

General FAQ

What information is required for ordering an LTS share?

- Department
- Responsible ISG
- For CIFS: AD Group
- For NFS: DNS name (e.g. something.ethz.ch) or IP address (e.g. 192.168.0.1) or network IP/Mask (e.g. 192.168.0.0/255.255.255.0)

What is the procedure for data transfers?

- Data is written from a client system to a share.
- The delay action timer expires. Subsequently, data gets tagged for further processing, written on to a tape, replicated on another LTS appliance where it is written on tape as well.
- Each file is entirely written on tape. The first 4MB (stub) are kept on the LTS disk as a read cache. Upon recall of the data they are sent to the client in small packets (trickle read). This prevents timeouts on the client while the entire file is loaded from tape.

What is "data replication"?

- ETH has two LTS appliances. One is located at ETH Centre and the second one at Hönggerberg. Each share is defined to one of those units. This unit is referred to as „primary“. After -> Delay Action Timer expires the data is copied (replicated) to the second location as well.

What is the "Delay Action Timer"?

- After creating or copying a file/directory on the share, a timer starts to run (delay action timer), default time = 1h!
- During this period changes can still be made to the data (e.g. set permissions).
- Once the timer expires, the data is r/o (read-only). Change attempts receive an error message.
- Data cannot be changed anymore, only deleted. Subsequent follow-up of new data into the directories is always possible.

What are considered "suitable" and "unsuitable" files for LTS?

Suitable files are:

- Packed data (*.tar, *.zip, *.gz etc.)
- File size 10 GB to 200 GB (up to 2 TB possible)

Unsuitable files are:

- Unpacked data (normal directory structures)
- File size is less than 10 GBB

What are the constraints on naming of files and directories?

- Shares are generated for a department by the LTS team. That ensures that the names are unique on this level. Beneath this level ISGs can define names and structures on their own.

Please note:

- The names of files and directories may contain a maximum of 255 characters.
- The full path may be 3900 characters long.
- Rights must be defined at creation. Subsequent changes (chmod, mv, etc) can only be done within one hour. Delay action time applies here as well.
- Should changes be necessary after that, the only solution is to create new directories, copy the data and then delete the old structures.
- Subsequent follow-up of new data into the directories is always possible.