User briefing about HBW2 (Aug. 16 2023) Q&A

Date: August 16, 2023, from 2:00 pm to 3:30 pm
Place: Video conference (Zoom)

1. Overview of HBW2 and its operation policy

If the upper limit is reduced from 5% of BW to 1%, it will be smaller. For example, if 50% of resources are provided to HPCI, is it possible to reduce it by half to 2.5%?
→We believe that the use of HPCI issues and low-priority execution can cover this to some extent. We will consider this in the future while looking at the operational situation.

Are 5% of BW and 1% of BW2 the same?
→The total number of cores in BW and BW2 is slightly increased, so the core time is reduced to about one-fifth. However, since the memory bandwidth is 10 times greater, the performance of BW2 could be better.

What is the node performance of BW2 compared to BW?
→BW2 has more than twice as many cores per node, and the clock frequency is a little lower, but since it has 10 times the memory bandwidth, performance could be more than twice as good, depending on the application.

Is it not possible to use the low priority job execution before the allocated core time is used up?
→This is not possible under the current operation policy, but will be considered in the future.

Can we apply for use at any time?
→Yes, basically anytime for RIKEN internal projects, but only once a year for HPCI projects.

Is the job execution method the same as for BW?
→In the sense that it is a batch job system, it is the same. However, the difference is that the job manager is slurm and Singularity is introduced so that jobs can be executed in containers.

Can we use applications provided in BW?
→Basically, yes, but we are consulting with individual applications for which there are only a few users.

Can GPUs be used only with subsystems?

→Yes.

Does GPU server mean that there are 4 nodes with 4 GPUs?
→Yes.

Is A100 correct for GPUs?
→It was a mistake for H100.

How are the subsystems used?
→Basically, it is a batch job system, but it could be changed depending on the situation.

Will BW2 and R2DMS be linked?
→We are not considering any special linkage, but we are preparing to link SS and R2DMS.

What about the use of tapes (cold storage)?
→We have not decided how to use cold storage. The current tapes will be mounted on the login node of BW2.

What will the usage report look like?
→The usage report for RIKEN internal project is expected to be the same as that for BW.

2. Overview of HPCI and application procedures

HPCI project must be submitted in the fall of the previous year, so it is difficult when calculations are needed urgently.
→We believe that the current operational policy can cover this to some extent, but it is an issue to be considered in the future.

Where will the data be placed in the case of HPCI projects?
→Basically, data is placed on the computing resources used. However, it is also possible to access and use the data from various computing resources by using shared storage of HPCI.

Is data shared when using both RIKEN and HPCI proposals?
→Yes, the home area will be shared. The data area can have a directory for each project.