Connecting to WIMM Ubuntu Desktop
Working Remotely

If it becomes necessary that you work from home as a result of COVID-19 isolation requirements there are a number of options open to you. In all cases you must ensure that the machines connecting to Institute systems are patched with the latest security updates and are running anti-virus programs that are updating with the latest virus/malware information.

IP addresses in the screenshots in this document have been deliberately obscured.

It is not possible to allow remote connections to multi-user systems within the Institute. Remote access is only possibly from a single remote connection to a single user account on an Institute desktop.

1. If you have a laptop or desktop at home you must use the University of Oxford VPN client when accessing restricted University data and services from your home WiFi. Details of the University VPN can be found at:

   https://help.it.ox.ac.uk/network/vpn/index

2. If you are transferring confidential or sensitive data from WIMM systems via USB drives or laptops then the data should be encrypted.

3. If you wish to access your WIMM server account home and shared folders remotely you will need to use the VPN client in order to log into the WIMM servers via the Windows MicroFocus client or the Macintosh native client.

4. If you want to access your WIMM home folder (not lab shared folders) remotely it is also possible to do this via a web interface, see:

   https://netstorage.imsu.ox.ac.uk/

Connecting remotely to your Institute Desktop System

If you wish to connect to your desktop computer in the WIMM then please email:

help@imm.ox.ac.uk

to request an account on the WIMM ssh gateway (this will have the same username and password as your University SSO account).

The instructions below describe how to use your WIMM ssh gateway account to make a connection to your Institute desktop system. Instructions are given for Windows, Macintosh and Ubuntu platforms.

It is essential that you know the IP address of the Institute computer you wish to connect to remotely. It is also essential you know the username and password to log on to your Institute desktop, your SSO (Single Sign On) username and password and your Remote access password.

Follow these instructions to find out the IP address of your Ethernet (wired) connection on your Institute desktops:

Ubuntu desktop:

https://help.ubuntu.com/stable/ubuntu-help/net-findip.html.en

Windows desktop:

https://support.microsoft.com/en-us/help/4026518/windows-10-find-your-ip-address

Macintosh desktop:

https://www.wikihow.com/Find-Your-IP-Address-on-a-Mac

To connect from remote (home) Windows PC or Macintosh to an Institute Ubuntu Desktop

On the Institute Ubuntu Desktop

Note the Ethernet IP address of the Institute Ubuntu system.

Open a terminal window and type the following commands:

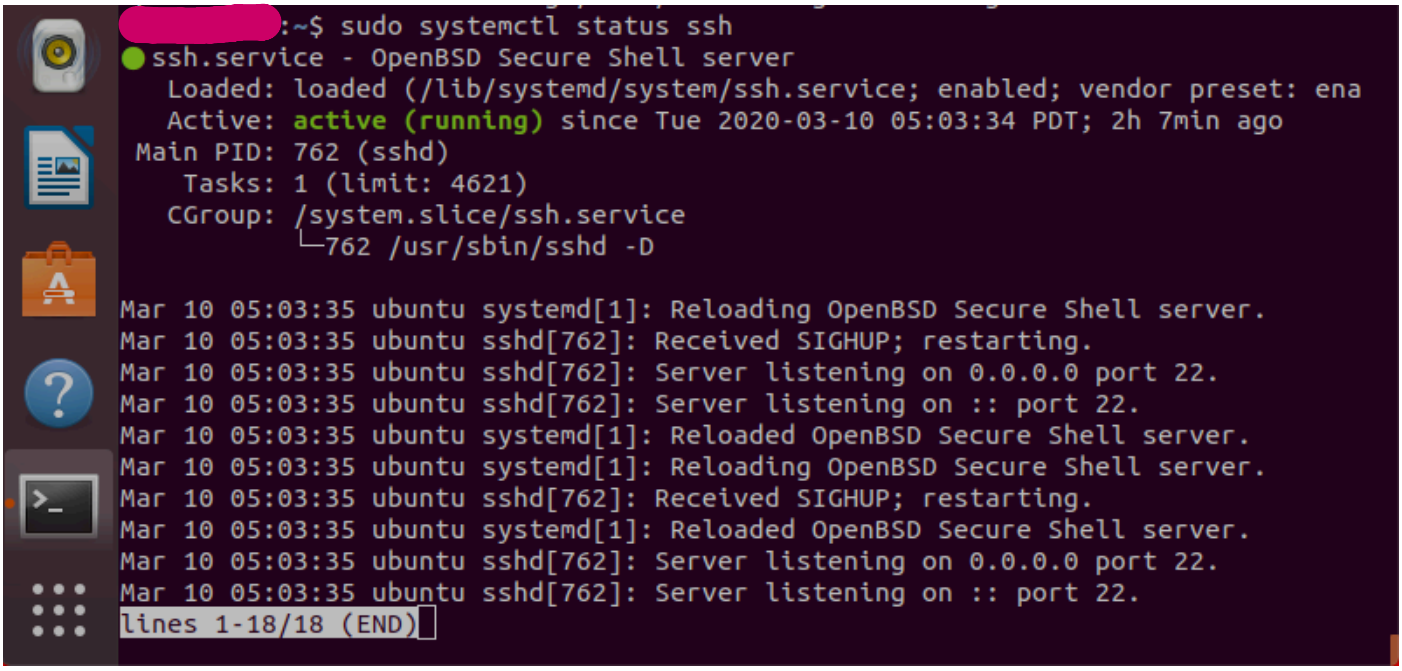
sudo apt-get update

sudo apt-get upgrade

sudo apt install openssh-server

Check ssh is enabled (active):

sudo systemctl status ssh

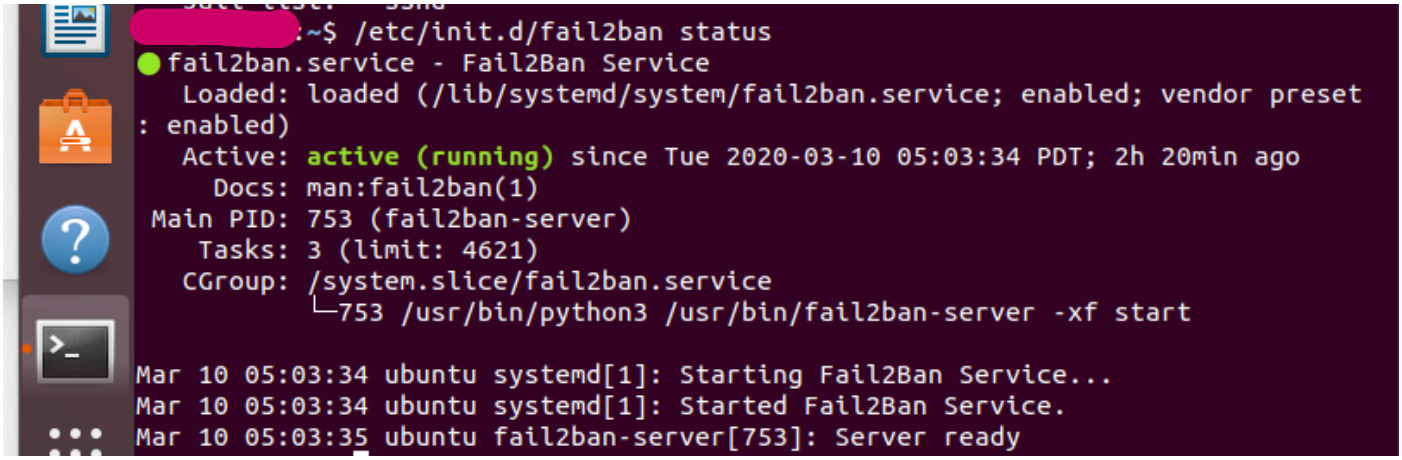


Install fail2ban:

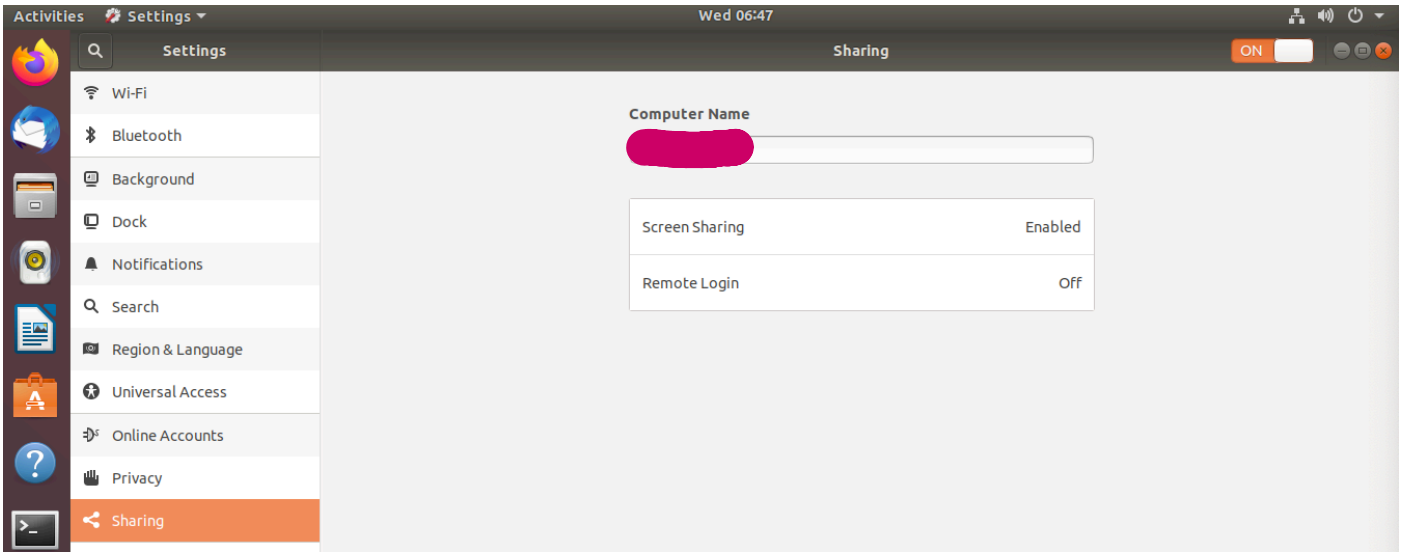
sudo apt install fail2ban

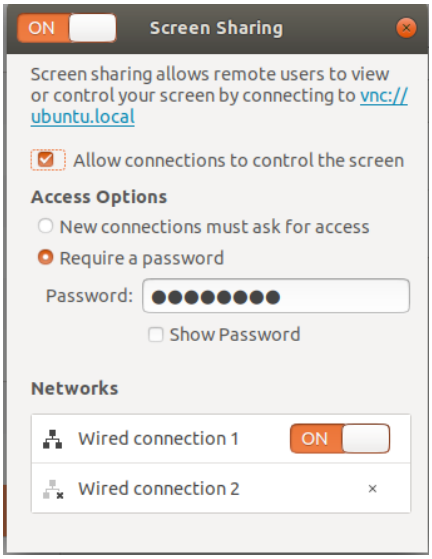
Check fail2ban is running:

/etc/init.d/fail2ban status



Turn on Desktop sharing from the System Settings – set password for remote authentication





Enter command as a standard user **do not** sudo

/usr/bin/gsettings set org.gnome.Vino require-encryption false

On Remote (home) Windows Desktop

On your home Wifi you will need to use Oxford University VPN connection:

https://help.it.ox.ac.uk/network/vpn/index

Download and install VNCViewer:

https://www.realvnc.com/en/connect/download/viewer/

In **administrator** command prompt enter:

ssh SSO_username@sshgw.imm.ox.ac.uk -L 5901:IP_Address_of_Ubuntu_Desktop:5900

Prompted for SSO password (the IP address has been obscured)

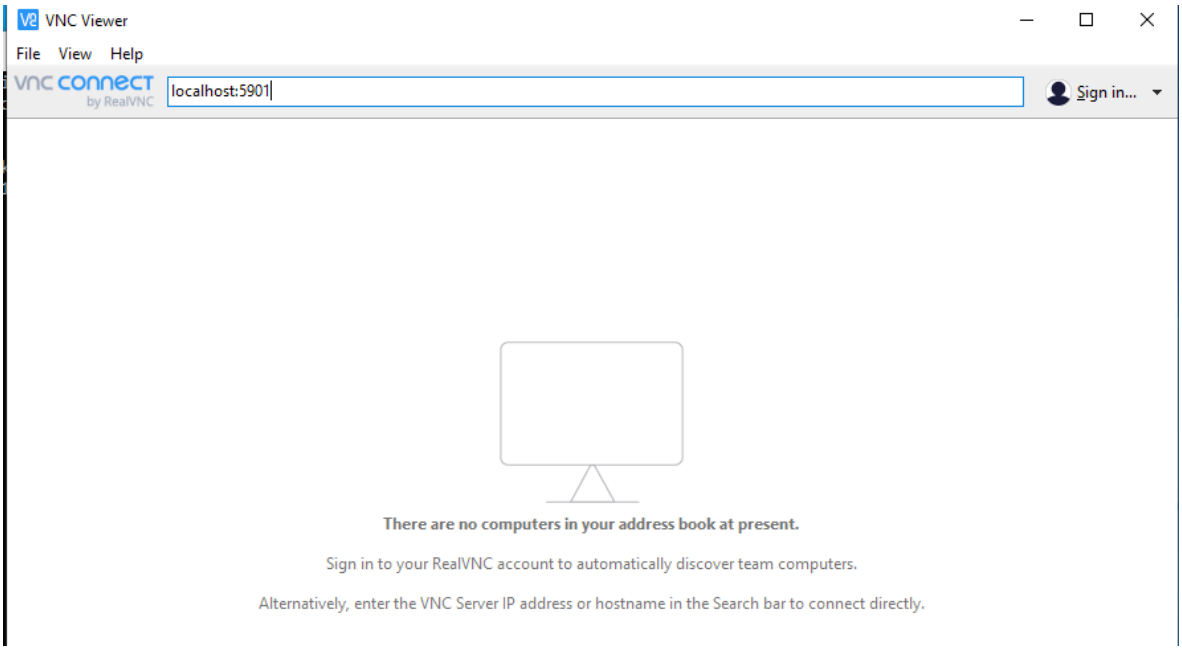
```
C:\Windows\system32>ssh lynne@sshgw.imm.ox.ac.uk -L 5901:[redacted]:5900
lynne@sshgw.imm.ox.ac.uk's password:
Last login: Tue Feb 18 11:19:54 2020 from client0151.vpn.ox.ac.uk
[lynne@sshgw ~]$
```

You could put this command in a batch file.

Open VNCViewer

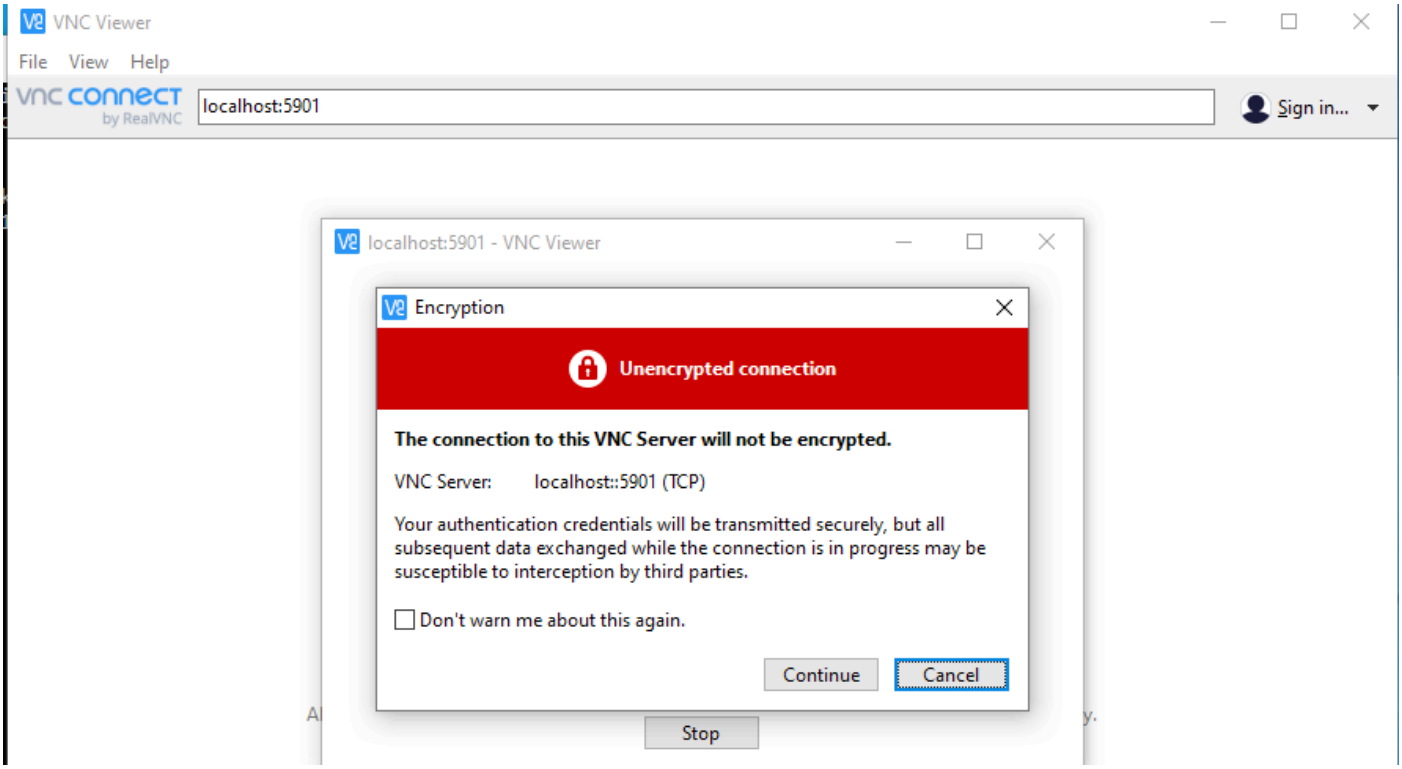
Enter

localhost:5901



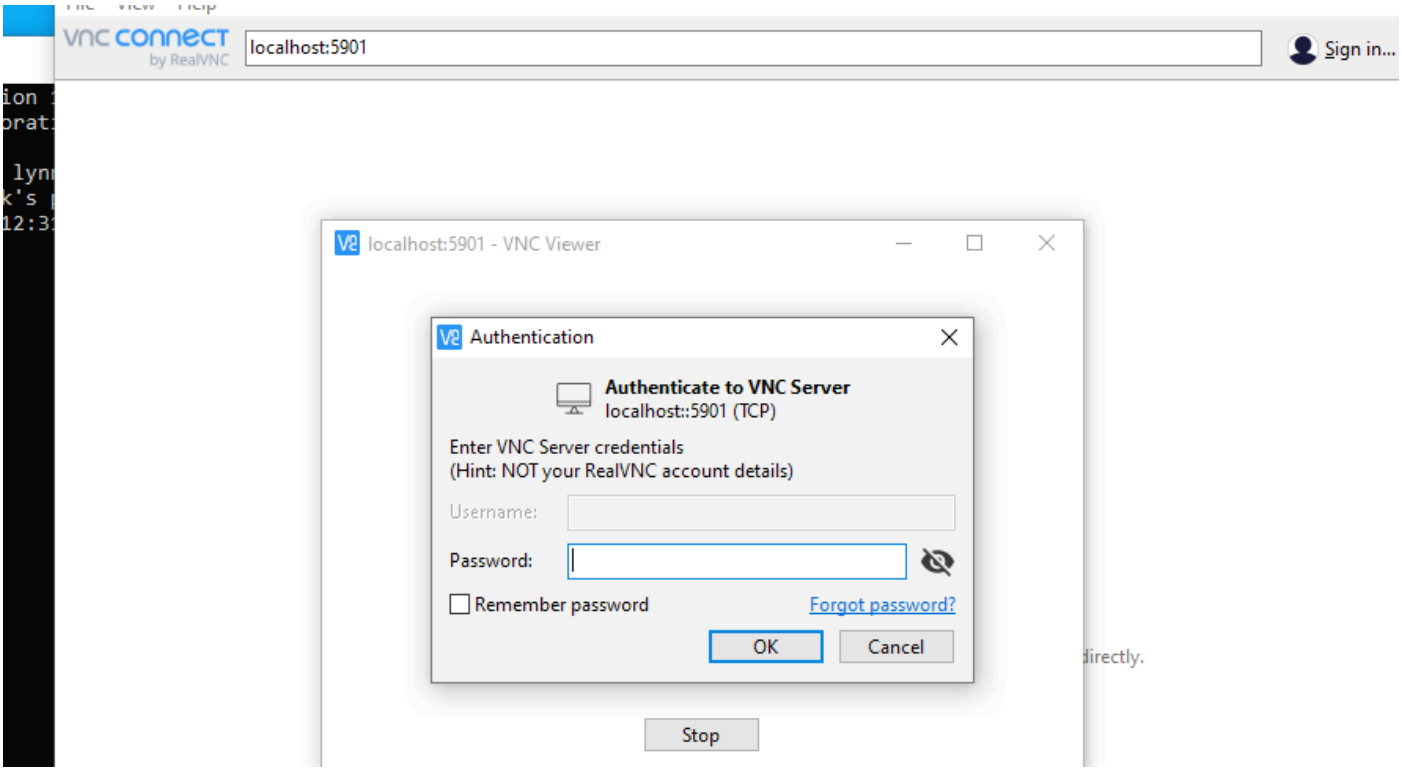
Press Return

You may see the following prompt:

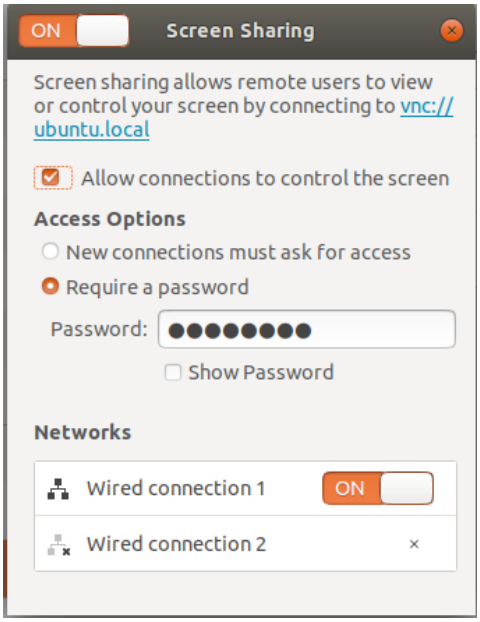


Tick **Don't warn me about this again** and click **Continue**

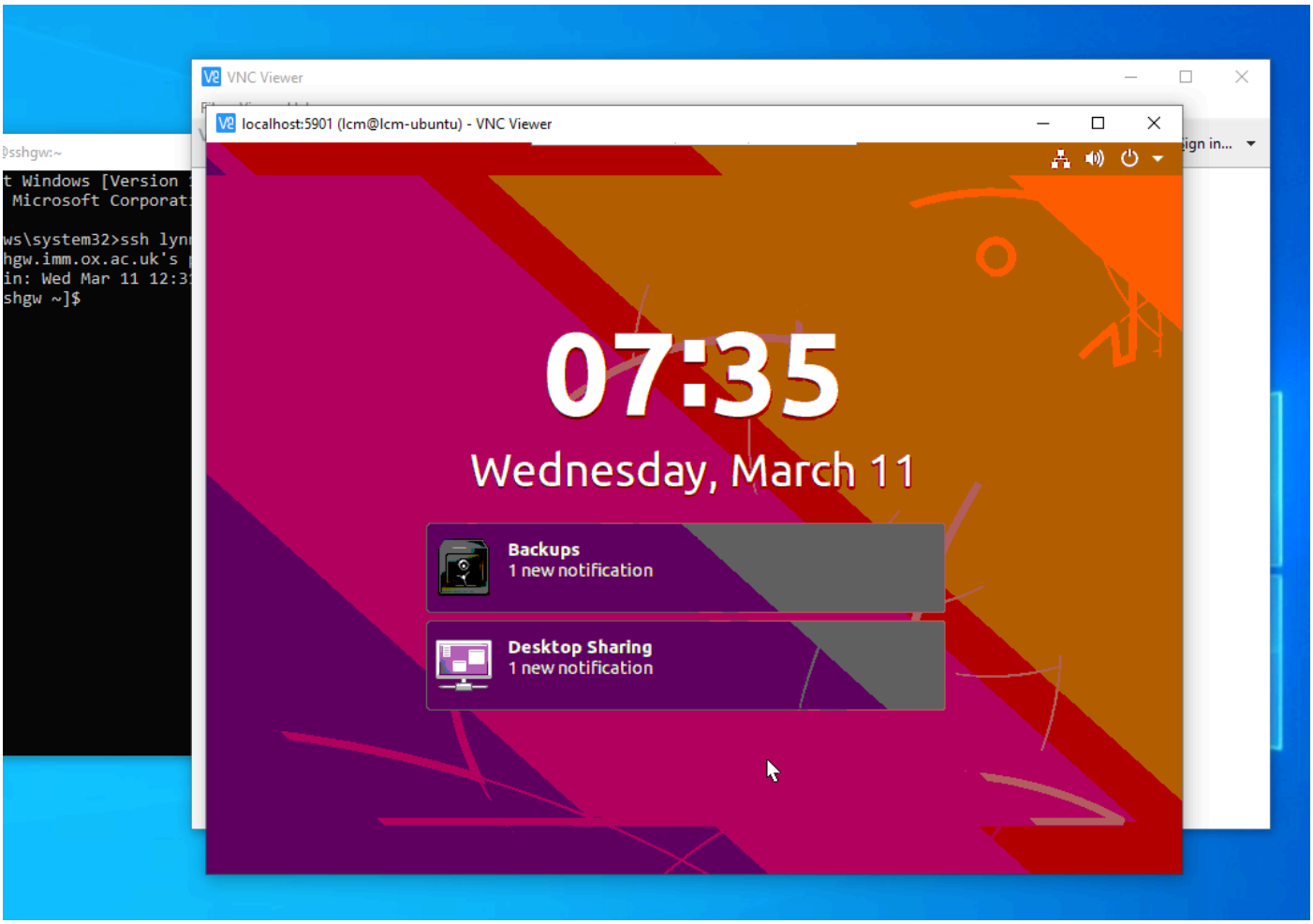
You will then see a prompt for the Ubuntu Screen Sharing password



This is the password you configured on the Institute Ubuntu desktop window below (this password may be different from the one you use to log into the user account on the machine):



Enter the password to display your Ubuntu desktop on your Windows PC:



When you have finished your remote session to your Institute desktop it is essential that you exit the ssh gateway by typing exit:


lcm — lynne@sshgw:~ — -bash — 155×24
Last login: Wed Mar 11 11:52:29 on ttys000
lmmproeth0:~ lcm$ ssh lynne@sshgw.imm.ox.ac.uk -L 5901:129.67.56.124:5900
lynne@sshgw.imm.ox.ac.uk's password:
Last login: Wed Mar 11 14:42:55 2020 from lmmproeth0.imm.ox.ac.uk
[lynne@sshgw ~]$ exit
logout
Connection to sshgw.imm.ox.ac.uk closed.
lmmproeth0:~ lcm$

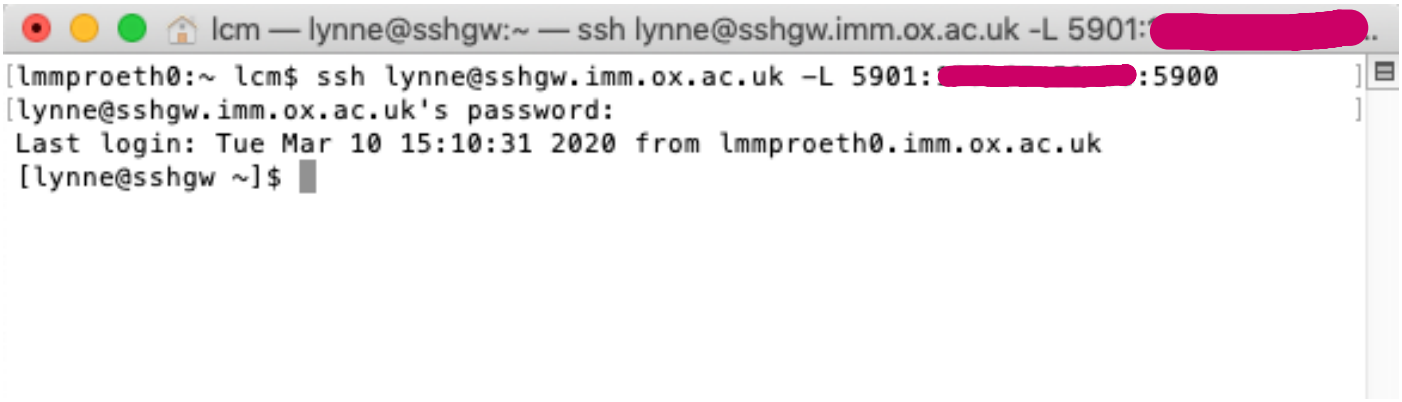
On your home Macintosh Desktop

On your home Wifi you will need to use Oxford University VPN connection:

https://help.it.ox.ac.uk/network/vpn/index

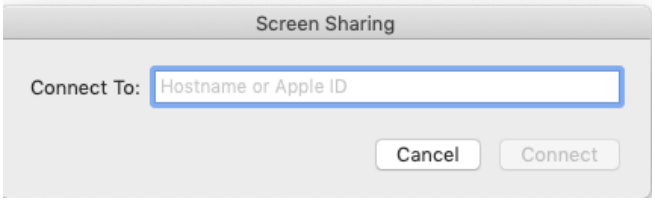
Open a terminal window:

ssh SSO_username@sshgw.imm.ox.ac.uk -L 5901:IP_Address_of_Ubuntu_Desktop:5900



Open screen sharing application on the Macintosh

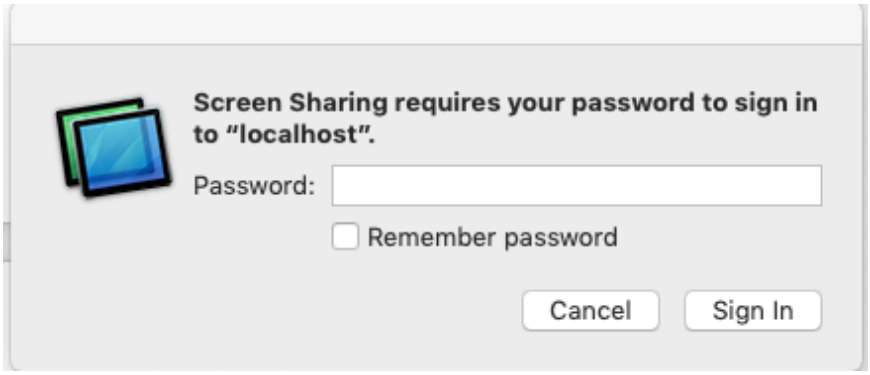
Macintosh HD > Library > CoreServices > Applications > Screen Sharing



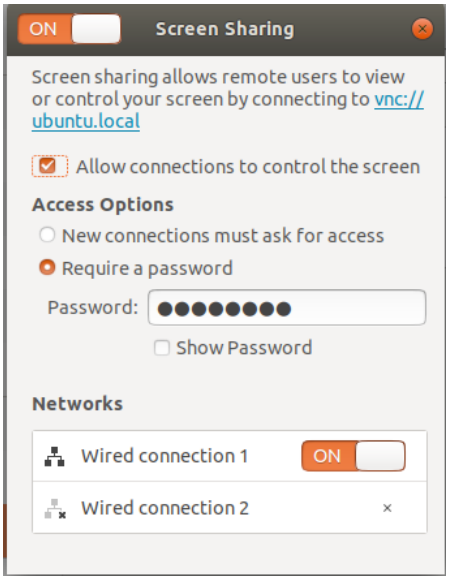
Enter

localhost:5901

You will then be prompted for the Ubuntu Screen Sharing password:



This is the password you configured on the Institute Ubuntu desktop window below (this password may be different from the one you use to log into the user account on the machine):



The Ubuntu desktop will then be displayed on your Macintosh desktop.

When you have finished your remote session to your Institute desktop it is essential that you exit the ssh gateway by typing exit: