Connecting to Samba the NMR Data Server

Instructions for Mapping Your Group's NMR Data onto a Windows 10 PC

1) **Be sure you have already sent us your static IP address (Google: "my IP address") and we have confirmed that you can try the connection.**
   a. **A new computer or new location will generate a new IP address.**
2) **Open the File Explorer folder**
3) **On the left, press "This PC"**
4) **On the top, press, the "Computer" tab, then "Map Network Drive"**
   a. **You can also try using "Add a Network Location"**
5) **In the folder box, type something like this if you are in the Smith Group:**
   a. **\\nmrds2.SCS.uiuc.edu\Smith-ui400**
   b. **A coursework example might be: \\nmrds2.SCS.uiuc.edu\chem237-cb500**
   c. **Proceed to check the box for "Reconnect at sign-in". Click Finish**
      i. **If this does not work also check "Connect using different credentials"**
6) **Perform #4 & #5 for each spectrometer you want data from**
7) **Proceed to log on to Samba:**
   a. **User name = user1d**
   b. **Password = samba@nmr**

For Windows 10, Perform the Following Additional Task:

- **Open the Control Panel (search for it if necessary)**
- **Proceed to "Programs and Features"**
- **Proceed to "Turn Windows Features On or Off"**
- **Scroll down and check the box next to "SMB 1.0/CIFS File Sharing Support"**
- **Restart your computer, and try connecting to Samba again**

See the next several pages for more information on connecting to Samba via different computers, plus tips on data back-up.

When you connect to Samba, turn off all the WiFi Internet connections on the computer being used. Samba will not successfully connect via WiFi.

To connect to Samba from off campus, you must use a VPN to connect to a campus computer that is already mapped to Samba.

Instructions for mapping your group's NMR data on a Windows 7 PC:

1) Double click on [My Computer] on the desktop
2) Select [Map Network Drive...]
3) For [Drive:], select an available drive letter
4) For [Folder:], type in **\\nmrds2.scs.uiuc.edu\Group-instrument** (for example: \\nmrds2.scs.uiuc.edu\Mitchell-ui400. Substituting Group with your group's name, and substituting instrument with u400, ui400, u500, vxr500, ui500nb, ui500nb1, ui300, ui600, or vns750nb. Pay attention to UPPER and lower cases since this is case sensitive.)
5) Check the [Reconnect at logon] tick mark (optional but recommended)
6) Click on [Finish]
7) Enter user1d for [User name]
8) Enter samba@nmr for [Password]
9) Check the [Remember my password] tick mark (optional but recommended)
10) Click on [OK]
11) The network drive for a particular instrument will contain the directories for all the users in your group on that instrument.
12) Repeat steps 2 to 10 for each spectrometer that your group uses. You may not be prompted for the [User name] and [Password] again after you have set up the first one.

Instructions for mapping your group's NMR data on a Mac OS X computer (typically Mojave version)

Try not to update your Mac operating system to the "Catalina" version, which might not connect to Samba. If you already have Catalina, try the procedure below.

1) Go to "Connect to Server..." under the "Go" Menu in the Finder
2) Type "**smb://nmrds2.SCS.uiuc.edu/Group-instrument**" ((for example: //nmrds2.scs.uiuc.edu/Burke-u400. Substituting Group with your group's name, and substituting instrument with u400, ui400, u500, vxr500, ui500nb, ui500nb1, ui300, ui600, or vns750nb. Pay attention to UPPER and lower cases since this is case sensitive.)
3) Click Connect
4) A Dialog box will appear.
5) Enter user1d for [Name]
6) Enter samba@nmr for [Password]
7) Check the [Remember this password in my keychain] tick mark (optional but recommended)
8) Click on [OK]
9) The network drive will appear on your desktop.
10) You may drag the drive to the right side of your dock so that you may simply click on the dock icon to re-mount the server.
11) To unmount the server, drag the network drive to the eject symbol on the very right side of the dock.

Instructions for mapping your group's NMR data on a Linux computer

1) Go to "Connect to Server..." under the "Places" Menu on the menu bar, a connection window pops up
2) Under 'Service type: select 'Windows share'
3) Under Server: type: nmrds2.scs.uiuc.edu
4) Under Folder: type: /Group-instrument " ((for example: /Burke-u400. Substituting Group with your group's name, and substituting instrument with u400, ui400, u500, vxr500, ui500nb, ui500nb1, ui300, ui600, or vns750nb. Pay attention to UPPER and lower cases since this is case sensitive.). A figure shows below
5) Uner 'Name to use for connection': type: user1d
6) A Dialog box will appear.
7) Enter user1d for [Name]
8) Enter samba@nmr for [Password]
9) Click on [OK]
10) The network drive will appear on your desktop.
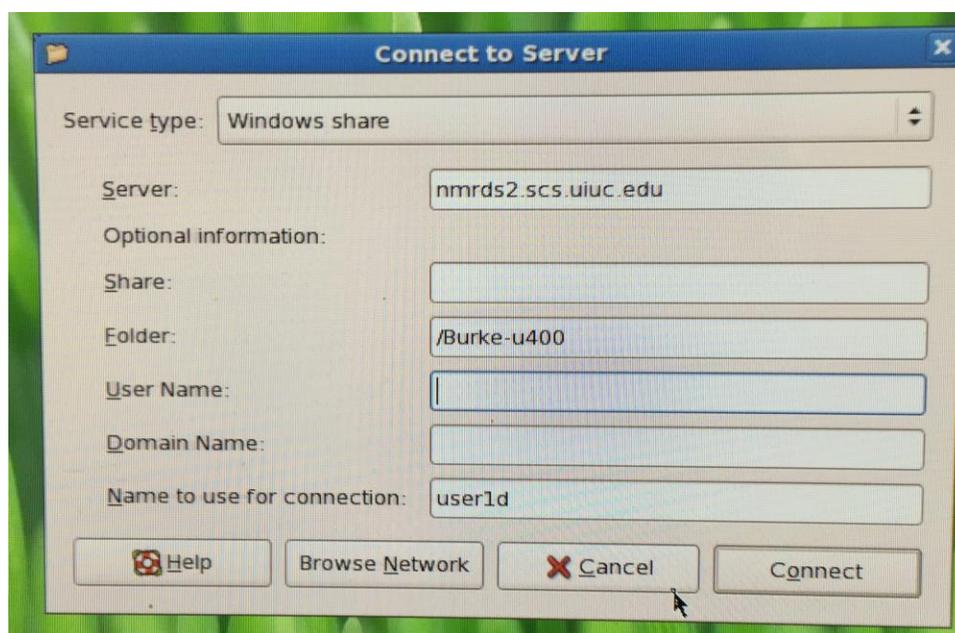
Data Backup Options

1. **On the computers in your own lab**. If your group has provided the NMR Lab the IP addresses of the computers in your lab, then you should be able to map your group's NMR data as network drives on these computers (see instructions below). Once mapped, data can then be copied from the NMR Lab server to your computer manually via copy-and-paste or drag-and-drop, or automatically with scripts or backup software. A manual or automatic daily or weekly backup to a set of mirrored hard drives is recommended.

2. **A few notes**:
a. If your data are important to you, then you should back them up often and keep multiple copies of the same backup, preferably on different media and in different locations.

b. Always test the integrity of you backup, as well as your ability to restore from your backup, before deleting the original data.

c. Storage quota will be per group instead of per user. Details concerning this are in handout - Data Backup and Storage Policies.

d. **You are prohibited from operating from a Unix shell**, local or remote, on any of the spectrometers or the Sun Data Station unless explicit permission and instructions are given for you to do so. The reason for this restriction is that a mistake by the user in a Unix shell is potentially catastrophic and can result in the loss of data for ALL users or cause a system malfunction. **WARNING: A violation of this policy could result in your privilege to use this facility being suspended or revoked.**

e. **You are prohibited from operating, such as creating or deleting files, outside of your own directory** on the spectrometers, the Sun Data Station, or the network drives on your lab computer.

3. **The Temp directories on the spectrometers** If you forget to logon and change the working directory to your own directory, chances are that your files will be saved in the Temp directory. Here is what you can do when that happens:
a. *Changing to the Temp directory:* Enter logon as usual, and at the prompt, input Temp as the directory name.
b. Moving your files from the Temp directory to your own directory:
i. On the spectrometer: LC [Main Menu] ↷ LC [File] ↷ LC [Move from Temp] On Sunds1: LC [File Menu] ↷ LC [6:Move from Temp]
ii. Then follow the instructions carefully as prompted.

Research Group Names (Partial List)

Allen	Andresson	Arai	Aref	Bailey
Bhargava	Bond	Braun	Burke	CHEM
Cadwallader	Cahill	Cai	Cann	Chan
Cheng	Choi	Clark	Crofts	Cronan
Cusick	Czapar	Damien	Das	Denmark
Diao	Dlott	Economy	Eden	Espinosa
Evans	Feng	Flaherty	Fout	Garg
Gennis	Gerlt	Gewirth	Girolami	Granick
Gruebele	Guenthner	Guironnet	Ha	Han
Harley	Hergenrother	Hu	Huang	Hull
Imker	Imlay	Jain	Jasiuk	Jin
Katzenellenbogen	Kenis	Kilian	Kim	Klemperer
Knight	Kong	Kraft	Kriven	Krogstad
Lam	Leal	Lee	Lewis	Li_K
Li_Z	Lila	Lopez	Lu	Lu_Yongqi
Marinas	MartinisS	MaselR	McCall	Metcalf
Miljkovic	Miller	Mirica	Mitchell	Mondal
Moore	Morrissey	Mulvaney	Murphy	Nair
Nyfeh	Nguyen	Nuzzo	OBrian	Oldfield
Olshansky	Olson	Orphans	PRACTICE	Pack
Pan	Peck	Petr	Rajagopalan	Rao
Rauchfuss	RevMed	Roechers	Rienstra	RienstraC
Rockett	Rogers	Rovey	Sarlah	Scheeline
Schmidt	Schroeder	Schuler	Seigler	Selvin
Shapley_J	Sharma	Silverman	SligarS	Smith
Sottos	Spies	Staff	Strano	Strathmann
Struble	Suslick	Sweedler	Tang	Temp
VanHoy	Van_Der_Donk	Van_Der_Veen	Vanderpool	Varma
Vura_Weis	Werth	White	WhiteS	Wraight
Yang	Zhao	Zilles	Zimmerman	Zukoski