

# File sharing mapping

For all CCB staff and others, Windows and Mac file sharing. Includes using Cornell's DFS service.

## See also

- [Instructions for using group's file share](#)
- [Configuring restricted user folders on file share folders](#)
- [Drive letter conventions](#) (Windows auto-mount) (ChemIT staff only)
- [ChemIT's internal file servers](#) (ChemIT staff only)

## Overview

Using the Microsoft [Distributed File System \(DFS\)](#) convention to mount file shares makes things easier. DFS Brings 2 main features to a system of file shares.

Wikipedia: [http://en.wikipedia.org/wiki/Distributed\\_File\\_System\\_%28Microsoft%29](http://en.wikipedia.org/wiki/Distributed_File_System_%28Microsoft%29)

1. A common directory tree. This "virtual file system" appears to users as one big interconnected file system. The tree is made up of pointers that link to the actual share locations.
2. The ability to replicate Windows between multiple shares at a node, providing redundancy, and location distribution.

Advantages include:

- Your mapping can still work even when the provisioning service underneath changes completely.
- The DFS convention is easier to remember than the fully qualified names. A fully qualified name may look something like, <as-chm-serv\_2.ad.cornell.edu>.
- Mount points can be on a wide variety of services on campus, including services provisioned by ChemIT, A&S, and CIT.
- Security is still managed on the shares using normal Domain accounts and authorization, using NTFS permissions & AD groups. This helps make permissions easier to understand for users, and more efficient to support and maintain.

Cornell's Active Directory domain supports DFS, which is available to Windows, Macs, and Linux computers. Individual shares need to be Windows SMB / DFS compatible. Below are examples of how you can use the Cornell implementation as a member of the Chemistry department.

Research group with file server services have group accounts with easy-to-remember mount-point names:

- Abruna, Dichtel, Freed (2 names coming), Lin.
- Example: \\files.cornell.edu\as\chm\abruna mounts the Abruna Group's file share.

## Windows

\\files.cornell.edu\as\chm\... wherever you have permission to look and/ or write to.

CCB staff using Windows have the following auto-mapped:

- Staff file shares. R:  
is mapped to <\\files.cornell.edu\as\chm\>.
- From R:, you can browser department file shares you are authorized to either just see or see and write to.

This service works best with:

- CU Active Directory member computers
- Windows 7 and higher PC's
- OS X 10.7 (10.8?) and higher Macs
- Some newer Linux distributions.
- It will work with Windows XP Domain computers

This service will not work with the following, which will need to point to individual share paths instead:

- Older Non-CU AD computers
  - Windows XP stand-alone, such as a student's personal computer, or a non-domain instrument system.
  - OS X 10.6 and earlier
- Off campus use requires VPN to access.

## Mac and Linux

smb://files.cornell.edu/as/chm/... wherever you have permission to look and/ or write to.

All staff Macs are on CU AD, as are many Research Macs.

This service will not work with:

- Mac OS X 10.6 or older.

- Q: Read-only for NTFS shares?