



POET
PERFORMANCE OPTIMIZATION



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Optimizing application performance with SODALITE

Migrating applications over heterogeneous infrastructures requires re-starting the optimization processes again as it is not portable and involves a huge investment in system configuration. SODALITE addresses this challenge providing an abstraction layer for application experts with limited hardware or optimization knowledge to be able to use diverse targets in an optimal way.

Deployment along the Continuum

Static optimisation

Optimising application deployment at design phase is used for modeling applications mapping optimal parameters of the infrastructure and the container with application requirements. Although there is not such a solution already available in the market, combining static and runtime optimization supports designers tuning application parameters.

Performance model






When deploying applications along the Continuum it is important to be able to supervise contention scenarios, on CPUs and GPUs, supporting different architectures. Being able to build a performance model, based on running standard benchmarks, simplifies the optimization process.

Smart scheduling

In heterogeneous and complex environments there is a lack of an integrated coordination while managing CPUs and GPUs resources. By combining the scheduling of requests and fine-grained vertical scalability of resources, optimization processes can be improved and made portable.

How It Works

POET provides a set of tools for scaling applications across infrastructures in the most optimal way as possible, without the need of undertaking an exhaustive study of both application and underlying infrastructure. At the same time, it can cater for additional knowledge, profiling data or autotuning of application parameters for AI and HPC deployments.

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 825480. Privacy policy

