

## Connecting to WIMM Windows 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 possible 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](mailto: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>

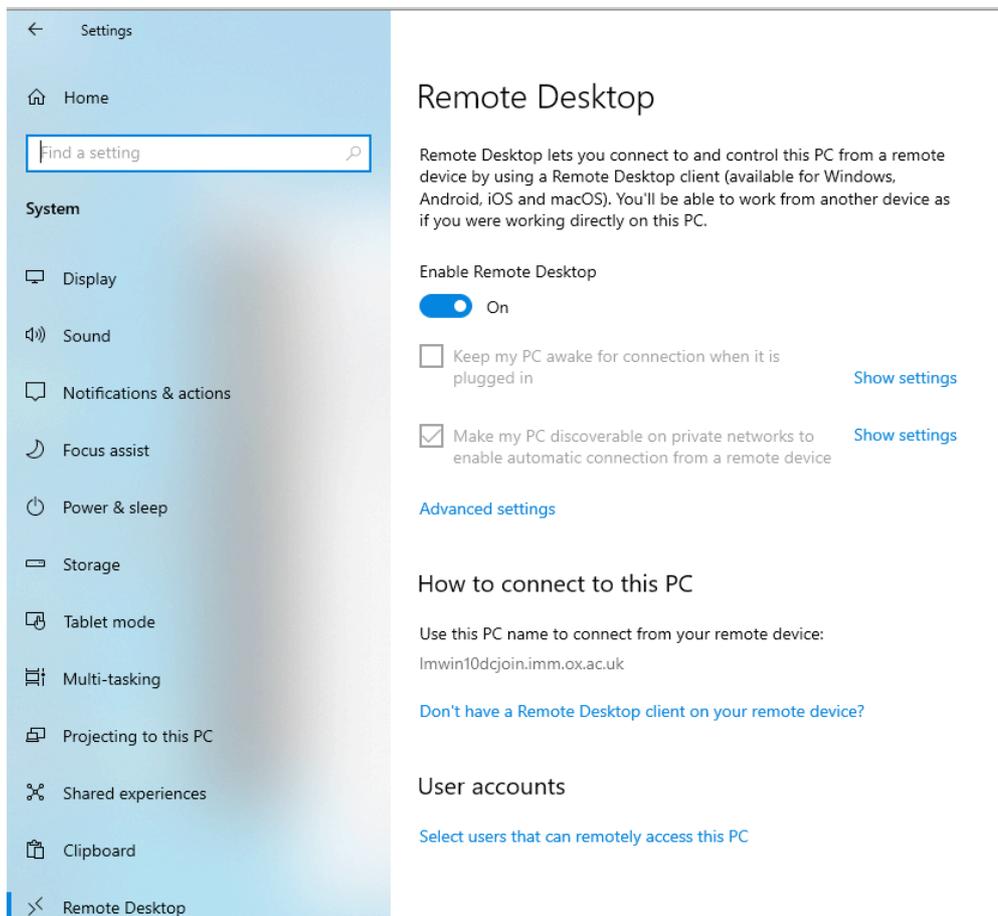
## To connect from remote (home) Windows PC to an Institute Windows Desktop

### On your Institute Windows Desktop

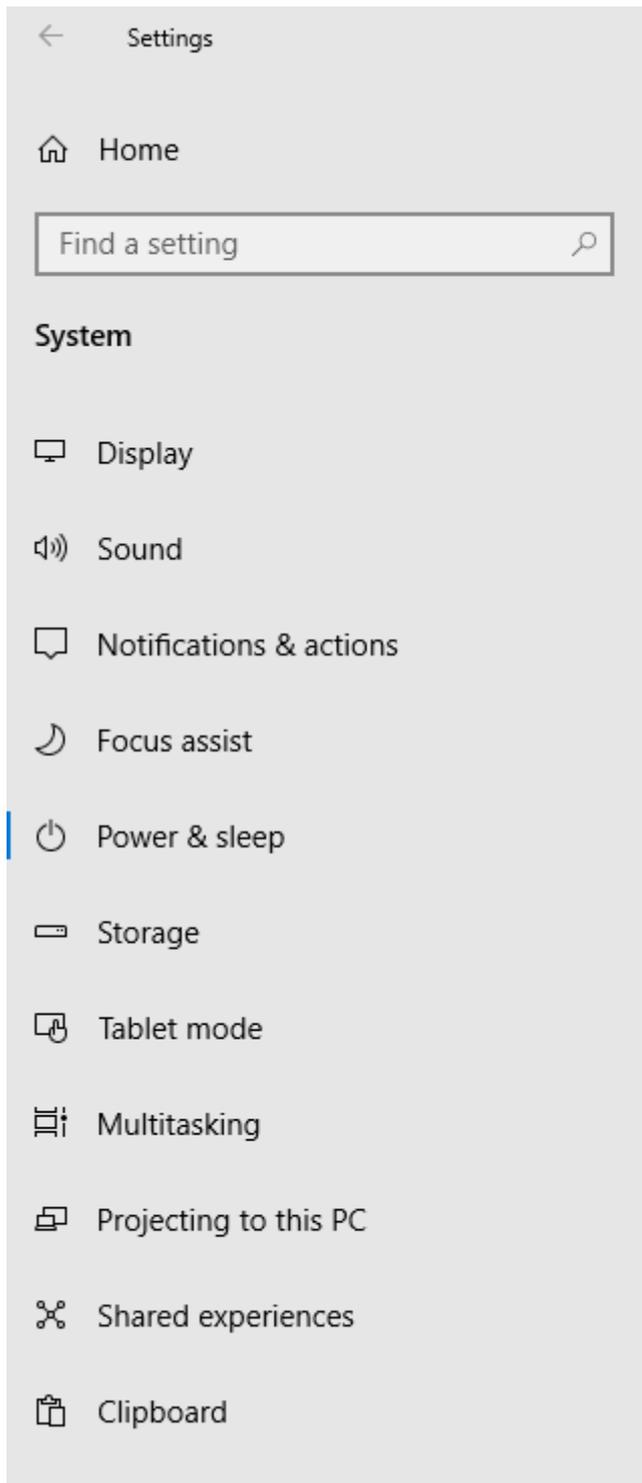
Note the Ethernet IP address of the Institute Windows system.

On the Institute Windows Desktop you will need to enable sharing:

On the device you want to connect to, select **Start > Settings > System > Remote Desktop**, and turn on **Enable Remote Desktop**.



Click **Show settings** next to **Keep my PC awake for connection when it is plugged in** set the settings as below:



## Power & sleep

### Screen

When plugged in, turn off after

### Sleep

When plugged in, PC goes to sleep after

## Performance and Energy

Power mode: Better performance

A horizontal slider control for the Power mode. The slider is currently positioned towards the right side, indicating 'Better performance'. The left end is labeled 'Best energy savings' with a battery icon, and the right end is labeled 'Best performance' with a lightning bolt icon. The slider bar is blue, and the current position is marked by a blue vertical bar.

## Save energy and battery life

Make your battery last longer by choosing shorter times for s

Go back to Remote Desktop. Under **User Accounts** ensure that only one user be allowed to access the system remotely and ensure that user account has a strong password.

### On your 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>

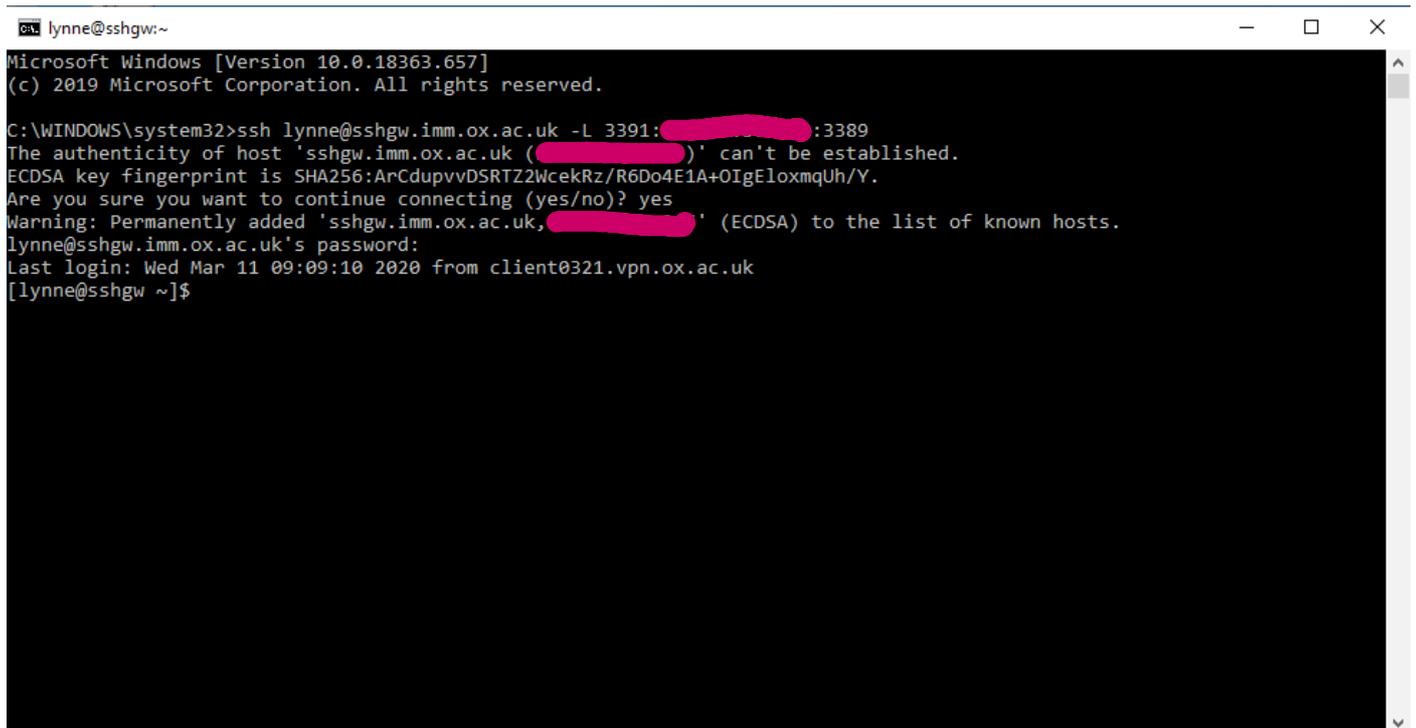
Open a command prompt as Administrator:

<https://blog.techinline.com/2019/08/14/run-command-prompt-as-administrator-windows-10/>

In **administrator** command prompt enter (remote desktop port is 3389)

```
ssh SSO_username@sshgw.imm.ox.ac.uk -L 3391:WIMM_Windows_IP_Address:3389
```

The first time you do this you will be prompted to accept the ECDSA key fingerprint – type yes in response to this prompt:

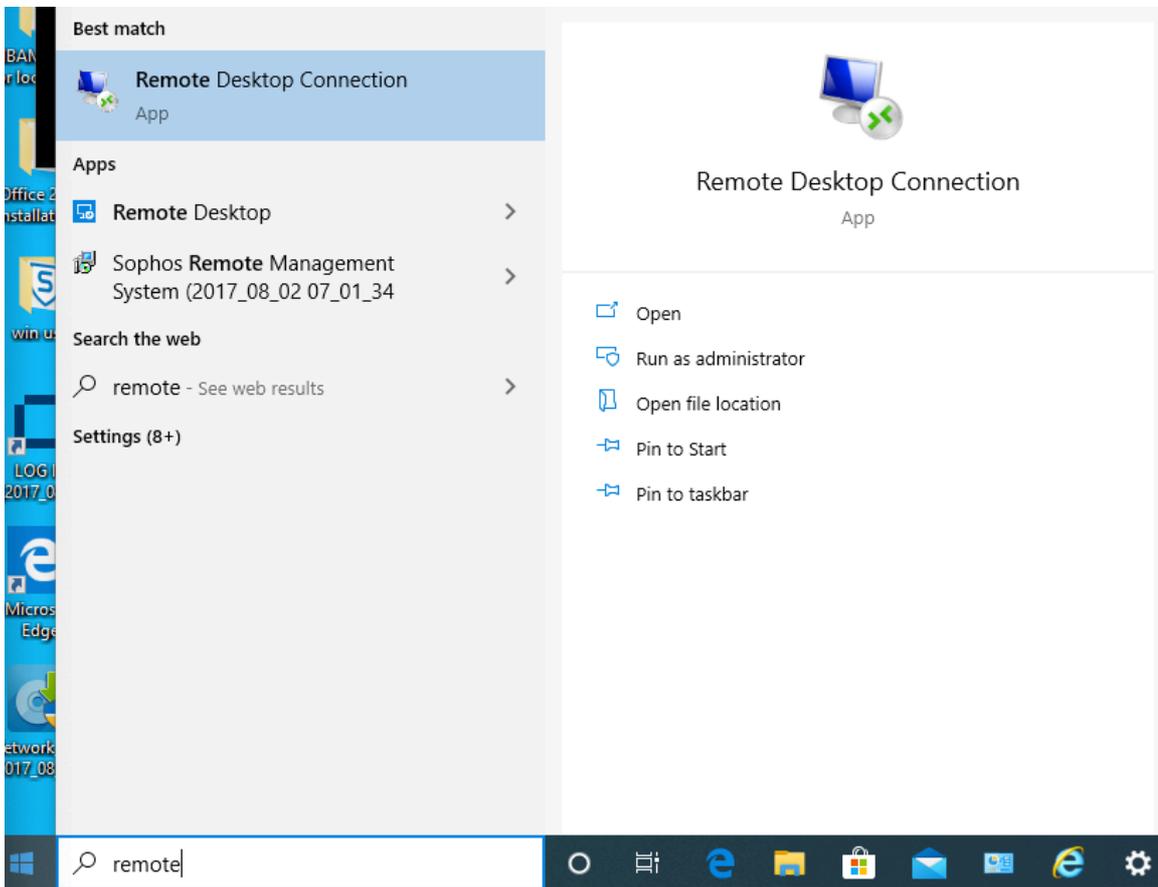


```
lynne@sshgw:~  
Microsoft Windows [Version 10.0.18363.657]  
(c) 2019 Microsoft Corporation. All rights reserved.  
  
C:\WINDOWS\system32>ssh lynne@sshgw.imm.ox.ac.uk -L 3391:[REDACTED]:3389  
The authenticity of host 'sshgw.imm.ox.ac.uk ([REDACTED])' can't be established.  
ECDSA key fingerprint is SHA256:ArCdupvvDSRTZ2wcekRz/R6Do4E1A+OIgE1oxmqUh/Y.  
Are you sure you want to continue connecting (yes/no)? yes  
Warning: Permanently added 'sshgw.imm.ox.ac.uk, [REDACTED]' (ECDSA) to the list of known hosts.  
lynne@sshgw.imm.ox.ac.uk's password:  
Last login: Wed Mar 11 09:09:10 2020 from client0321.vpn.ox.ac.uk  
[lynne@sshgw ~]$
```

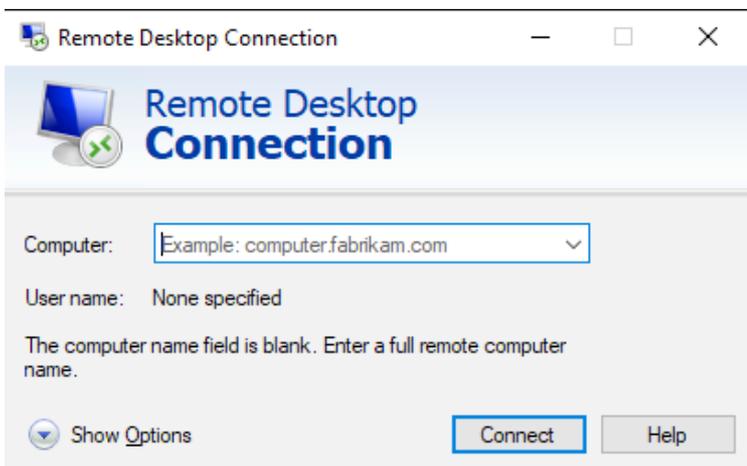
You then need to run the Remote Desktop client to access the Institute desktop. Click on the **Start** menu and type

Remote

The system will then display:



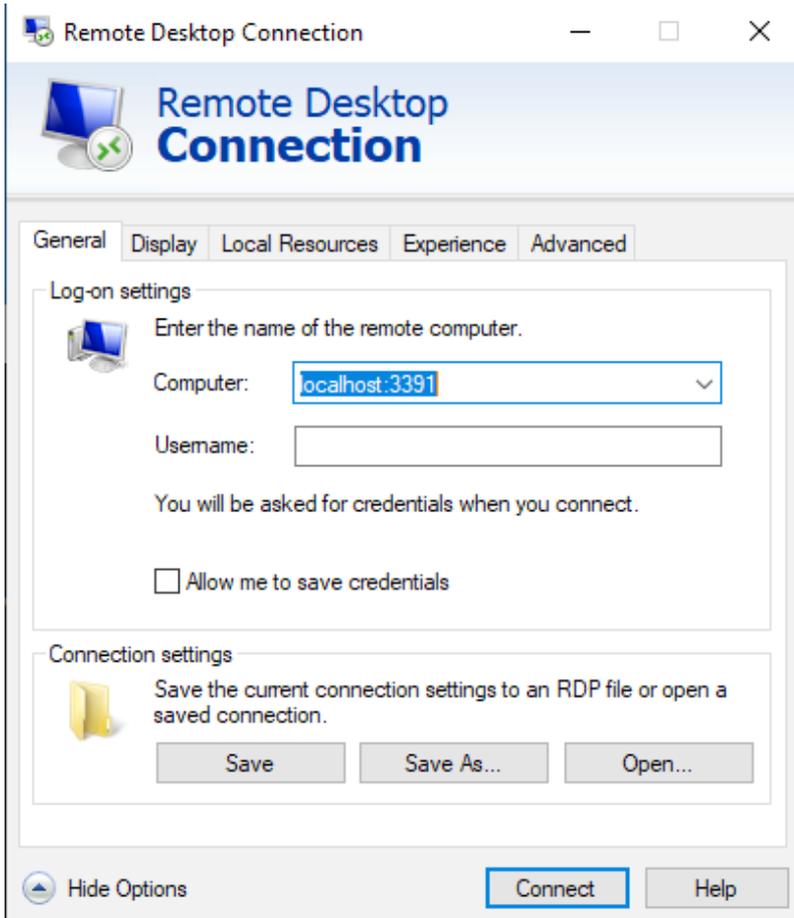
Double-click **Remote Desktop Connection** to display:



Click Show Options drop-down to see all options

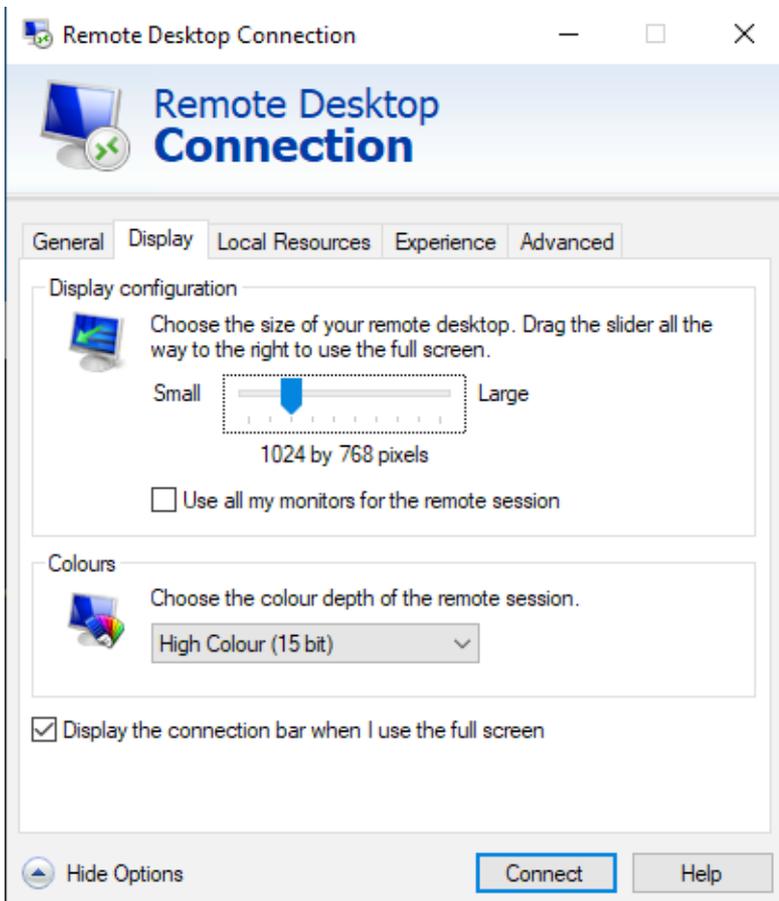
Enter the following:

localhost:3391



Enter the username for the account permitted in the Remote Desktop connection set up on the Institute desktop

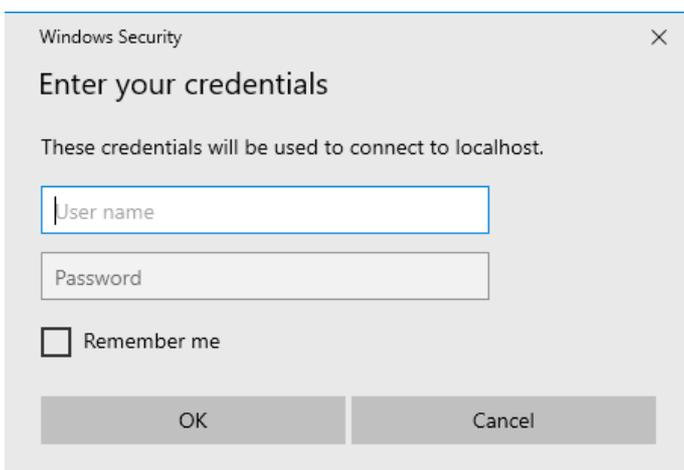
Click on Display tab, use the following settings:



Click the General tab and click the Save button to save these settings.

and click **Connect**

You will be prompted to enter the username and password to connect to your Institute desktop:

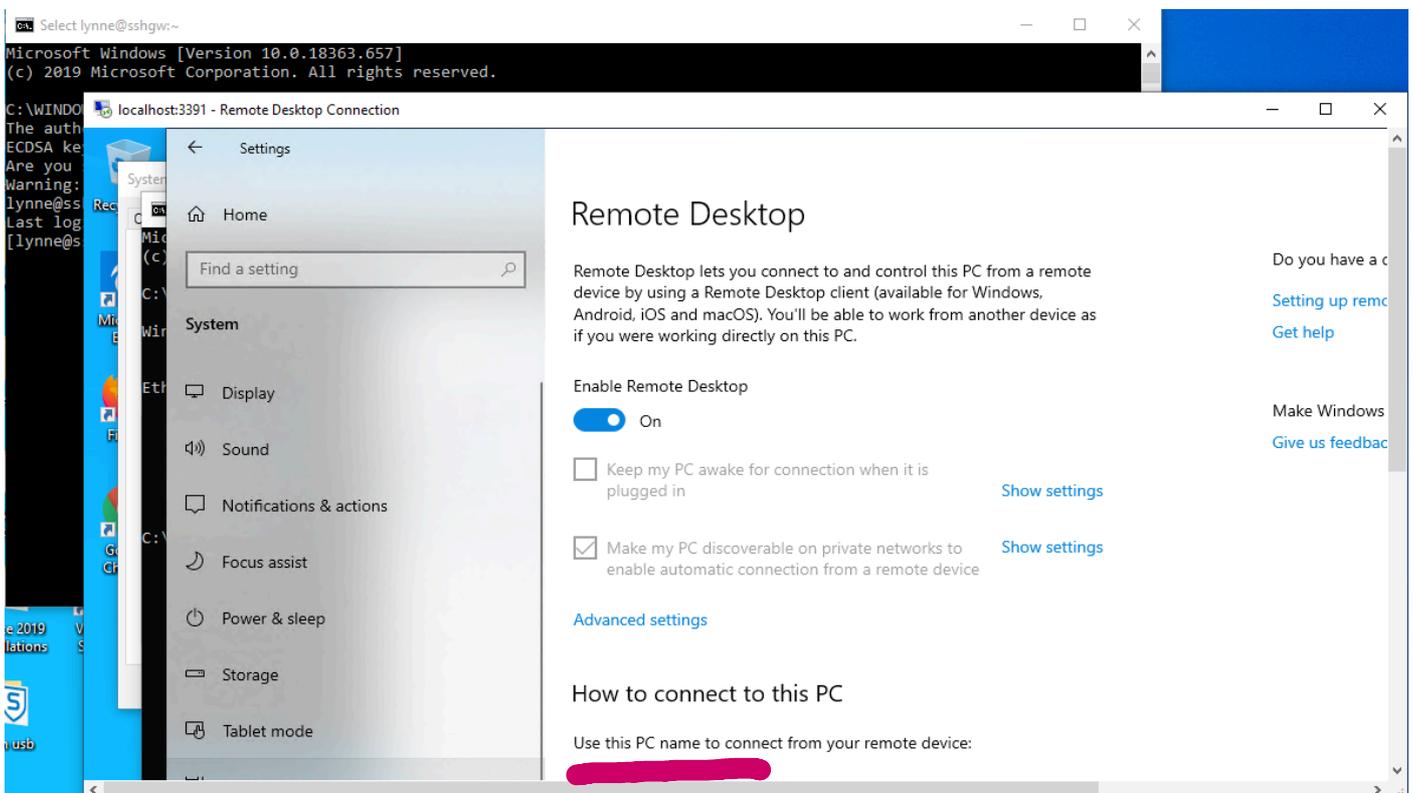


Enter the username and password you have enabled for Remote connections. If prompted with a verification prompt:



Tick the **Don't ask me again for connections to this computer** and click on yes.

The Institute Windows desktop will be displayed as a window on your local machine:



To close the connection click the X on the top right of the window displaying the Institute desktop.

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 — 155x24
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$
```

## To connect from remote (home) Macintosh to an Institute Windows Desktop

### On Institute Windows Desktops

Follow steps in **On your Institute Windows Desktop** above.

### On your Home Macintosh

Download the Microsoft Remote Desktop client from the Mac App Store:

<https://itunes.apple.com/app/microsoft-remote-desktop/id1295203466?mt=12>

Open Terminal window (\Applications\Utilities) and type the following command

```
ssh SSO_username@sshgw.imm.ox.ac.uk -L 3391:IP_Address_WIMM_Windows_PC:3389
```

```
lcm — lynne@sshgw:~ — ssh lynne@sshgw.imm.ox.ac.uk -L 3391:129.67.56.124:...
Last login: Wed Mar 11 11:00:17 on ttys000
lmmpro:~ lcm$ ssh lynne@sshgw.imm.ox.ac.uk -L 3391: [REDACTED]:3389
lynne@sshgw.imm.ox.ac.uk's password:
Last login: Wed Mar 11 11:00:33 2020 from lmmproeth0.imm.ox.ac.uk
[[lynne@sshgw ~]$
```

Open Microsoft Remote Desktop

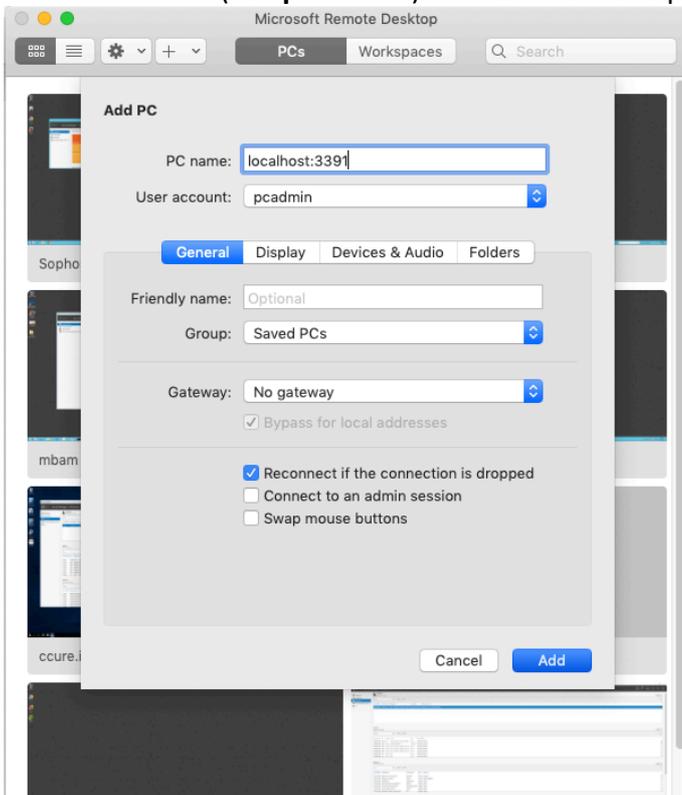
Enter the computer address as

localhost:3391

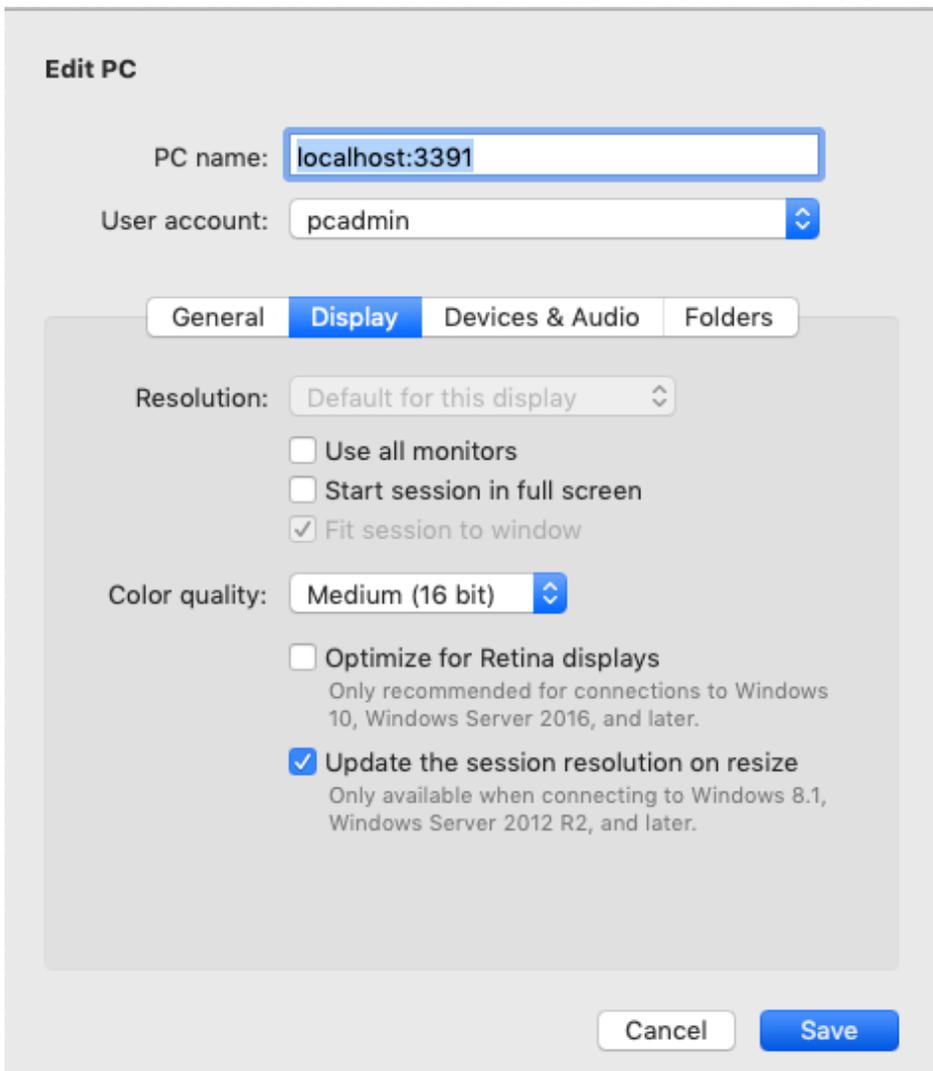
Next to User Account select Add a User Account from the drop-down menu:



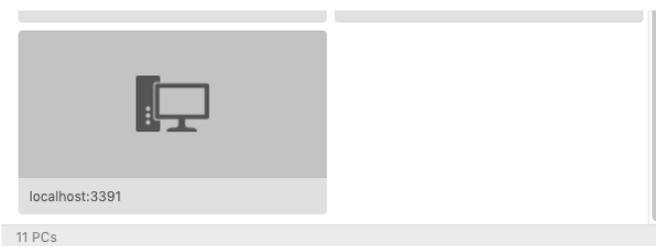
Enter username (**not password**) for account set to permit remote connections:



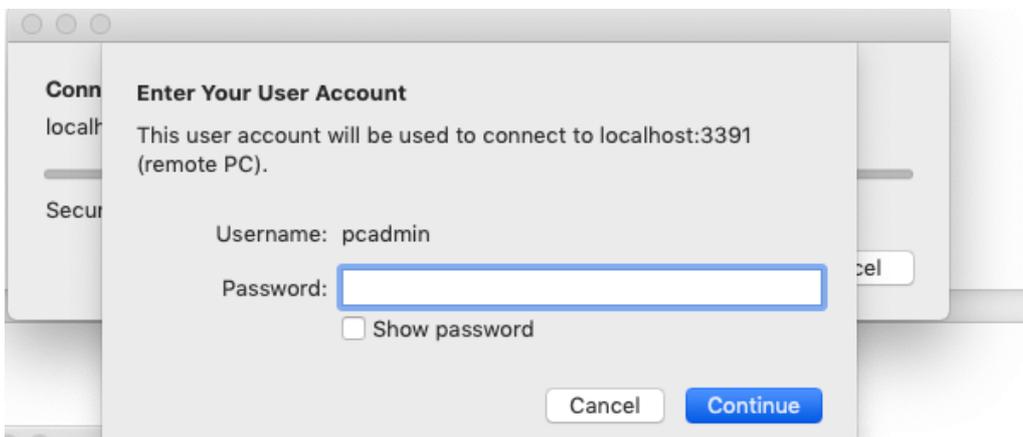
Go to **Display** tab set screen options as below:



Click **Add** button. Double-click on the localhost desktop:

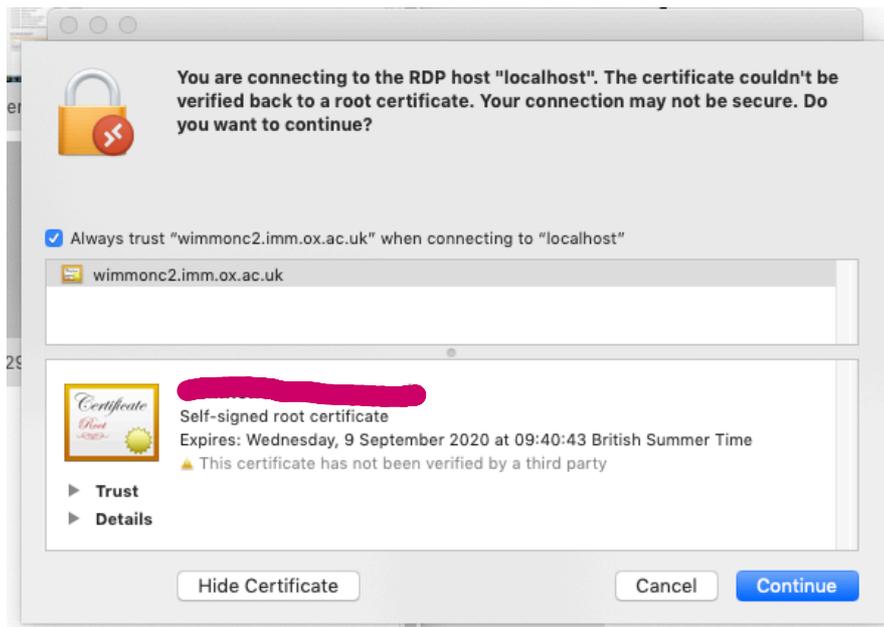


You will be prompted for the password for the Windows account:



Enter the password.

You may be prompted to accept a certificate



Trust the certificate and click **Continue**. The Windows desktop will then open 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**:

```
lcm — lynne@sshgw:~ — -bash — 155x24
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$
```