

Notice to KEKCC ILC users

Version: 14 March 2014

- In order to maintain a secure, stable, and efficient operation of KEKCC, please respect followings.
- Keep your account password secret and use the one not used in another system. ssh private key should not be stored in any servers (login.cc.kek.jp, sshcc1.kek.jp, ...etc)
- Login server (login.cc.kek.jp) is for interactive jobs shared by many users. Do not occupy the system by running long CPU time jobs or many processes concurrently. Use batch job instead.
- Do not submit too many jobs at once. LSF can not handle many job submission in a short time.
- When you submit many jobs, arrange your batch jobs so that CPU usage of the system is maximized. Following type of jobs are examples of inefficient jobs and user should think carefully to improve efficiency.
 - Reading files on tape could be very inefficient if they are staged-out. There are only 60 tape drives (i.e, system can read only 60 files on tapes at the same time. Some times many files are on the same tape, thus read-out is suspended until read out of first file is completed.). If you use tape files (those in /hsm/ilc), make sure that they are staged-in before submitting jobs. An example command to stage-in a tape file is

```
$ head file > /dev/null
```
 - Reading a few files from many IO bounded jobs will also easily hit IO limit of the file server and reduce the CPU efficiency. Process them serially using a script.
- Do not occupy group disk and tape area space without using them. Clean them up and leave the space for other people. Files should be removed in principle when you leave the ILC group.
- If you are going to consume a lot of tape space, say 1TB or more, please notify the group manager in advance.
- The group disk for ILC group is /group/ilc. Personal files on the group disk should be stored under /group/ilc/users/[your_login_name], creating it by yourself.
- The tape area for ILC group is /hsm/ilc. There are 4 types of tape directory
 - /hsm/ilc/grid/strom : Area used by GRID Storage Element (SE). Many generator files and ILD DST will be found here. Only for Write access.
 - /hsm/ilc/grid/dpm : Old area for GRID SE
 - /hsm/ilc/ : For read/write from batch and login servers. Users personal files should be stored in /hsm/ilc/users
 - /hsm/ilc/grid/JB : For read/write from batch and login servers. Users personal files should be stored in /hsm/ilc/grid/JB/users. Remaining space is little and further writing is discouraged. Further information may be found in /hsm/ilc/README
- Tape system is not efficient as a storage of small size files. Merge small size files to a big tar file before storing them on the tape directory.
- Don't hesitate to contact the group manager, akiya.miyamoto@kek.jp if you have any questions