

Computer and network system at RCNP

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We are in about the middle in the operation period of the present system of the computer and network at RCNP since it was introduced in December of 2000. A distinguished feature of the RCNP computer system is that it accommodates a large storage space of about 58 TB including disks (38 TB) and tapes (20 TB). The specification and performance were briefly described in the annual report last year [1].

In the academic year of 2002, we have introduced the following services:

- One storage disk (about 3 TB) is additionally assigned to the experimental groups working at the RCNP cyclotron. Another disk is temporarily assigned to super computer users.
- We have increased the space for home and work directory (/home and /work) from 0.7 TB to 1.4 TB, in order to accommodate increasing amount of users (see Fig. 1).
- We have started the wireless LAN service in the main building. Services to other RCNP areas will be planned in due time.

In the following, we report the summary status for the use of the RCNP computer in the year of 2002:

1. Fig. 1 shows the number of users and occupied disk space in the home directory (in total 1.4 TB is available now). Starting from the initial values in December of 2000, they increase roughly monotonically. If the rate of increase may be extrapolated, we expect that the present space of 1.4 TB will be sufficient. Nevertheless we continuously announce that users should move or delete unnecessary files periodically, such that the disk space should be used efficiently.
2. Fig. 2 shows the number of batch jobs and used CPU time. There are 32 CPU's for the experimental group (Saho), and 12 CPU's for the theory group (Senri). The maximum value of the axis in the CPU plot is the maximum CPU time available for each node; for experimental node, it is about 14×10^5 minutes and for theory node 5×10^5 minutes.

References

- [1] H. Togawa, M. Nomachi, H. Shimizu and A. Hosaka, RCNP Annual Report, p107 (2000).

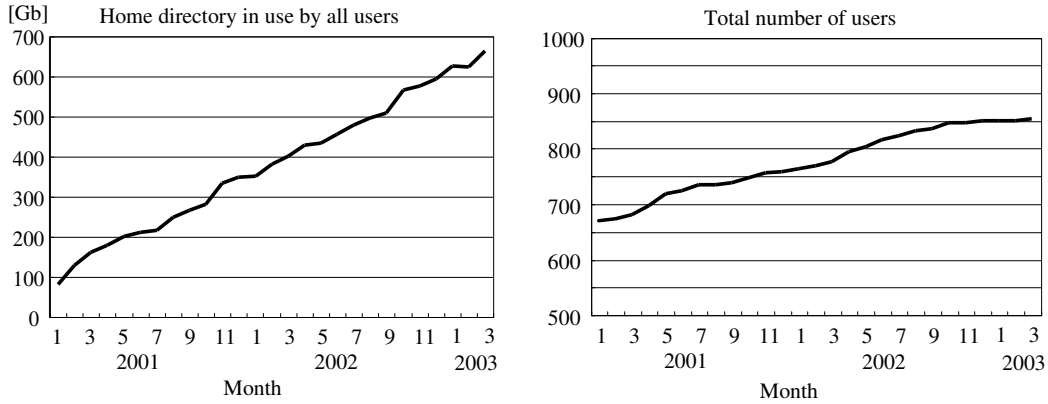


Figure 1: Total number of uses (left) and home disk space in use by the RCNP computer users (right).

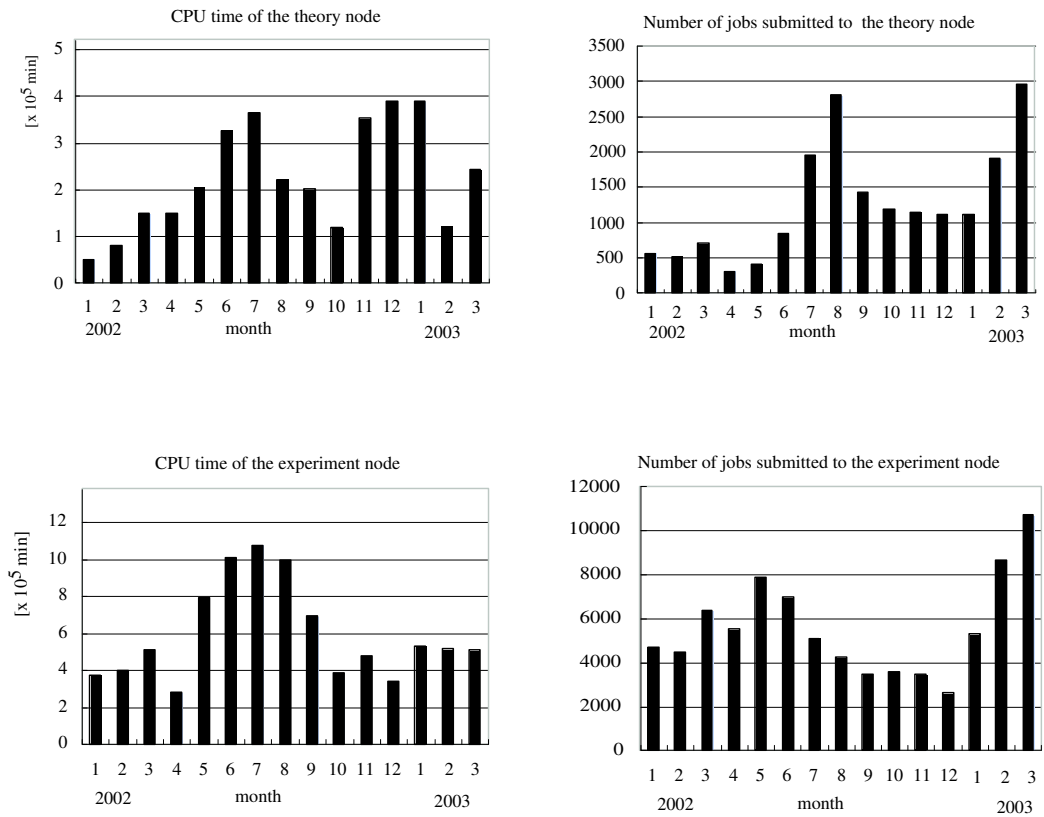


Figure 2: Batch jobs (number of submitted jobs and CPU time) on the RCNP computer.