Minute of the meeting
Date: October 15th, 2021

Participants

EUROfusion: France Boillod-Cerneux, Jacques David, Gilles Fourestey, Roman Hatzky, Serhiy Mochalskyy
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 since September 14 until October 14.

Ticket revision

We have reviewed the two tickets, 16505 and 18895, escalated to SchedMD support:
- ticket 16506: SchedMD support referred that the fix for the issue reported in this ticket will be available in slurm 21.08; this was installed on Marconi100 cluster on September 21st, tests performed after the slurm upgrade showed the expected behaviour, this bug was fixed.
- ticket 18895: SchedMD support expect this bug fix on 20.11.8 version. Latest slurm 21.08 version was installed on Marconi cluster on September 8th, tests performed have confirmed that the issue is fixed.

We have also reported and reviewed the status of the ticket escalated to Intel support:
- ticket 3932: Intel support confirmed that this bug fix will be merged into the compiler, and it has been approved its release on Intel oneAPI 2022.0.

We quickly reviewed the state for the four tickets [18851, 19978, 19982, 20303] that have been escalated to NVIDIA support. We have not received yet updates from NVIDIA support.

We also reviewed other tickets on the second level support queue focusing mainly on:
- ticket 20676 and 20832: we will perform extensive checks for a better understanding of the reported issue.
- ticket 21125: for the type of request reported on this ticket has been reminded the procedure that foresees an immediate escalation to Richard Kamendje for the final evaluation of OC members.

Ticket statistics

We have reported and reviewed information collected for all tickets received, on both the first and second level support queues, since September 10 until October 12.

Module usage on Marconi-SKL

We reported data collected for September 2021 (referring to new 5th Cycle Allocation projects that started on March 1st) for the modules usage of those batch jobs submitted by EUROfusion users/accounts to Marconi-SKL partition, that was integrated with information about module usage by partition/qos.

Sanity checks on Marconi and Marconi100 clusters

Sanity checks were performed between October and November on both Marconi and Marconi100. For Marconi, only production checks were performed since maintenance was postponed. For Marconi100, some maintenance tests showed an issue coming with the newly installed version upgrade of slurm. Further checks were immediately submitted during production, with a workaround for that issue. In all cases, the results didn't show any significant problem and the cluster proved to be overall stable in both production and maintenance cases.

likwid & hpcmd tools

We have continued the discussion to clarify the state-of-the-art for likwid tool that makes use of linux perf tool, focusing on hardware counters on Marconi SKL compute nodes.

We have shown the progress done for HPCMD tool by showing the Grafana instance (hosted on a dedicated VM on new CINECA ADA cloud infrastructure) that allows the visualization of those metrics collected by this tool for those jobs being executed on the four dedicated SKL compute nodes (belonging to the skl_sys_test slurm partition).
We showed three different Grafana dashboards (in a preliminary form) that permit to check now both raw data for all the collected metrics and derived metrics also through several available interactive plots and tables.
Differently from what reported on previous meetings, the present workflow foresees the metrics collection into an InfluxDB database, so all the previously built procedures for data ingestion into elasticsearch have been modified to this purpose. We will prioritize those activities required to provide a safe access to the site from external network as at present this VM is only reachable from internal CINECA network, and we will continue the work in other active tasks due to guarantee a correct data transport and ingestion.

Next ticket meetings

The scheduled dates for next ticket meetings are:

TM-58: Monday, November 22nd, 2021 at 10:00
TM-59: Wednesday, December 15th, 2021 at 10:00
TM-60: Thursday, January 20th, 2022 at 10:00