

PINMRF

Varian Inova NMR Spectrometers - Data Transfer between Varian Spectrometer and User PC

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Overview

These notes cover the steps involved in moving an NMR dataset from a Varian spectrometer or offline data station to a personal computer for archiving or manipulation by a third party processing program. These notes are designed to be used in conjunction with the PINMRF Varian 1D Training Guide.

Secure File Transfer

1. **On your personal PC/Mac** download and install a Secure File Transfer Protocol (SFTP) client if you do not already have one setup.

Purdue has made available a program called *SecureFX* through the security resources section of the ITAP website (<http://www.purdue.edu/securepurdue/download/>). After authenticating as an authorized Purdue user you will be allowed to download SecureFX and be sent a license code via e-mail. Install on your PC following all standard options.

Mac users may use any free option, such as *Fugu* (<http://rsug.itd.umich.edu/software/fugu/>) or *CyberDuck* (<http://cyberduck.ch/>) which provide the same functionality. Mac or Linux users may also use the `scp -r` (secure copy) command from a terminal window within Mac OSX if they are comfortable with Unix command-line input. The `scp` command does not have a GUI so directory locations must be entered manually.

2. Launch the SFTP client and open a new connection.
3. Enter or select the following parameters for that connection:
 - a. Connection Type/Protocol: SFTP
 - b. Port: 22
 - c. Hostname: *spectrometer_name*.pinmrf.purdue.edu (where *spectrometer_name* could be inova300-1, inova300-2, inova600 or endeavour)

- d. Username: your NMR User ID
 - e. Password: your NMR password for that machine
4. Click CONNECT and wait for the client to connect. A file management window should open showing your home directory.
 5. Use the navigation buttons to get to your saved data. This is typically located in: */mnt/d2/userID*, where *userID* is your NMR username – this directory is your home directory. If you have saved data in a different directory, simply navigate to that location.
 6. Locate the files of interest. In most cases you may download them by clicking on them to highlight, and then dragging them directly to the desired location on your computer. Otherwise, click the .fid file to highlight, and select DOWNLOAD in the client. You should then be prompted to choose a save location. Click SAVE to save the file to your PC.
 7. Repeat step 5 until all desired files have been transferred.
 8. Disconnect from the host spectrometer and quit your SFTP client.

NOTE: Varian NMR data will require a third-party NMR data processing program in order to view and manipulate your data on a PC or Mac. An excellent choice for this is MestreNova, a reasonably priced comprehensive package available at www.mestrec.com. Other packages such as NUTS or Perch will also suffice.