

Run VNMR remotely with X-windows on Mac OS 10.7 or later

This procedure describes how to run VNMR on the Sun workstation, nmr1 or on the Linux computer nmr400 (which used to run the vnmrs400) or the Linux computer nmr2

The way this works is that you are remotely logged onto the Sun/Linux workstation, but you are typing on your desktop computer, and VNMR will be displayed on your desktop computer. However, the VNMR program is physically running on the Sun/Linux workstation (there is a version of VNMRJ for Mac but it is not easy to install).

How to run VNMR remotely on Sun workstation:

Step 1:

You have to have an account on the workstation (nmr1/nmr400). Usage of the workstation is free; I will give an account on nmr1/nmr400 to anyone with an account on any instrument, but you have to ask so that we can setup a password.

Step 2:

You have to transfer data to the workstation from the nmr computers.

Login to nmr1/nmr2/nmr400.

If you are typing on nmr1 follow these instructions, to do this remotely, you will need to do the same thing except you will be typing in Xwindow (described how to get to below). Open up a UNIX terminal window by holding down the right mouse button, under Tools menu, select Terminal window.

On nmr1 type:

xdir

On nmr1, under Connect menu, select Connect to Remote.

If the nmr computer that you are trying to transfer data is listed, select it, if not, type the computer name,

ui600.stanford.edu	(600)
ui500.stanford.edu	(500)
merc400.stanford.edu	(old/merc 400)
vnmrs400.stanford.edu	(new/vnmrs 400)
ui300.stanford.edu	(300)

It asks for a password, this is the password on the nmr instrument that you are logging into.

Find the files that you want to transfer, and drag them to the other window (the local window). If you do not see the files that you are looking for, you are in the wrong directory, so under the Goto menu, select Directory, and then type:

/export/home/user_name/vnmrsys/data

If you still do not see your files, try:

/data/user_name

If you still do not see your files, you probably need to ask me.

On nmr400 type:

`gftp computer_name_that_you_are_trying_to_get_data_off`

[see computer names above]

[enter username/password]

On nmr2 type:

`ssh computer_name_that_you_are_trying_to_get_data_off`

[see computer names above]

[enter username/password]

type:

`scp -r filename.fid nmr2:/home/username`

where filename.fid is what you want to transfer, and username is your login name

if you want to transfer more than 1 file, use * as wildcard:

`scp -r *.fid nmr2:/home/username`

would transfer all files that end in .fid

[note the ssh/scp works for any of nmr1, nmr2 or nmr400, but xdir only works for nmr1, gftp for nmr400]

Step 3. You need to have an Xwindows type program on your PC/Mac.

Mac OS X:

OS X is a UNIX operating system. Xwindows applications are standard applications for UNIX.

For 10.8 or newer, X11 is not already installed, but it should be an optional install that you can find by searching for it.

10.7 and newer OS Instructions:

1) Open Unix terminal (or X11) then type [note likely only one of these three is necessary but it does not hurt to enter all 3 commands as only one is likely active for each version of OS]:

`defaults write org.x.X11 wm_click_through -bool true`

```
defaults write com.apple.x11 wm_click_through -bool true
defaults write org.macosforge.xquartz.X11 wm_click_through -bool true
```

2) Open X11, you may have to go to the Applications/Utilities directory to do so (if you opened X11 in step #5, then you will need to quit X11 then re-open it)

3) An xterm terminal window should open.

```
ssh to nmr1 (or nmr2 or nmr400)
```

```
ssh -Y username@nmr1
```

[Note that it is simply ssh if your login name on the Mac matches your nmr1 login name. Also, you should be able to use just nmr1 rather than nmr1.stanford.edu if your DNS is configured right. Thus, in this case,

```
ssh -Y nmr1
```

```
]
```

4) You should then be logged into nmr1, then the window asks what type of terminal, type:

```
s
```

If you need to transfer data, now you can type:

```
xdir
```

and follow directions for xdir as above

If you do not need to transfer data, then just start VNMR by typing:

```
vnmr
```

Run as normal.

Exit out of vmnr by typing:

```
exit
```

Logoff off of nmr1 workstation by typing:

```
exit
```

in xterm window.

Be sure prompt goes back to your Mac computer name.

nmr1 runs vmnr as on the 300

nmr2 runs the newest vmnrj as on the new400

nmr400 runs an older version of vmnrj which is similar to the current version but looks different