

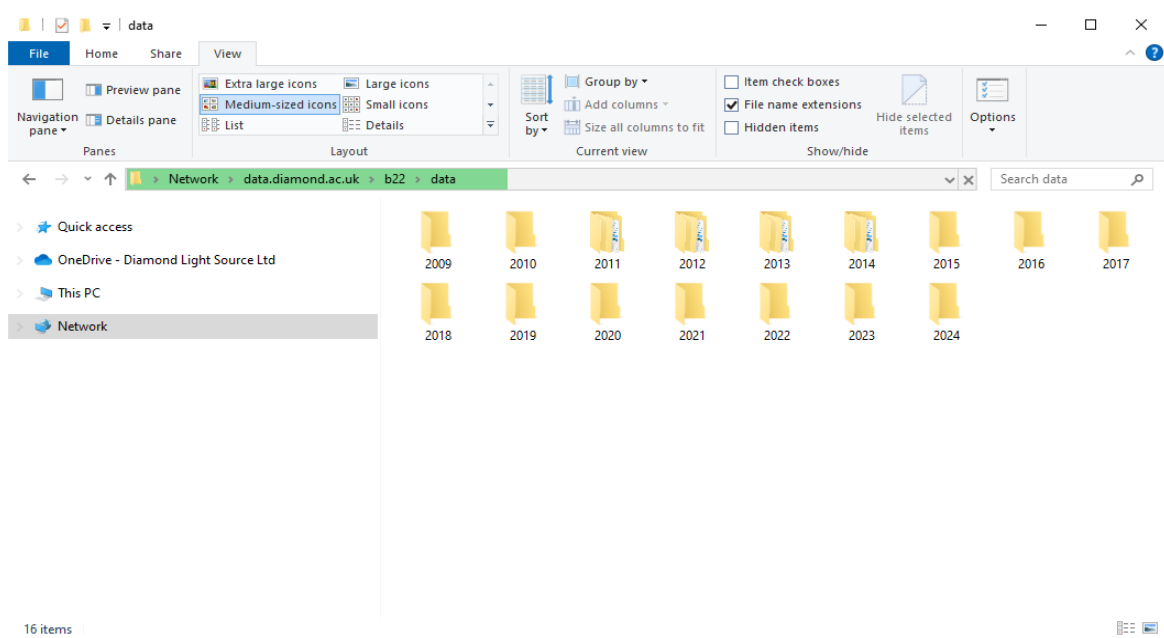
DATA ACCESS AND ANALYSIS

On Site Data Access

Connecting from a B22 Beamline / Data Room PC

If you login to any of these machines with your FedID, you have access to the synchronized files for further analysis. Open 'My Computer', and the X:\ drive will be the storage server for the beamline.

If you don't see an X drive, type <\\data.diamond.ac.uk\b22\data> into the address bar of the Explorer.



Open the folder corresponding to the year and the subfolder corresponding to your proposal number. The data in this folder is read-only. However, you can copy the files into a subfolder called “processing”, where you can modify the files without changing the original data. The proposal folder and any subfolders can also be remotely accessed (cf. below)

Please note: **NO hard drives / USB sticks may be inserted into the B22 endstation PCs.** If you need to copy your data use the other workstations on the beamline or the data room to do so or – preferably – use the remote data access protocol as outlined below.

Connecting from your laptop (on-site)

`\\data.diamond.ac.uk` can be accessed from the visitor network (read-only). A detailed description for various operating systems can be found at

<https://www.diamond.ac.uk/Users/Experiment-at-Diamond/IT-User-Guide/At-DLS/Access-data>

For Windows, type `\\data.diamond.ac.uk\b22\data` into the address bar of the Explorer.. Login with your FedID as “CLRC\yourfedid” and your password

Offsite Data Access

Various options to retrieve data after the session are explained at

<https://www.diamond.ac.uk/Users/Experiment-at-Diamond/IT-User-Guide/Not-at-DLS/Retrieve-data.html>

Do not use the instruction for “After 40 days since session”, as these do not apply to B22. The data will remain available through the standard protocol.

Analysis Server Access

B22 has a set of virtual machines specifically for the analysis of User data from offsite. It allows all B22 softwares (Opus, Cytospec, Quasar, neaPlot, Gwyddion) to be used from a remote terminal.

Pre-requisites

Make sure that your FedID is working by logging in to <http://uas.diamond.ac.uk>

Please contact the user office or your local contact for any issues around the FedID It might have been deactivated if more than six months have passed since your experiment.

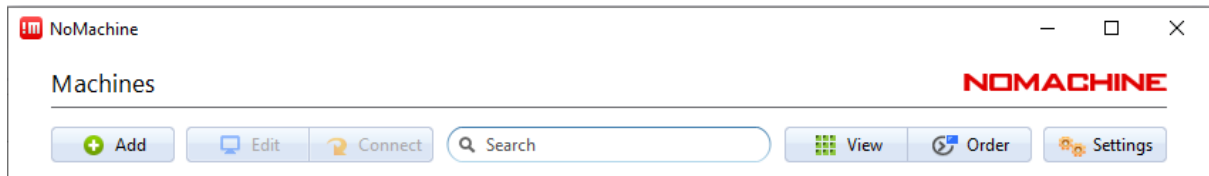
To use the virtual machines remotely, you will need to install a piece of software called ‘NoMachine Client’. This is just a small program that allows you to connect securely to Diamond Light Source. You only need to do this once, and it should be downloaded and installed from:

<https://www.nomachine.com/download-enterprise>

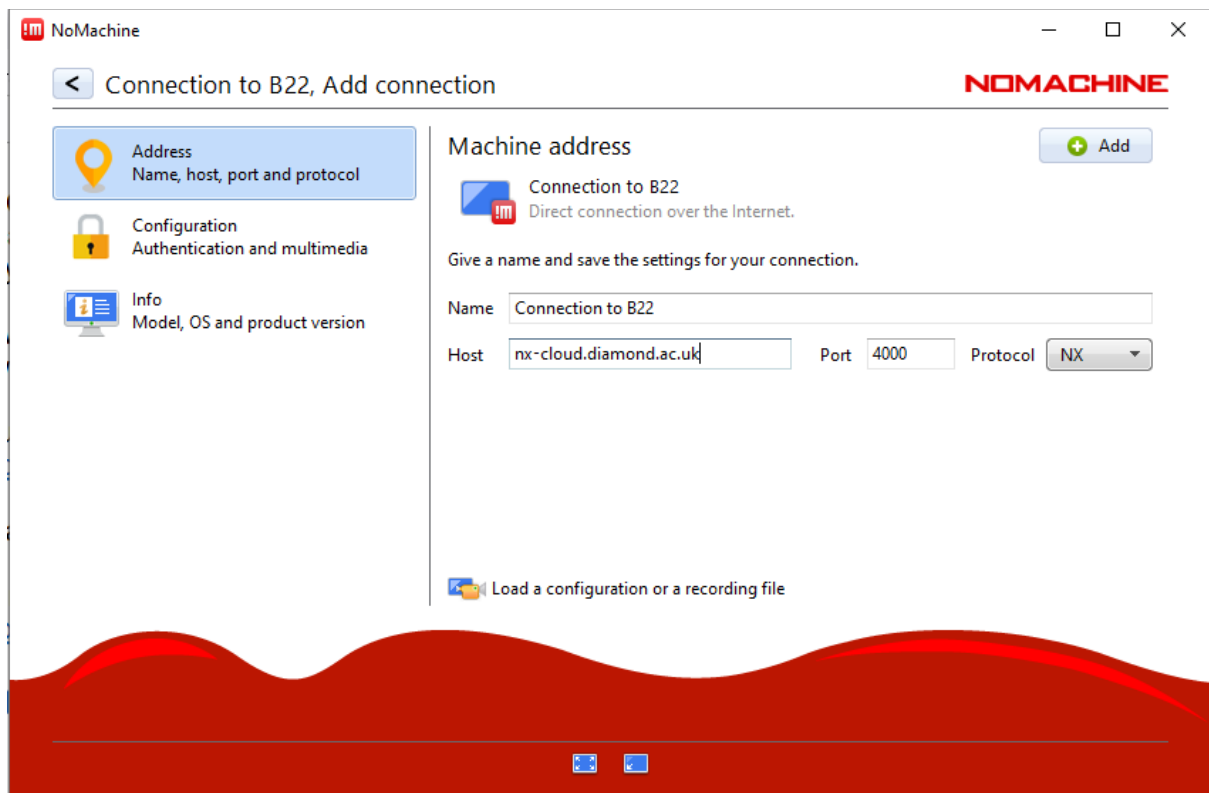
...then **scroll down to the ‘Enterprise Client’ section** and select the client version appropriate for your operating system ([Windows](#), [MacOS X](#) or [Linux](#)).

New nx-cloud connection

In order to connect to the virtual machines, open NoMachine, then click on “Add” to create a new connection for using nx-cloud.

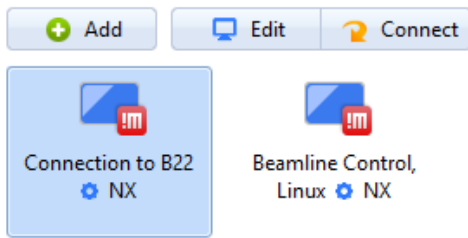


You need to specify a name for the connection and insert the host name “nx-cloud.diamond.ac.uk”



Double click on the newly generated icon or select the icon and click connect.

Machines



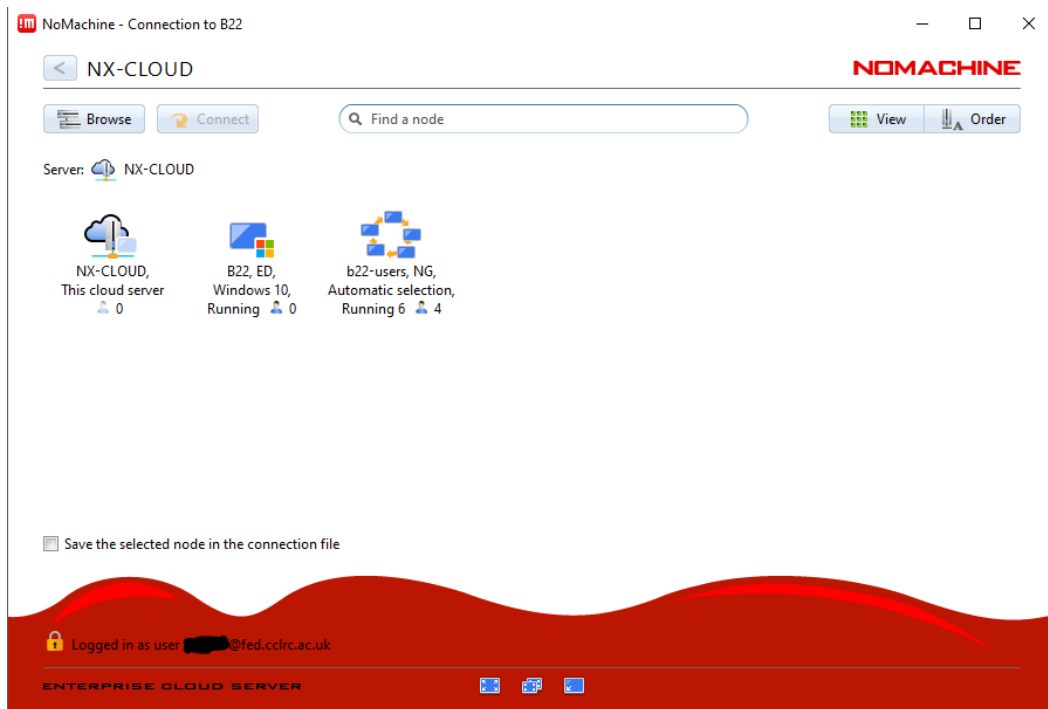
Enter your FedID - you must enter the suffix “@fed.cclrc.ac.uk” (e.g. ‘rtg01234@fed.cclrc.ac.uk’) and your password and click OK:



For convenience, we suggest selecting ‘Save this password in the connection file’

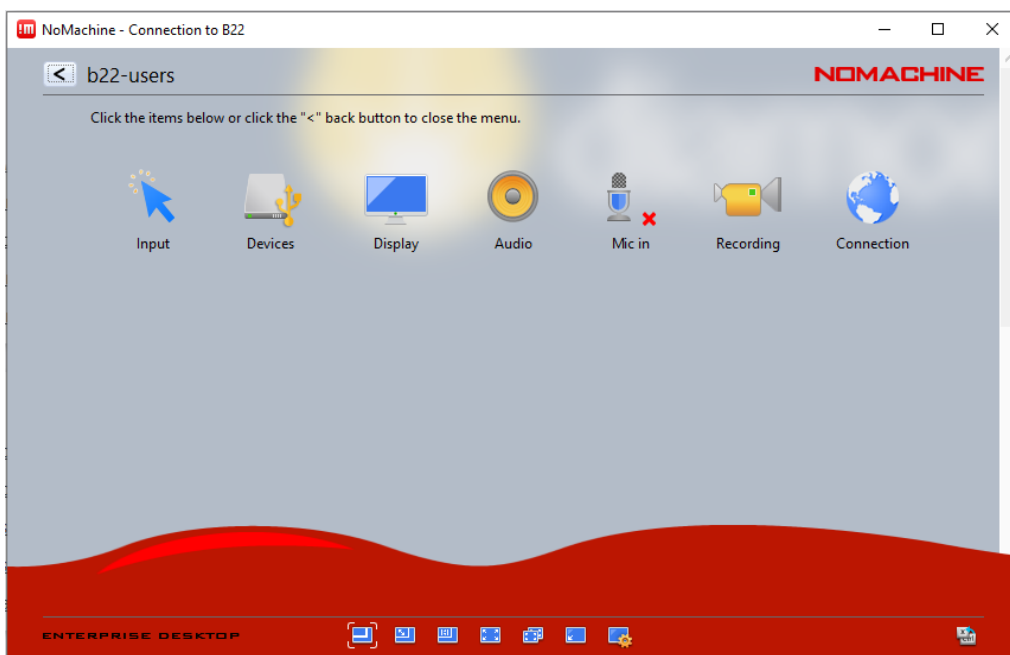
Please note that your account will be locked after 5 failed attempts, it will then unlock after 30 minutes. Ask your B22 local contact for support if you experience login issues.

When you have successfully logged in, you will see a screen similar to the following:

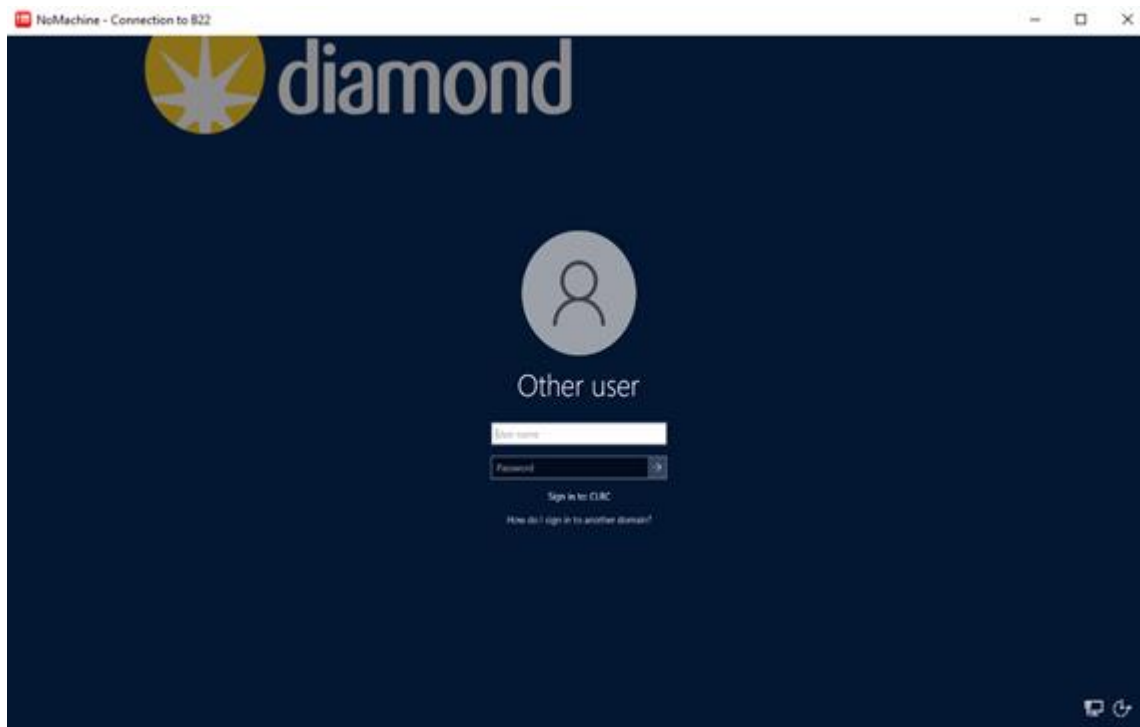


Select **"b22-users, NG, Automatic selection"** to access the virtual workstation.

NoMachine will now explain some of its features. It allows you to select the display resolution. If you need to change any of the settings later on, hover with your mouse over the top right corner of the screen. The controls menu looks similar to this:



If you click on the Windows background with the Diamond logo, a login window will show up.



Enter your FedID and password.

If 'Sign in to: CLRC' is displayed as highlighted, then enter only your FedID. If not, then enter the prefix "clrc", then your FedID (i.e. 'clrc\rtg01234'). Some users may be required to enter your FedID in its long form (i.e. 'rtg01234@fed.cclrc.ac.uk')

You can access your data collected at Diamond from the Data (P:) where you can search for your experiment folder. All the new analyzed data and every change you made to a file should be saved in the processing sub-folder of your visit folder. You will be able then to copy your analyzed data from the processing folder to your computer as specified in the "Off site data access" protocol.

Your data will be available for direct access for 6 months from the date of your experiment. If you need access after this time, you should email your local contact so that IT can renew the access for you.

At the end of your session: Log off!

Please click on the Start button and then select "Log Off" and do NOT just click on the cross at the top right. This is important to ensure that the virtual machine remains available for other users.

Known issues:

For OPUS: You might need to change the setup if you have a problem when displaying the data. In case you are not able to display more than one spectrum in the spectrum window, go to the “setup” tab, click on “user settings” then “new file” and click on “add new spectrum to window” then click “ok”.