Minute of the meeting

Date: March 14th, 2022

Participants

EUROfusion: France Boillod-Cerneux, Jacques David, Roman Hatzky, Serhiy Mochalskyy, Michal Konrad Owsiak, Francois Robin 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 February 15 until March 14.

Ticket revision

We have reviewed tickets escalated to NVIDIA support, for which we have received some updates. Two of the four have been closed after 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 February 15 until March 9.

Module usage on Marconi cluster

We provided data for the month of February; 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 production on both MARCONI and MARCONI100, and the results were shown during the Ticket Meeting. No maintenance undergone within the last month period, so only production checks could be shown. All the tests proved that the situation is stable and there are no significant problems in any of the tests performed.

Power capping on Marconi

We showed that since February of 2022 the automatic procedures of CINECA detected 11 nodes that had to be investigated due to power capping. We also shown that from the beginning of the year a total of 13 diverse nodes had to be uncapped, and some of them had an incident quite frequently. Those nodes will be reported to the system administrators of CINECA.

Likwid & hpcmd tools

The Grafana interface that allow the visualization of the data collected by this tool is online and can be reached at: <u>https://hpcmd.hpc.cineca.it:3000</u>. 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. At present, using this tool, is not possible to collect memory bandwidth information for jobs due the available kernel version on Marconi-SKL nodes. 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. We have included, as agreed, new panels and also annotations on this site to give user's a proper metric's explanation. To this purpose we will contact the tool developer to get a better overview of the metrics and panels implemented at MPCDF (https://docs.mpcdf.mpg.de/doc/computing/performance-monitoring.html).

Other topics

EUROFusion has scheduled a workshop about advanced topics with Intel and AMD experts. A similar workshop with Nvidia has to be scheduled.

Next ticket meetings

The scheduled dates for next ticket meetings are: TM-63: Monday, April 11th, 2022 at 10:00 TM-64: Monday, May 16th, 2022 at 10:00 TM-65: Monday, June 13th, 2022 at 10:00