligence

Paris, November 15, 2023

The CLUSSTER¹ project aims to strengthen the French and European cloud industry by creating a cloud dedicated to artificial intelligence, high-performance computing and quantum computing. As a single-entry point, the CLUSSTER project will bring together a range of digital resources for the academic and industrial communities. The project is being led by a consortium of French academic and industrial researchers in numerical calculation and AI: GENCI, CEA, CNRS and Inria, as well as industrialists Eviden (Atos Group), OVHcloud, CS Group, ActiveEon and Qarnot.

At a time when the availability of cloud computing technologies is accelerating, this secure, unified and scalable system, available from 2024, comes as an answer to the requirements of artificial intelligence (AI) and high-performance computing (HPC). It will then be extended to also cover quantum computing.

This as-a-service model for HPC, AI and quantum computing in the cloud will provide access to one of the largest portfolios of computing services and supercomputers, encouraging and enabling the democratization of advanced computing by simplifying the use of public and private data centres.

For the first time, this project will help to ensure a continuum between open research, confidential research and industrial activities. It also aims to federate both academic and industrial sovereign infrastructures, as well as value-added "Expertise as-a-service" and "Learning as-a-service" services (support, business expertise, training, technology watch).

The first partners to make their computing resources available are France's public organizations, GENCI, CNRS-IDRIS and Inria, as well as OVHcloud and Qarnot for the private sector.

CLUSSTER will also provide access to resources and services available in France and Europe, thanks to the convergence of European initiatives on sovereign cloud platforms such as GAIA-X and EOSC (European Open Science Cloud).

The CLUSSTER portal will be based on Eviden's "JARVICE™ XE HPC Enterprise Software" solution, which offers a set of flexible and secure HPC as-a-service solutions. It will be complemented by additional services (vertical business services and/or horizontal technological services) provided by ActiveEon as well as tools for measuring energy consumption and carbon impact on all the infrastructures available in the CLUSSTER federation in order to report on the footprint of the operations carried out.

Thanks to the expertise of the various players in the consortium, the CLUSSTER project will provide specific software environments via business verticals, notably in the geospatial field (CS Group), climate (CEA), risk calculation and 3D rendering (Qarnot) and digital simulation. With the additional funding from the French Ministry of Higher Education and Research, this cluster will be completed by extensions, such as in artificial intelligence with the processing of large language models (LLM), or digital health, as well as other areas of the geosciences in partnership with the GaiaData national infrastructure.

¹ Sovereign Unified Cloud of Services, Technologies and Infrastructures (Cloud Unifié Souverain de Services, de Technologies et d'Infrastructures)

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High added-value services will also be made available for as-a-service training and as-a-service technology watch (MesoNet project, GENCI Technology Watch Unit and Grid'5000/SLICES-FR).

"This initiative is perfectly in line with Eviden's strategy, and we are honored to be able to be part of it alongside our various partners. The hybridization of technologies and the development of as-a-service computing capabilities is a priority for the Group in order to make these technologies more accessible to our customers and to foster innovation and research in both the academic and industrial worlds."

Emmanuel Le Roux, SVP, Global Head of HPC, AI and Quantum at Eviden, Atos Group

"A continuum of access to high-performance digital simulation resources and artificial intelligence technologies is a fundamental requirement for research and the development of knowledge and technologies. The joint public-private proposal put forward by CLUSTER comes at a time of very strong growth in demand. Its potential to open up the quantum field already demonstrates a spirit of anticipation of the future.

Philippe Lavocat, CEO of GENCI

About Eviden ²

[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 GENCI

GENCI (Grand Equipement National de Calcul Intensif) is a large research infrastructure created in 2007 to democratize the use of digital simulation through high-performance computing, associated today with the use of artificial intelligence and to support scientific and industrial competitiveness.

GENCI supports three missions:

- Implementing the national strategy of equipping France with the means for supercomputing, storage and processing of massive data associated with AI technologies and future quantum technologies for the benefit of French and European open scientific research in conjunction with the three national computing centers ;
- Support the realization of an integrated HPC, AI and quantum ecosystem on a national and European scale;
- Promote digital simulation through HPC among academic open research teams and industry.

² Eviden business is operated through the following brands: AppCentrica, ATHEA, Cloudamize, Cloudreach, Cryptovision, DataSantics, Edifixio, Energy4U, Engage ESM, Evidian, Forensik, IDEAL GRP, In Fidem, Ipsotek, Maven Wave, Profit4SF, SEC Consult, Visual BI, Worldgrid, X-Perion. Eviden is a registered trademark. Eviden is a registered trademark. © Eviden SAS, 2023.

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