

Research Storage Simplified

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Be Boulder.

Meet the User Support Team



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Data Storage

Core

- Personal Storage
- Includes 3 Directories
 - /home (2 GB)
 - /projects (250 GB)
 - /scratch (10 TB)

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PL

- PetaLibrary
- Tiered Storage
 - Active, Archive, Active+Archive, Archive+DR
- Requires Funding
- Starts at 1 TB





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Home

- Personal data
- Config files
- OnDemand data
- Do not share!

2 GB

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Projects

- Code, Job scripts
- Installed software
- Shared data

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Scratch

- Job data (in/out)
- Shared data
- Deleted after 90 days

10 TB





More Details on Scratch

/alpine

- Available from all nodes
- Accessible even when no jobs are running

/local

- Specific to each compute node
 - Accessible only on that node, while a job is running on it

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- Performance tier
- Accessible by all nodes
- No file limit

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- Accessible by data transfer (DTN) and login nodes only
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- Same features as Active
- Copy is synced to separate on campus datacenter monthly





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Active + Archive

- Same features as Active
- Copy is synced to separate on campus datacenter monthly

Archive + DR

- Same features as Archive
- Copy is synced to offsite datacenter monthly

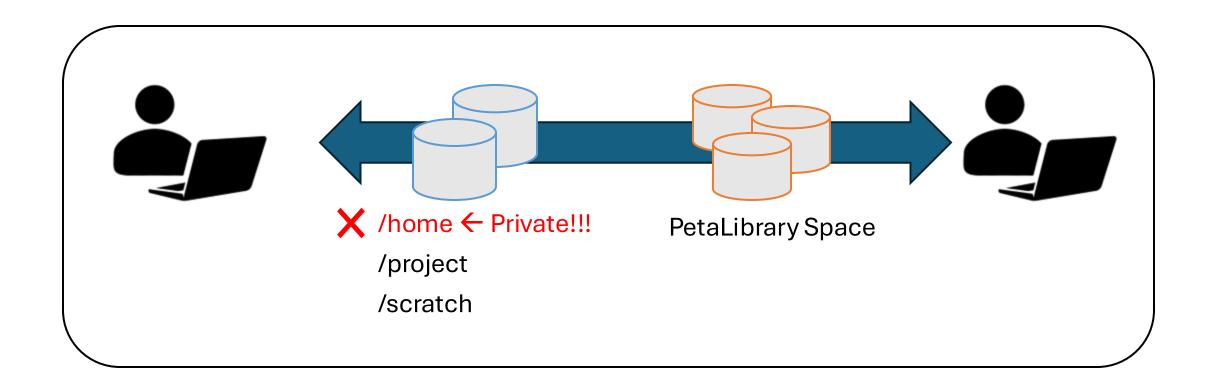


Speed Comparison

- /scratch/local: Fastest
 - •/scratch/alpine: 2nd Fastest
 - PetaLibrary (all tiers): 3rd Fastest
 - •/projects: 4th Fastest
 - •/home: Slowest



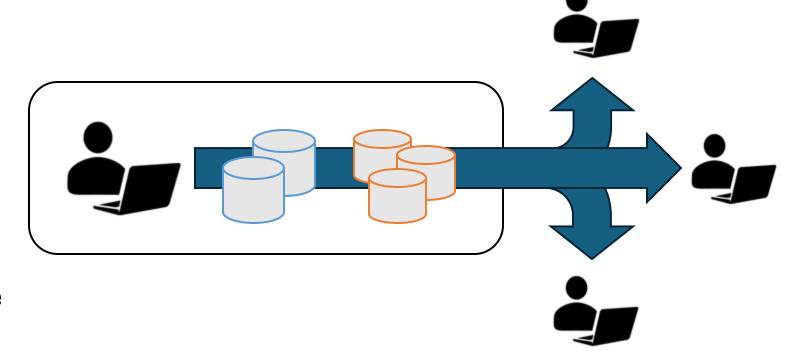
Data Sharing: Within RC



Data Sharing: Outside RC

Large Data Transfers:

- Globus (Recommended)
- Data Transfer Nodes (DTN)
- Terminal/Command Line:
 - o rsync
 - rclone (connect to 3rd party cloud services like OneDrive)
 - o sftp
 - o scp





Data Transfer Nodes



- Support data transfers
- Can be selected when using scp, sftp, or ssh transfers





Acceptable data storage and use

CURC systems and services **should not be used to store** any data that is US government Classified, nor any Controlled Unclassified Information.

For users requiring storage for sensitive data types, please see the secure research computing resources:

https://www.colorado.edu/rc/secure-research-computing-resources



