Performance Optimisation and Productivity

A Centre of Excellence in HPC

POP Newsletter 26 – Issue December 2024

Welcome to the 26th newsletter from the EU POP Centre of Excellence.

In this edition, we invite you to register for our next webinar on "OpenMP 6.0 Part 1: New Host-side Features and Enhancements" and report on the recent events and workshops attended and held by POP3.

If you would like to contribute technical content for this newsletter on the topic of parallel performance profiling, please contact us at pop@bsc.es.

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For past editions of the newsletter, see the POP newsletter web page.

POP Webinars

Upcoming Event

31st POP Webinar – OpenMP 6.0 Part 1: New Host-side Features and Enhancements

Join us on the 19th of December at 3pm

In the webinar, Christian Terboven (RWTH) and Michael Klemm (AMD) will discuss OpenMP's development process, highlighting the strategic roadmap and the continuum of control that guides the evolution of this powerful API. They will delve into the exciting new features and enhancements in OpenMP 6.0 and give a comprehensive overview of the latest advancements in Host-side parallel programming with OpenMP.

This webinar will be the first part of a two-part series, with the second webinar scheduled for February 2025. Follow us on our social media channels or sign up for this newspaper to be notified of the date.

Find out more and sign up for this webinar here.

Past Events

Assessing CPU Code Quality

On the 22nd of September 2024, William Jalby talked about how suboptimal codes can affect performance for various reasons and how the MAQAO performance analysis can be used to assess code quality and help identify steps to improve performance. William illustrated the MAQAO capabilities through real code examples and demonstrated strategies for comparative studies between different compilers and compiler settings.

The recording and the slide presentation can be found here.

ChEESE and POP: a Story of Success and Fruitful Interaction

The webinar on 11th of November 2024, held by Arnau Folch and Piero Lanucara, focussed on the ChEESE-2P Project and its efforts to improve the performance of the CoE's 11 flagship codes towards Exascle. They highlighted the work of WP2, which defines a successful methodology (originating from the ChEESE1 project) requires that flagship codes undergo a performance assessment on EuroHPC architectures.

The recording and the slide presentation can be found here.

Browse the full list and catch up on all our previous webinars here.

Recent POP Events

POP @ EuroHPC User Day 2024

At the EuroHPC User Day 2024 on the 22nd and 23rd of October in Amsterdam, hosted by EuroHPC Joint Undertaking and EuroCC Netherlands, POP was featured in a walk-in networking session focussing on the HPC Applications Centres of Excellence alongside EoCoE, ChEESE, MaX and ESiWACE. Furthermore, users were able to meet and chat to POP staff at a number of booths.

To read more about POP at the EuroHPC User Day 2024 here.

POP @ SC 2024

Every year in November, the worldwide HPC community meets at the International Conference for High Performance Computing, Networking, Storage, and Analysis (SC). Four of the POP members featured research exhibition booths: BSC (#3549), HLRS (#2231), IT4I (#4233) and JSC (#1443, see picture). POP experts were available at the various booths to provide further information, but also project flyers or posters were distributed and POP presentations were shown to interested visitors.

To see pictures and read more go to our blog.

POP @ 2nd Plenary Meeting

At the end of a very successful first project year the POP3 consortium held its second Plenary Meeting on the 2nd and 3rd of December at the IT Centre of the RWTH Aachen, Germany. Representatives for all partners and a large number of performance analysts gathered to discuss the projects work and have a productive interdisciplinary exchange.

Read all about the meeting here.

We would like to take this opportunity to wish all our readers

Happy Holidays & a Happy New Year!

Apply For Free Help with Code Optimisation

We offer a range of free services designed to help EU organisations improve the performance of parallel software. If you are not getting the performance you need from parallel software or would like to review the performance of a parallel code, please apply for help via the short Service Request Form, or email us to discuss the service further, and how it can be beneficial.

These services are funded by the EuroHPC research and innovation programme so there is no direct cost to our users.

The POP Helpdesk

Past and present POP users are eligible to use our email helpdesk. Please contact our team of experts for help analysing code changes, to discuss your next steps and to ask questions about your parallel performance optimisation.

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https://pop-coe.eu