Setup TightVNC viewer

To control the EASYnLC from the PC rather than via the touch screen you will need to install a virtual display.

The EASY should have been installed and connected to a PC running Xcalibur.

The engineer should have set the IP address on the EASY during install You can view the IP under the configuration tab

🚰 LC-030758:0 - Tig											
	5 0 1	Cel Az 🕸	0,0	a a	*						
Thermo	Home	Batch Set	up N	lethod :	Setup	Mainte	nance	Confi	guration		
Users	LAN										
Connections	Profile:	MS LAN	Ţ		Configur	ation: O	Dynam	nic 🖲	Fixed		
Ndtwork		10 170	16	0	104					0	
		1/2	10	0	104	sucret.		<u> </u>		0	
Time					_						
Time Data	Catew	ay: 0.	0.	0	0	DNS:	0.	0	ο.	0	

Download and install Putty and TightVNC

Putty: <u>http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html</u> Download the putty.exe for **Windows on Intel x86.** The icon can be saved directly to the desktop, no install is required.



TightVNC: http://www.tightvnc.com/download.html

Download the self installing package for windows and choose only to install the TightVNC Viewer during the install.

🛃 TightVNC Setup		-		×
Choose Setup Type				
Choose the setup type that best suits your	needs		(S
Typical Installs the most common program	n features. Reco	mmended for mo	ost users.	
Custom Allows users to choose which prog they will be installed. Recommend	gram features wi led for advanced	ll be installed an l users.	d where	
Complete				
All program features will be install	led. Requires the	most disk space	e.	
	Back	Next	Can	:el

We only need the Viewer, so I would only install the Viewer only, not the Server.

To do that click on TightVNC Server and select "Entire feature will be unavailable", you should see a red X, that way the server will not be installed.

🕼 TightVNC Setup	– 🗆 ×
Custom Setup Select the way you want features to be	e installed.
Click the icons in the tree below to char	ige the way features will be installed.
TightVNC	TightVNC Server makes this computer available for remote viewers. This feature requires 9KB on your hard drive.
	Browse
Reset Disk Usage	Back Next Cancel

Then follow through the rest of the installation.

Configure Putty

1. Start Putty

2. Go to Connection/SSH/Tunnels



3. Enter the **Source Port** on your PC you want to use. Typically it will be 5901. If you want more Connections, you have to use a free port e.g. 5902, 5903 etc.

4. Enter the **Destination**: *localhost:5900* and click the **Add** *button*. Note: 5900 is NOT the port number you have used in the previous step!

Keyboard	^	Options	s controlling SSH p	oort forwarding		
Bell Features Window Appearance		Port forwarding Local ports accept connections from other hosts Remote ports do the same (SSH-2 only)				
Behaviour Translation Colours Connection Data Proxy SSH		Forwarded ports	Remove			
		L5901 loca Add new forwar Source port	ded port:	Add		
		Destination	localbort-5900			
Kex Host keys Cipher		 Local Auto 	O Remote O IPv4	O Dynamic O IPv6		
ALL ALL						

5. Next, enter the **Session tab**

6. In the Host Name, enter the IP address of the EASYnLC, this can be found on the EASY nLC by going to Configuration Tab...select Network.
7. In the Saved Sessions box, type in a name to save this script for future use and click Save. The EASYnLC should appear in the box below the Saved Sessions field.

 Session Logging Terminal Window Connection Data Proxy Telnet Rlogin SSH 	Basic options for your Pu	ITY session	
	Specify the destination you want to connect to Host Name (or IP address) Port		
	172.16.0.104	22	
	Connection type:		
	Load, save or delete a stored session Saved Sessions	on	
Kex	EASYnLC		
	Default Settings EASYnLC	Load	
- X11		Save	
Tunnels Bugs Serial		Delete	
	Close window on exit:	ly on clean exit	

- 8. Slect EASYnLC and Click the Open button (or double click on the EASYnLC)
- 9. Press Yes if you get the Putty Security Alert pop-up message. (this will only happen the first time you start Putty).

Basic options for your PuT Specify the destination you want to o	TY session
Specify the destination you want to o	oppect to
172.16.0.104	Port 22
Connection type: Raw Telnet Rlogin	SSH OSerial
Load, save or delete a stored session Saved Sessions EASYnLC	n]
Default Settings	Load
EASTALC	Save
	Delete
Close window on exit: O Always O Never	v on clean exit
	Connection type: Connection type: Raw Teinet Riogin (Load, save or delete a stored session Saved Sessions EASYnLC Default Settings EASYNLC Close window on exit: Always Never () Only

11. Login as:

user: hplc password (SW v 4.1): hplc password (SW v 4.2): MasterKey



Note that number 0 and capital O, as well as the number 1, small letter I and capital letter I look very similar. If you get an error when entering the key you may need to try to substitute them.

Note after you log in you can change the password, with SW v 4.2 "hplc" is too short, it has to be longer than that. Go to the end of this document for details on how to change the password.



12. On the command line type: **x11vnc -q -display :0**

(Please note there is a single space bar between c -q, q -display and display :0)



and press Enter.

13. You should now see the following:



If you don't see that type this alternate command: x11vnc -env FD_XDM=1 -auth guess

14. The EASY-nLC is now ready to be remote controlled. Minimize this window without closing it. Continue with the TightVNC session.

Start the TightVNC session

- 1. Start the TightVNC viewer
- 2. Enter: *localhost::5901* Use the port number you used in the Putty session (here:
- 5901). Please remember to type two colons (::) between *localhost* and 5901.



- 3. Press the **Connect** button.
- 4. You should see the screen on the remote EASY-nLC:





Try rebooting the EASYnLC and possibly the PC and reconnect as described below.

Reconnecting and starting up TightVNC viewer (e.g. after a PC reboot)

Check EASYnLC connection

- Open instrument configuration (should be pinned to the start menu)
- Click on "ThermoEASY-nLC" and then click on "Configure"

Advancing Proteomics

WPR

- A new window should open, click on "Test Connection" the bar to the right should change color to green and display "Connection OK"
- Under Autosampler Configuration select the correct "Plated installed": typically we use 6x8 vials
- Click "OK" and then "Done"

Thermo Foundation Instrument Configuration		
Device Types :		
Available Devices:	Configured Devices:	T T
		Thermo EASY-LC Configuration
		IP Address/Hostname: 172.16.0.104 The IP/name can be found in the network
Thermo EASY-nLC Thermo Scientific SII for Xcalibur	Thermo EdoY-nLC SQ Altis	User name: admin exist on the EASY-LC insudiment exist on the EASY-LC)
		Test Connection Connection OK
201		LC device driver and instrument information:
TSQ Altis		LC device driver :LC Server 2.0.0.0 LC Instrument :Thermo Scientific EASY-nLC2 [HPLC] Driver Info :4.15.1 Serial Number :LC :030737 Loop volume :20 µl Column setup :Two column Idle flow rate :50 n/min Idle mixture :50 %6 Max.Pressure :1180 bar
		Autosampler Configuration Solvents for LC Pump
Add >>	Kernove Configure	Plate installed: 6x8 vials Edit
Done	Help	Sample lagout: Row first Start pos: A1 B: acetonitrile 80% Acetonitrile concentrations over 95% shorten the fietune of system
		components.
	203	Cancel

Start virtual display

• Double click on PuTTY (located on the desktop), select "EASY nLC" and hit "Open"



• The PuTTY window will open up prompting to login and then password:

Login as: **hplc** hplc@172.16.0.104's password: **hplc**

- On the command line, type: x11vnc -q -display :0
- Alternatively try the up arrow to reload previously used command and it should populate with the command line above.

hplc@LC-030757: /home/hplc		_ _ X
login as: hplc		
hplc@172.16.0.104's password:		
The programs included with the Debian GNU/Linux system are f	Free software:	
the exact distribution terms for each program are described	in the	
individual files in /usr/share/doc/*/copyright.		
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the e	extent	
permitted by applicable law.		
Last login: Fri Oct 19 16:08:03 2018 from 172.16.0.101		
piceLC-030757:~\$ x11vnc -q -display :0		
2	0±	
A ** WARNING ** WARNING ** WARNING ** WARNING **	0#	
	e #	
YOU ARE RUNNING X11VNC WITHOUT A PASSWORD!!	0#	
	0#	
In this means anyone with network access to this computer	6 #	
@ may be able to view and control your desktop.	0#	
0	0#	
Ø >>> If you did not mean to do this Press CTRL-C now !! <<<	< 0#	
8	6#	
	200#	

The VNC desktop is: LC-030757:0		
PORT=5900		

You can minimize this window without closing it.

- Now double click on the TightVNC icon (located on the desktop)
- Type: localhost::5901
- And hit "Connect"



• Now the virtual display should open up and allow you to control the EASYnLC from the PC.

LC-030757:0					
🖀 🗈 🔂 😏 🛛	🔊 🎉 Ctri Ali		1		
Thermo SCIENTIFIC	Home	Batch Setup	Method Setup	Maintenance	Configuration
Overview	25.4 bar 25.0 n1/mir	í.,	Active Prive Pr	ending ancelled	LSP disabled Idle flow 50 / 50
Graphs	35.3/140.0	- DO 5-	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000	-
Queue	Solvert A 27.0 bar 25.0 nJ/mil 18.7/140.0	рі 19.4	70°C	0.1 bar 0.0 nJ/min 2 S 2 S 2 S 2 S 2 S 2 S 2 S 2 S 2 S 2 S	Petil A 8
Solvents Refreshed	Solvent B: 80	MACN	Prepare gradient Run gradient	Equilibrate analytical of Autosampler wash + r	olumn efill S
Job 98:01:06					
Sample 01:08:41 Gradient 60:00		Sample	Job		Eject / Insert tray
23.0ct 2018	Current		Isocratic flow		
admin	Next				START STOP

Changing the password in Putty

WPR

Open putty and login:

user: hplc password (SW v 4.1): hplc or password (SW v 4.2): MasterKey

Advancing Proteomics



Note that the number 0 and capital O, as well as the number 1, small letter I and capital letter I look very similar. If you get an error when entering the key you may need to try to substitute them. (Note if you wrote it down you can copy it and do a right mouse click in putty to paste it)

Note with SW v 4.2 the password "hplc" is too short, it has to be longer than that.

Once you logged in type "passwd" and hit enter

It will prompt you for the "(current) UNIX password": enter the password/master key you just used to log in Then it will prompt you to "Enter new UNIX password": type the new password of choice it has to be at least 6 characters Then it will prompt you to "Retype new UNIX password": enter the new password again

It should confirm that the password updated successfully

