

PetaLibrary Overview and User Guide

How do I access and begin using the PetaLibrary?

Step 1. Request an [XCEDE account](#) by clicking on the Create Account Computing button and completing the requested information.

The screenshot shows the XSEDE User Portal interface. At the top, there is a search bar and a 'SIGN IN' button. Below the search bar is a navigation menu with categories: MY XSEDE, RESOURCES, DOCUMENTATION, ALLOCATIONS, TRAINING, USER FORUMS, HELP, and ABOUT. Under 'MY XSEDE', there are links for Summary, Allocations/Usage, Accounts, Jobs, Profile, Publications, Tickets, Change Password, Add User, Community Accounts, and SSH Terminal.

The main content area is divided into several sections:

- Get Started on XSEDE:** Contains 'Sign In' and 'Create Account' buttons.
- Quick Links:** A list of links with icons: System Monitor, Allocations, User News, Scheduled Downtimes, Software Search, Documentation, Training, Help Desk, ECSS, User Forums, and Science Gateways.
- In The Past 7 Days:** A section titled 'XD SUs Changed: Total: by Field of Science' featuring a pie chart. The chart shows the following data:

Field of Science	Value
Materials Research	17,325,775.0
Astronomical Sciences	10,448,562.0
Biochemistry and Molecular Structure and Function	6,582,183.0
Chemistry	6,133,202.0
Fluid, Particulate, and Hydraulic Systems	4,529,078.0
Biophysics	4,124,329.0
Advanced Scientific Computing	3,881,398.0
Physics	3,683,193.0
Condensed Matter Physics	3,396,013.0
Mechanics and Materials	3,026,074.0
All 78 others	34,673,514.0
- New to XSEDE?:** A dropdown menu.
- XSEDE Compute Resources:** A table with columns for Name, Status, Load, and Jobs.

Name	Status	Load	Jobs
Stampede2 TACC	Healthy	99%	R: 863 Q: 835 O: 186
Comet SDSC	Healthy		R: 2341 Q: 328 O: 133

Step 2. Complete this form -

<https://na2.docusign.net/Member/PowerFormSigning.aspx?PowerFormId=2a60257b-60e4-43a4-ade0-ae8221638aa8&env=na2&acct=088d5d64-ef4d-40bb-acf2-480eabff546d&v=2>

For the CU identikey owner field, please enter your xsede username (username@xsede.org).

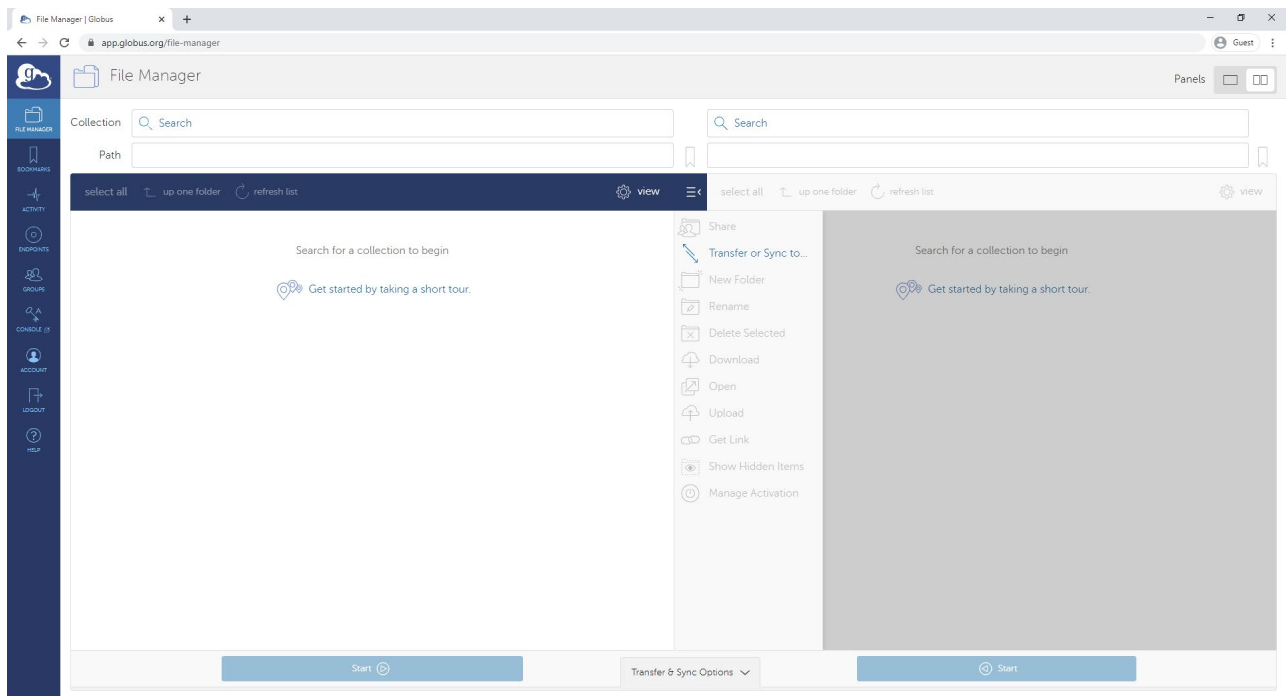
For the Allocation type – Choose Active-Disk based

Step 3. Following approval and provisioning of storage, you will need to install and configure Globus which is the preferred method for transferring data to the PetaLibrary.

Globus provides an interactive web interface for transferring large data sets and supports automatic resumption of failed data transfers. A detailed description of the service is available on the Globus [website](#). Video with detailed instructions is available [here](#)

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- Login to [Globus](#) or [create an account](#) if necessary
- [Download](#) and install the Globus Connect Personal client on your local computer. Note: This is the service that runs locally on your computer that makes the transfer secure. You will be prompted to name your personal client.
- Connect to the Globus endpoint by clicking on “Endpoint” and searching for the CU Boulder Research Computing endpoint and entering your Research computing credentials.
- Connect your local Globus endpoint with the Research Sync Computing endpoint to begin the file transfer.



Step 4. To utilize SSH to transfer the data to the Petalibrary, login to resource computing resources (login.rc.colorado.edu) and navigate to the archive storage located at: `/pl/active/AMC-SOM/<your_allocation_name>`

Windows instructions – Video with detailed instructions is available [here](#)

- Install PuTTY ssh [client](#)
- Under Host name enter `login.rc.colorado.edu`
- Enter password when prompted and approve Dup Push on your phone

Macintosh instructions - Video with detailed instructions is available [here](#).

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- Open a terminal window session in the Utilities folder under the Applications folder
- Type ssh [username@login.rc.colorado.edu](https://login.rc.colorado.edu) where the username is your research computing username.
- Enter password when prompted and approve Dup Push on your phone

Linux instructions –

- Open a terminal window session in the under the application menu.
- Type ssh [username@login.rc.colorado.edu](https://login.rc.colorado.edu) where the username is your research computing username.
- Enter password when prompted and approve Duo Push on your phone

FAQs

What types of data should I store in the Petalibrary?

- Archiving research data from projects that have been completed but must be saved for regulatory purposes.
- Archiving research data on storage devices attached to scientific equipment such as genomic sequencers and microscopy images devices.
- Archiving research data stored on local computers and network attached storage devices

What data transfer protocols does the Petalibrary support?

Globus, Secure Copy (scp), Rsync and sFTP are supported protocols for transferring data to the Petalibrary.

Is the Petalibrary HIPPA compliant?

No, not at this time, HIPPA regulated data cannot be stored in the Petalibrary. HIPPA regulated data should be stored on the Dell Isilon or in Microsoft OneDrive which are approved campus solutions.

What is the cost of the Petalibrary?

The cost is currently is \$45/TB/yr and pre-purchase of a storage block is required. A purchase of a minimum of 2TB of storage with a valid speed-type is also required.

Where can I get more detailed information?

More detailed information is available on the CU Research Computing [website](#) and at [Globus.org](https://globus.org)

Are there any other considerations for using the Petalibrary?

- Large number of small files (<3000 files/TB of data) are not allowed.
- New customers are limited to 100 TB of archive storage.

Who should I contact if I have problems?

Please email rc-help@colorado.edu