

# **Performance Optimisation** and **Productivity**

A Centre of Excellence in HPC



# **POP Newsletter 25 – Issue September 2024**

Welcome to the 25<sup>th</sup> newsletter from the EU POP Centre of Excellence.

In this edition, we invite you to register for our next webinar on "Assessing CPU Code Quality" 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 <u>pop@bsc.es</u>.

This issue includes:

- POP Webinars
  - Upcoming Event: 29<sup>th</sup> POP Webinar Assessing CPU Code Quality
  - Past Events
- Recent POP Events
  - POP @ 46th VI-HPS Tuning Workshop
- The POP Helpdesk

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

## **POP Webinars**

### Upcoming Event 29<sup>th</sup> POP Webinar – Assessing CPU Code Quality

#### Join us on the 22<sup>nd</sup> of October

In the upcoming POP webinar William Jalby (UVSQ) will talk 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 will illustrate the MAQAO capabilities through real code examples and demonstrate strategies for comparative studies between different compilers and compiler settings.

Find out more and sign up for the webinar here

### **Past Events**

### Last webinar: The CARM Tool: Cache-aware Roofline Model for HPC

On the 5<sup>th</sup> of September 2024, José Morgado (INESC-ID) presented the Cache-aware Roofline Model (CARM), which offers effective guidance by providing insights into bottlenecks that limit the application's ability to reach the system's maximum performance. Furthermore, José demonstrated the capabilities of the tool during the webinar and gave a short tutorial of its usage. The recording and the slide presentation can be found <u>here</u>.

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

### **Recent POP Events**

### POP @ 46<sup>th</sup> VI-HPS Tuning Workshop

POP and the National HPC Competence Centres (NCCs) for Austria, Czech Republic, Hungary, Poland, Slovakia and Slovenia co-organised the 46<sup>th</sup> VI-HPS Tuning workshop, which was led by the IT4Innovations National Supercomputing Center. This 3-day virtual training event was part of the CASTIEL 2 / Euro CC Training Sprint series. Our experts gave an overview of the VI-HPS programming tool suite and explained how to use the tools effectively. The workshop also provided hands-on experience as well as expert assistance.

Read everything about the tuning workshop here.

### **Apply For Free Help with Code Optimisation**

We offer a range of <u>free services</u> 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 <u>Service</u> <u>Request Form</u>, or <u>email us</u> 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 <u>email helpdesk</u>. 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.

