Sharing files and related topics

Many services allow sharing of files. Look here for guidance on which to use, and why.

See also

- File share services and related tools
- Box.com info

Standard of practice

- Never have a unique, valuable file on a single storage or device.
    - That is, make sure you have copies accessible elsewhere!!

Options:

- Back it up, of-site and with versioning. (Traditional desktop model)
- Store it elsewhere, and mount it so files easily accessed. (Typically a file server does this)
- Sync it elsewhere, with versioning. Access files via web browser (Typically cloud services do this)

Oliver's thoughts (Oliver needs to finish this...!)

1) Default location for work files:

- Departmental file storage, such as A&S file server.

2) Alternate location for work files, when it conveys an advantage to do so:

- OneDrive, especially after MS releases a Mac client (later in 2014?). 1TB!
- Box.com

Best practice: Create a "work" directory at the top level and share this with at least your supervisor in case you are out and work files need to be accessed.

Example of advantages:

Ad hoc sharing a canonical copy of a (potentially changing) file vs. making yet another copy, especially one which may go out of date.

Storing more sensitive files, especially

At Cornell

Service	Files one expects to see there	Sharing characterizations	Backup-related comments Q no answered: What if account is hacked?	Versioning Providing access to prior versin os existing files, and last version of deleted files.	Enablers and barriers to use, and related considerations.	Cost ("Free" means free to departments/ users)	Notes	Comparison to other services
Staff person's **work computer.** (Cornell owned desktop or laptop.)	Work, and sometimes personal files.	No sharing directly. • Thus promotes use of emailing attachments.	No. Backup encouraged if files deemed unique and valuable (fee-based, if via EZ-Backup).	No.	• Not accessible via web. • No access via mobile device. • Off campus access only through VPN. And that's only user is trained, system is left on (no power outages), system enabled, and network enable. Thus, no persistent access allowed, such as if you set up automation.	Sunk cost of provisioning a system. Fee-based service, if backups are being done.	Historical default.	

A&S's file storage service • A&S file share	Work files. Best for static sharing arrangements.	ChemIT configures permissions, including sharing. • Turn-around time and process. • Dampens experimentation and ad hoc sharing. Sharing with those with CU NetIDs or publicly	Yes. Backed up off-site (EZ-backup) for disaster recovery purposes of the entire service.	?Any file-level versioning?	• Not accessible via web. • Challenging access via mobile device. • Off campus access only through VPN. Thus, no persistent access allowed, such as if you set up automation. • Approved for university data.	Free	For departmental administration only.	
CIT's SFS (file storage service) • Chemistry file sharing instances, including SFS	The funder gets to specify files appropriate.	ChemIT structures permissions, including sharing. • Turn-around time and process. • Dampens experimentation and ad hoc sharing. Sharing with those with CU NetIDs or publicly	Yes. Backed up off-site (EZ-backup) for disaster recovery purposes of the entire service.	Yes, optionally. (Usually turned on!)	• Not accessible via web. • Challenging access via mobile device. • Off campus access only through VPN. Thus, no persistent access allowed, such as if you set up automation. • Approved for university data. • Sensitive data storage solutions available.	Fee-based service. Reasonable cost for up to 1-2TB of data.	University controlled & sanctioned.	
Box.com • Box.com info	Work or personal files.	User controls sharing to others with CU NetIDs or publicly, so good for ad hoc sharing (usually beats emailing documents) • Promotes rapid experimentation and ad hoc sharing.	Yes. Backed up off-site (CU contract) for disaster recovery purposes of the entire service.	Yes	• Good integration with OSes. • Easy access via web. • Easy access via mobile device. • Off campus access easy (no VPN required). • Approved for non-sensitive university data.	Free	Limitations on single files size, but that's not a problem for most people. Limitations on path name length, file types, file names, etc.	
MS OneDrive	Work or personal files.	User controls sharing to others with CU NetIDs or publicly, so good for ad hoc sharing (usually beats emailing documents) • Promotes rapid experimentation and ad hoc sharing.	Yes. Backed up off-site (CU contract) for disaster recovery purposes of the entire service.	Yes.	• Default use by MS products and OSes. • Easy access via web. • Easy access via mobile device. • Off campus access easy (no VPN required). • Approved for non-sensitive university data.	Free	Limitations on single files size, but that's not a problem for most people.	
MS-provisioned (cloud) MS SharePoint	Work files.	User controls sharing to others with CU NetIDs or publicly, so good for ad hoc sharing (usually beats emailing documents) • Promotes rapid experimentation and ad hoc sharing.	Yes. Backed up off-site (CU contract) for disaster recovery purposes of the entire service.	?Yes?	• Default use by MS products and Windows OS. • Easy access via web. • Easy access via mobile device. • Off campus access easy (no VPN required).Approved for non-sensitive university data.	Free	Admin, tech, and training investments are required to enable effective use and maintenance of this service.	
CU-provisioned (on-premise) MS SharePoint	Work files.	User controls sharing to others with CU NetIDs or publicly, so good for ad hoc sharing (usually beats emailing documents) • Promotes rapid experimentation and ad hoc sharing.	Yes. Backed up off-site (EZ-Backup, usually) for disaster recovery purposes of the entire service.	?Yes?	• Default use by MS products and Windows OS. • Easy access via web. • Easy access via mobile device. • Off campus access easy (no VPN required). • Approved for non-sensitive university data.	Free	Admin, tech, and training investments are required to enable effective use and maintenance of this service.	
Cornell's Dropbox	Temporary storage of work files, for the purposes of sharing.	User controls sharing to others with anyone, so good for ad hoc sharing (usually beats emailing documents) • Promotes ad hoc sharing.	? (N/A really since just holds, temporarily, copies of files.)	No. (N/A)	Temporary sharing with anyone. CU-sanctioned tool for transferring sensitive university data.	Free	For temporary use of files. Limitations on single files size, but that's not a problem for most people.	

Non-Cornell file sync services (ex. Dropbox, Google Drive, iDrive, etc.)	Personal files. Regarding work files: Backups encouraged if used for work files, and there may be other issues, especially regarding risk management.	User controls sharing to anyone with service account or publicly, so good for ad hoc sharing (usually beats emailing documents)	Yes. We hope! (No CU contract to enforce this.)	Yes.	• Good integration with OSes. • Easy access via web. • Easy access via mobile device. • Off campus access easy (no VPN required). • Not approved for storage of university data.	Free and fee-based.	No institutional oversight, restoration, access, or path to service escalation. Limitations on single files size, but that's not a problem for most people.	

Box.com info

Box.com is a CIT-supported service. But to get more space, they expect you to go through your IT support provider. Which is ChemIT for CCB folks, of course.

- Box.com limitations and recommendations — Some select Limitations and Recommendations from the FAQ, for v3. How much pertains to the current version (v4)?

File share services and related tools

these relate to the more traditional file shares allowing for a regular mounting of the share to the desktop, via CIFS and the like. Includes Linux NFS-based shares, too. Being file shares, all at Cornell. Includes permission inventory tools, too.

- A&S file share — This is a service for A&S's administrative departments. (This service is not available to research groups.)
- Chemistry file sharing instances, including SFS — A list of CIT SFS (and other file share) instances, along with ChemIT's how-to's and conventions. Also, notes on any pending migrations or changes, including ChemIT test instances.
- Directory structure and permissions within a group file share — The conventions used within Chemistry for group file shares. Also includes how-to's for ChemIT staff.
- Drive letter conventions — Windows auto-mounts.
    - CIT SFS share request template — When you request that ChemIT provisions a file share for your research group, this page reminds how to fill out the request form.
- File permission inventory tools — Windows NTFS folder and file permissions can be complicated. There are tools available to better view those permissions than doing so by hand, one folder and file at a time.
- File sharing mapping — For all CCB staff and others, Windows and Mac file sharing. Includes using Cornell's DFS service.
- Instructions for using group's file share — Note 1: Off-campus use requires the use of Cornell's VPN (Virtual Private Network services).
- Physics file sharing instances — A list of file share instances, along with PhysIT's how-to's and conventions.