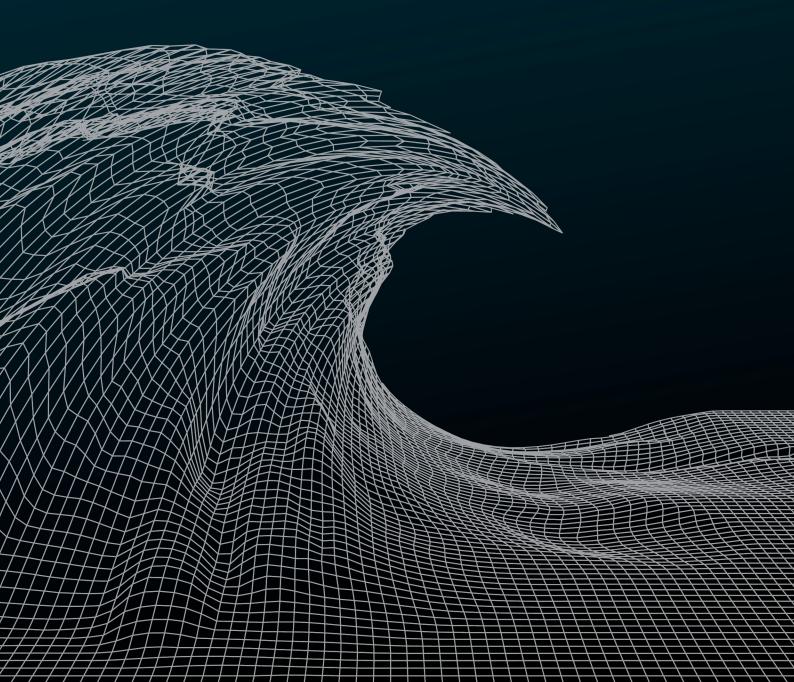
EVIDEN

CEPP Acceleration Accelerate workload, give value to simulation!



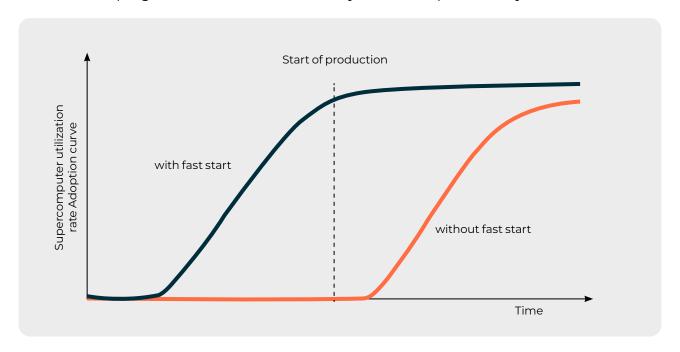
The CEPP (Center for Excellence in Performance Programming) supports organizations worldwide to tackle industrial, scientific challenges by exploiting the value from gigantic data. Combining deep HPC proficiency, data sciences and profound industry knowledges, CEPP accelerates HPC simulations, optimizes cluster performance and operation, reduce cost-to-innovation.

With a modular and flexible service offering, CEPP can customize our service offering adapting your goals with training, workshops, webinars or dedicated resources for your specific project.



CEPP Fast Start

Fast Start and/or Optimization is highly recommended. Designed to improve your skills, the Fast Start program boosts and accelerates your time to productivity.



Objective:

Assisting users for efficient application adoption in new hardware and software environments, such as GPU deployment, during the cluster's early lifecycle.

Benefit:

Facilitating a swift transition to the new cluster is pivotal for an early commencement of production on the fresh system, and it frequently yields substantial Total Cost of Ownership (TCO) advantages by optimizing the utilization of a significant corporate investment.

Approach:

The client submits a list of crucial applications, and depending on the number and type of applications, we arrange one or more half-day sessions per code. If it's an internal application, we collaborate closely with the primary developer to migrate and thoroughly test the code.

Our team includes specialists dedicated to ensuring the smooth and successful transition of your applications.

CEPP Bootcamp

Approach:

A bootcamp spans 3 to 5 days and involves a small group of end users, along with one or two experts – one representing CEPP and optionally a second expert from our partners (such as Intel®, NVIDIA®, AMD® etc.).

During this intensive period, we will introduce you to essential tools covering architecture and workflow execution. Special emphasis will be placed on modern programming languages, including CUDA, OpenMP5, SYCL, and more, to prepare you for the core part of this bootcamp.

Benefit:

You, as the end users, bring your own codes, and with the guidance of our HPC experts, we collaboratively port them to your cluster using these modern languages.



CEPP Acceleration Program

Objective	Provide expertise, code analysis, optimization, exploring new architecture to customers
Dedicated to	End users with a need of improved performance or a specific HPC issue
Prerequisite knowledge	A good level of expertise in HPC

Task force

The objective is to establish a customer/Eviden task force right at the customer's office, dedicated to addressing a specific problem. Our team can provide one or two experts who will collaborate closely with the customer's teams over the course of one (1) week.

Ask an Expert

This offering provides the utmost flexibility for our customers. It involves payment for a specified number of days of expert assistance. The utilization of these days follows a straightforward approach known as a 'tiny project.'

The process begins with the customer using a provided template to submit a request to Eviden. This request should include:

- · A detailed description of the request and the desired outcome for the end user.
- · A method to reproduce the observed behavior.
- · Contact information for the primary end user.

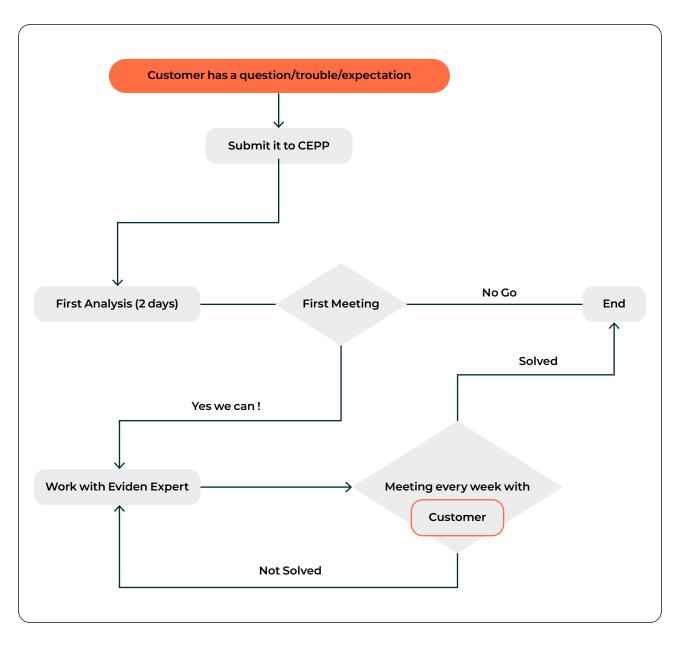
Eviden will then allocate two days to analyze the request thoroughly. Following this analysis, we will engage in a consultation with the customer to define the project's scope, estimate the effort required for resolution, and provide an expected maximum timeframe for completion.

Throughout the project, we will maintain regular touch points, ensuring effective communication and progress monitoring, starting after the initial two days of work.

Case study

A customer commits to a payment plan spanning 100 days over 5 years. Through mutual agreement with the customer, we establish that a single "tiny project" is limited to a maximum of 10 days within a 3-month period. With this definition we know that the customer could propose at least 10 "tiny projects."

Our Approach and Methodology



We are delighted with the invaluable support provided by Eviden CEPP's 'Ask an Expert' service. The expertise and assistance we received in code optimization and simulation issues have significantly enhanced the efficiency of our very demanding computational projects. Eviden CEPP has addressed the diverse highly technical needs of our users in academia and research from vast scientific topics. The collaborative skillful and adaptative approach in solving complex challenges has strengthened both our research capabilities and own expertise. The 'Ask an Expert' service has proven to be a vital resource in our pursuit of innovation, and we look forward to exploring further advancements with Eviden in the future.

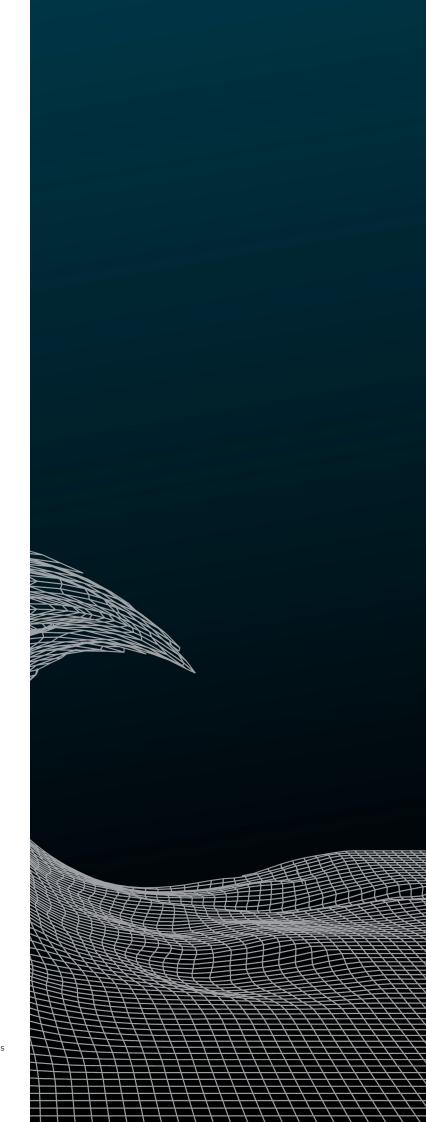


Nicolas RenonDirecteur Technique Mésocentre,
CALMIP

In today's rapidly evolving landscape, we're confronted with unprecedented challenges: vast data volumes, intricate complexities, and a pressing need for environmental stewardship. With its modular and flexible approach, CEPP Acceleration program offers rapid onboarding and application optimizations, transforming lengthy engagements into swift starts, empowering HPC users to expedite results, maximize dataset value, and catalyze innovation.



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