Minute of the meeting

Date: February 14th, 2022

Participants

EUROfusion: France Boillod-Cerneux, Jacques David, Gilles Fourestey, Roman Hatzky, Serhiy Mochalskyy, Michal Konrad Owsiak
CINECA: Susana Bueno, Alessandro Marani, Nitin Shukla
Intel: Giacomo Rossi

Subjects discussed

We have reviewed events announced to all users via hpc-newsletter that have affected production from January 15 until February 14.

Ticket revision

We have reviewed the ticket #3932 escalated to Intel support, for which the bug fix was released on Intel oneAPI 2022.0 version. Version 2022.1 has been installed on Marconi and it has been verified that the bug was fixed, so the ticket can be closed. We have also reviewed the tickets escalated to NVIDIA support, for which we have received some updates. Two of the four have received significant progress, for the other two nVIDIA is investigating.
Other tickets were briefly reviewed and discussed, with no particular observations raised.

Ticket statistics

We have reported and reviewed information collected for all tickets received, on both the first and second level support queues, from January 15 until February 9.

Module usage on Marconi cluster

We reported data for the month of December; it refers to the module usage of those batch jobs submitted by EUROfusion users/accounts to Marconi-SKL partition.

Sanity checks on Marconi and Marconi100 clusters

Sanity checks were performed during maintenance and production on bith MARCONI and MARCONI100, and the results were shown during the Ticket Meeting. All the tests proved that the situation is stable and there are no significant problems in any of the tests performed. Following up the discussion from last month, we showed that since the beginning of 2022 the automatic procedures of CINECA detected 15 nodes that had to be investigated due to power capping. A discussion began from various angles and will be reprised in the next Ticket Meeting, when further statistics will be presented.

Likwid & hpcmd tools

The Grafana interface that allows the visualization of the data collected by hpcmd is online and can be reached at: https://hpcmd.hpc.cineca.it:3000. We provided username and password to access this site for testing purposes, together with other details required to submit jobs whose collected metrics can be explored through this site. Preliminary tests performed to measure the flops for all applications being submitted to the batch system showed a very good agreement between the results provided with hpcmd and analytical prediction. For the next step we agreed to include annotations on this site to provide users a proper metrics explanation.
At present, using this tool, it is not possible to collect memory bandwidth informations for jobs due the available kernel version on Marconi-SKL nodes; we will check again the feasibility of performing a kernel version update (independently from the whole OPA upgrade operations), and about the possibility of performing this update on the EUROfusion Gateway cluster.

Other topics

EUROFusion has scheduled a workshop about advanced topics with Intel experts, on April 5th from 10:30.

Next ticket meetings

The scheduled dates for next ticket meetings are:

TM-62: Monday, March 14th, 2022 at 10:00
TM-63: Monday, April 11th, 2022 at 10:00
TM-64: Monday, May 16th, 2022 at 10:00