Secure File Copy (SCP)

Inside of the CIT network, there is no need for any special file transfer applications.

Linux users can access their shared drive space directly from their home directory.

OS X users benefit from the same setup.

From the shell prompt, their home directory is the shared space. From the GUI the home icon is their home directory. The Mac Desktop, and all preferences are kept as subdirectories of the home directory.

Windows users access their shared disk space through the U: drive.

The Windows Desktop, My Documents, and all preferences are kept on the C: drive while the user is logged in, and copied to the server at logoff time.

From outside of the CIT network

Special file transfer applications are needed. SFTP/FTP is no longer supported or enabled for access. The main reason for this is the security problem of cleartext passwords.

Additionally, only one host `ssh.cs.dixie.edu` is accessible via the SSH protocol. Because of this, users must use SSH tunnels to access systems inside of the CIT network.

To access CIT account files, just use any SCP tool and access the files from the user account on `ssh.cs.dixie.edu`.

Setuping up an SSH Tunnel

MAC ONLY

To access CIT files located on other servers, such as `stargate.cs.dixie.edu`, an SSH tunnel through `ssh.cs.dixie.edu` must be used.
In the terminal shell type:

```
ssh -L2121:stargate.cs.dixie.edu:548 USERNAME@ssh.cs.dixie.edu
```

followed by your password.

This will then allow you to use your access (in this case `stargate`) using `afp://localhost:2121` then logging on using the stargate credentials. Do do this you need to open the "Connect to Server" utility. The shortcut for this is `cmd + K` from the finder window.

WINDOWS ONLY

You will need to forward port 139 for SMB file transfer. You will need to use a program such as putty to accomplish this.

After setting up the tunnel you should be able to open the start menu and type:

```
\\localhost:2121
```

into the "run" or "search" field.

Using an SCP/SFTP tool

Unix users

You can use command line scp or any other SCP tool.

OS X users

You can use command line scp like other Unix users. To use a GUI SCP tool, further configuration is required (see "Setuping up an SSH Tunnel" above). FUGU is a free GUI tool that have received good reviews from the MAC community.

1. Launch FUGU
2. Create a "New SSH Tunnel" (command-T, Create Tunnel to: stargate.cs.dixie.edu, Service or Port: 22, Local Port: 1024, Tunnel Host: ssh.cs.dixie.edu, Username: CITACCOUNTNAME, Port: 22, Start Tunnel, Entry the CIT account password when prompted.)
3. Connect to stargate.cs.dixie.edu through the tunnel (Connect to: localhost, Username: account on stargate, Port: 1024, Connect, Password: password on stargate, Authenticate.)
4. Transfer files
5. Disconnect
6. Close tunnel

Windows user

You can use the command line tool pscp.exe available with the putty download. Be sure to create a tunnel with putty first. For a GUI SCP tool, WinSCP is one free tool that works well. To set up the SSH tunnel with WinSCP for the above example:

1. Launch WinSCP
2. Enable Advanced Options
3. Configure "Connection-Tunnel" (Check "Connect through SSH tunnel", Hostname: ssh.cs.dixie.edu, Username: CITACCOUNTNAME, Password: CIT account password)
4. Configure "Session" (Hostname: stargate.cs.dixie.edu, Username: account on stargate, Password: password on stargate)
5. Select Login
6. Transfer files
7. Close WinSCP