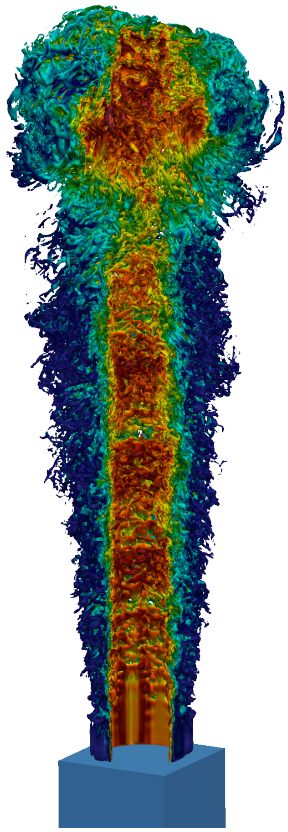
POP

Performance Optimisation and Productivity (A Centre of Excellence in Computing Applications)

High performance computing is a fundamental tool for the progress of science and engineering and as such for the economic competitiveness. The growing complexity of parallel computers is leading to a situation where code owners and users are not aware of the detailed issues affecting the performance of their applications. The result is often an inefficient use of computing resources. Code developers often do not have sufficient insight in its detailed causes in order to address the problem properly.



The objective of POP is to operate a Center of Excellence in performance optimisation and productivity and to share our expertise in the field with the computing community. In particular, POP will offer the service of precisely assessing the performance of computing applications of any sort, from a few hundred to many thousands of processors. Also, POP will show users the specific issues affecting the performance of their code and the best way to alleviate them. POP will target and offer such services to code owners and users from all domains, including infrastructure operators, academic and industrial users.

The estimated population of such applications in Europe is 1500 and within the project lifetime POP has the ambition of serving over 150 such codes. The Added Value of POP's services is the savings generated in the operation and use of a code, which will result in a significant Return on Investment (fixing a code costs less than running it below its optimal levels) by employing best-in-class services and release capacity for resolving other priority issues. POP will be a best-in-class centre. By bringing together the European world-class expertise in the area and combining excellent academic resources with a practical, hand-on approach, it will improve the access to computing applications, thus allowing European researchers and industry to be more competitive.

Project Partners:

- Barcelona Supercomputing Center, Spain
- RWTH Aachen
- Teratec, FR
- Numerical Algorithm Group, UK
- HLRS
- Forschungszentrum Jülich

Project details:

- Funding Agency: EU-H2020
- Runtime: 10/2015 - 03/2018

Further Information: ***https://www.pop-coe.eu***

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