

Uploading Data to LabCAS Server

Large datasets should be transferred to the LabCAS server via SFTP.

Before uploading data, please make sure to:

- Organize your data in a directory structure corresponding to the collection and one or more datasets, as previously determined with the JPL Informatics Center
- For your data provide as much metadata as possible using the metadata worksheet. Co-locate this with the data when you upload.

SFTP

Unix

On Unix-like systems, do the following:

- Generate a public/private RSA key pair with the following command, or use an existing pair if you have one:
 - `ssh -keygen -t rsa`
- Send your public key (`id_rsa.pub`) to the LabCAS team at ic-data@jpl.nasa.gov so they can enter it in the list of allowed user keys

Once you hear back from the JPL Informatics Center, you can start uploading data with the following:

- Simply use the SFTP client of your choice to connect to the LabCAS server (with no username or password, since authentication is provided by the key), navigate to your assigned root directory, create new directories for the Collection and Dataset to upload, then transfer the data (all files in the current local directory, including the metadata file `<dataset>.cfg`):
 - `sftp <your username>@s-7e3e14dbccae4ea9a.server.transfer.us-west-2.amazonaws.com`
 - `cd <your top level data directory>`
 - Optionally, create any desired sub-directory:
 - `Mkdir <sub-directory>`
 - Optionally, cd to any sub-directory:
 - `cd <sub directory>`
 - To place all files in the top level directory:
 - `put *`
 - To copy all files recursively from your local machine to the SFTP server:
 - `put -r *`
 - Email the LabCAS team at ic-data@jpl.nasa.gov to let them know new data is available, and to coordinate the publishing phase.

Windows

On Windows systems, you first generate a public/private key pair:

1. Download and install both [PuTTY](#) and [WinSCP](#). Both are free, open-source software packages.
2. Installing PuTTY makes a new program available, PuTTYgen. Start this.
3. At the bottom, select SSH-2 RSA and enter 2048 bits. (This should be the default.)
4. Press "Generate".
5. Move the mouse around in the blank area to generate random numbers until the progress bar is filled.
6. Click "Save public key" and save the key to a file.
 - o Send your public key (id_rsa.pub) to the JPL Informatics Center team at ic-data@jpl.nasa.gov (it will be entered into the list of allowed user keys. They will notify you once the key has been added)

Alternatively, you can click in the Public key box, select ALL the text, and paste that in an email. This key should be a single long line of text that starts with "ssh-rsa AAAA..."

7. Enter a passphrase (and confirm it) then press "Save private key". Choose a filename (say "LabCAS") and save it to your Documents folder.
8. Close PuTTYgen.

Once you hear back from the JPL Informatics Center, you can start uploading data with the following:

1. Open WinSCP.
2. Press the "Advanced" button.
3. On the left side, under "SSH", click "Authentication".
4. Under "Authentication parameters", click the ellipsis ... button under "Private key file".
5. Select the private key you saved in the Documents folder in step 7 (above). Click "OK".
6. Under "Session", select SFTP. For Host name, enter s-7e3e14dbccae4ea9a.server.transfer.us-west-2.amazonaws.com; for user name, enter your username (assigned to you when you registered). Leave the password field blank, and then click login.
7. You will be prompted for your passphrase you made in step 7 (above), enter that passphrase.
8. You will be warned the first time you're connecting to an unknown server. Click "Yes" to accept the connection.
9. Drag and drop files to the appropriate subdirectory.
10. Email the LabCAS team at ic-data@jpl.nasa.gov to let them know new data is available, and to coordinate the publishing phase.