



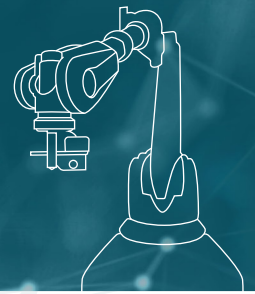
EXCELLERAT



EXCELLERAT

TARGET AUDIENCE

- Industrial R&D engineers
- R&D experts from manufacturing industrial sectors



Enabling HPC through a Data Exchange & Workflow Portal

CHALLENGE

Today, organisations and smaller industry partners face various problems in dealing with HPC calculations, HPC in general, or even access to HPC resources. In many cases, the calculations are complex and the potential users do not have the necessary expertise to fully exploit HPC technologies without support.

SOLUTION

SSC and **RWTH** is developing a secure data exchange and transfer platform and tool as part of the EXCELLERAT project to facilitate the use of HPC and to make data transfer more efficient.

BENEFITS

- **Reduction of HPC complexity** due to web frontend.
- **Time and cost savings** due to a high degree of automation.
- **Efficient, user-friendly and secure post-processing/data analytics.**

UNIQUE VALUE

- Provision and operation/support of the platform in order to significantly **facilitate the use of HPC.**
- **"Automatic" accounting and pre-calculation of resources.**
- Providing a user-friendly and scalable data analytic tool to **efficiently perform modal decomposition of large-scale simulation data.**

PRODUCTS / SERVICES

- **Alya, BSC:** Multiphysics simulation code available under license, available as Open Source / SaaS, and Consultancy about parallel mesh adaptation strategy based on the use of Gmsh library for re-meshing.
- **Modal decomposition toolkit, RWTH:** Scalable data analytic tool: modal decomposition of large-scale simulation data.
- **SSC platform, SSC:** Data exchange and transfer platform.
- **HPC resources** to run the simulation including Data Exchange & Workflow.
- **SSC & RWTH:** Consultancy, best practice guide, workshop and training about modal decomposition of simulation data.

Learn more about this [Success Story](#).

[Register to the EXCELLERAT Service Portal for free](#) and request support from EXCELLERAT staff on this application software.

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ABOUT EXCELLERAT

The EXCELLERAT project is a single point of access for expertise on how data management, data analytics, visualisation, simulation-driven design and Co-design with high-performance computing (HPC) can benefit engineering, especially in the aeronautics, automotive, energy and manufacturing sectors.

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