

Data Movement In/Out of HAL

Globus

Globus is the recommended way to move datasets in and out of HAL, the HAL endpoint ncsa#HAL instructions for setting up a Globus personal client on a machine is supplied by Globus and located [here](#).

Rclone

Rclone is a command line tool that supports file transfers between a wide variety of services. It is installed on the hal-data host (hal-data.ncsa.illinois.edu), instructions for set up for various endpoint location types can be found [here](#).

Users can SSH into hal-data directly or from the hal login node.

Rsync/SCP

Users can also use conventional command line transfer tools like rsync and scp, it is best to perform these processes on hal-data.ncsa.illinois.edu as that keeps the traffic off the login node and gives users there a better experience.

SFTP

Users can also use conventional command line transfer tools like [FileZilla](#) or [CyberDuck](#) to upload and/or download data from hal-data machine.

```
sftp <userid>@hal-data.ncsa.illinois.edu
put myfile.dat # upload data file
get myfile.dat # download data file
```