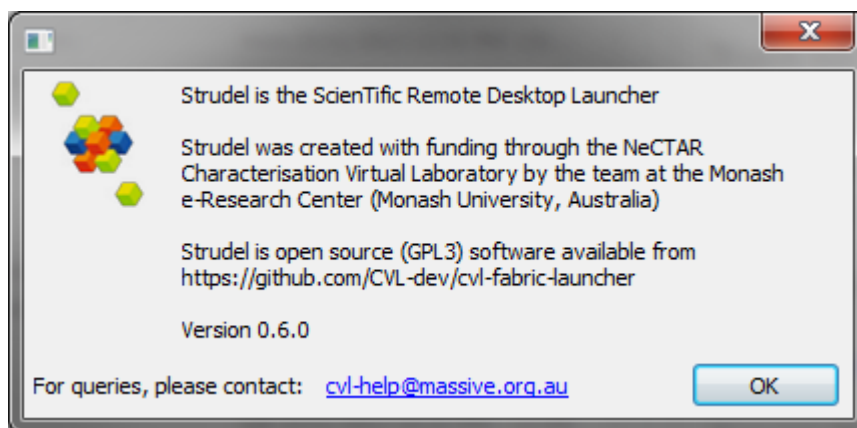


INSTALLATION OF STRUDEL

Introduction

Connecting to *Fawkes* using a Graphical Interface is easy using "Scientific Remote User Desktop Launcher", or Strudel for short.

The Strudel software is an open source package developed by the Monash eResearch Team. Strudel makes it simple to connect to HPC facilities, by simplifying the VNC Server process for the end users.

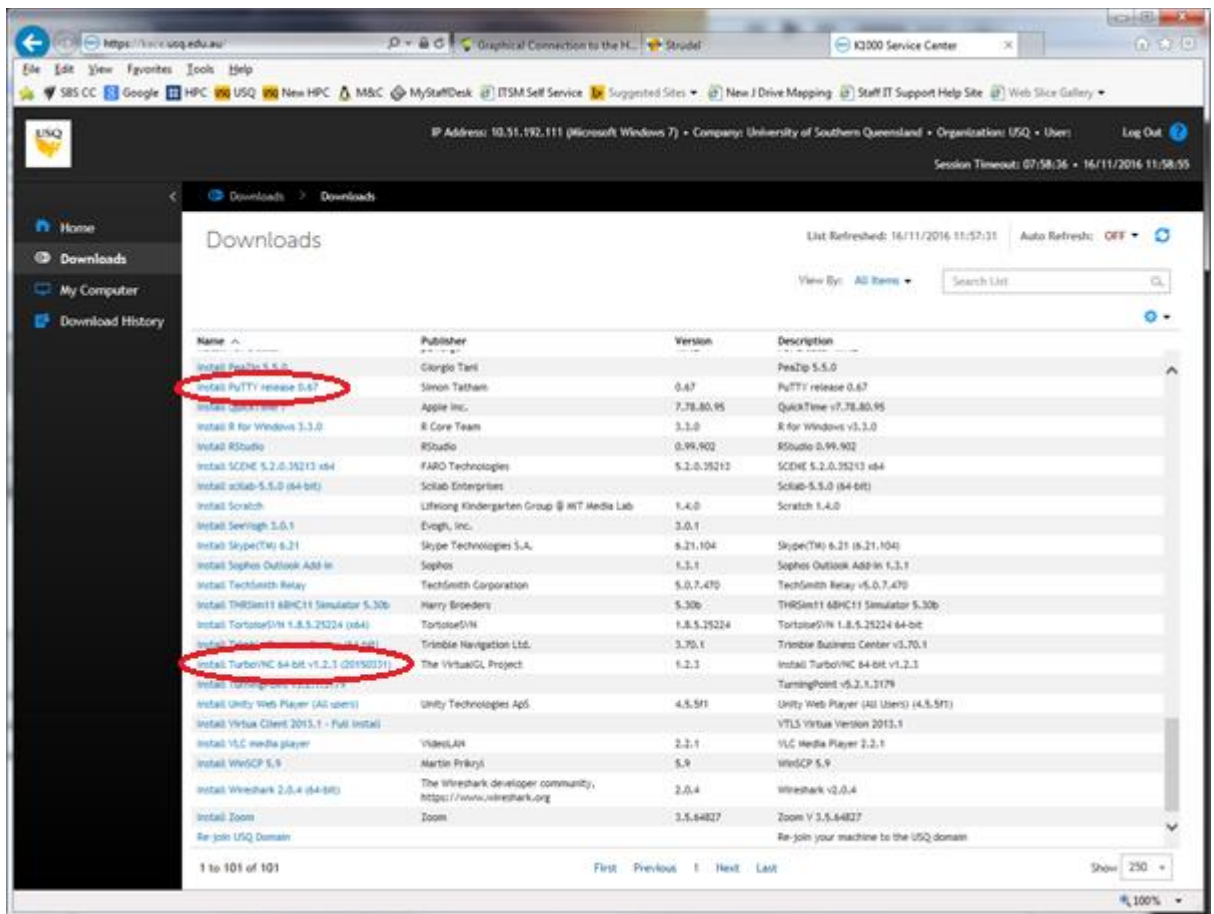


Some of the functionality Strudel provide includes:

- Automatically detecting the VNC Display Number – users no longer need to worry about this if the display number ever changes - especially after the host computer is rebooted.
- Configures and implements a SSH tunnel, making it highly secure, without the need for a separate ssh or putty session running in the background.
- Configures the "X Windows" manager to default to using Gnome.
- No need to remember the "VNC Password", as it automatically generates one for you. Therefore, you only need to worry about your USQ username and password.

Installation of Software

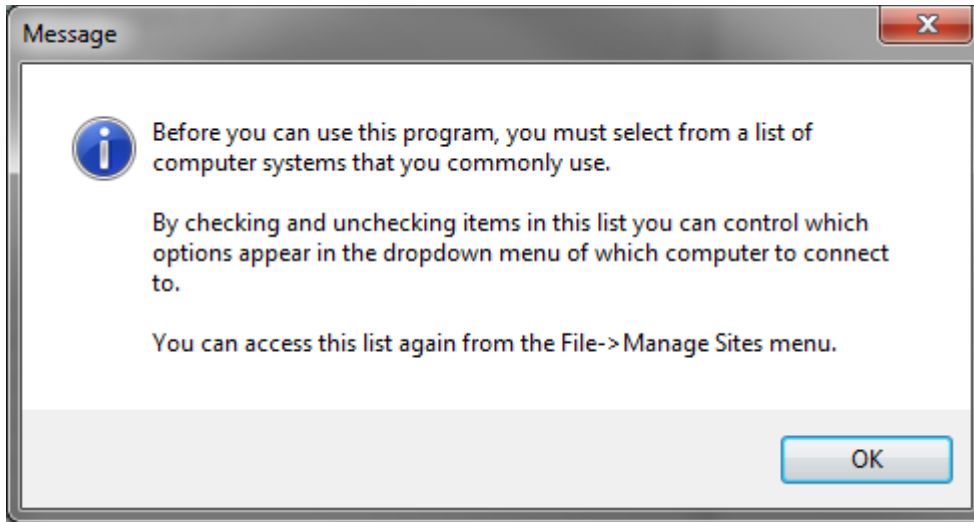
- If you are using a USQ University's Windows Computer, you require three software packages:
 - PuTTY
 - TurboVNC
 - Strudel
- You can install PuTTY and TurboVNC software by going to [ICT Software](#) or <https://kace.usq.edu.au>. On the login screen enter your USQ username and password then select the "Download option".



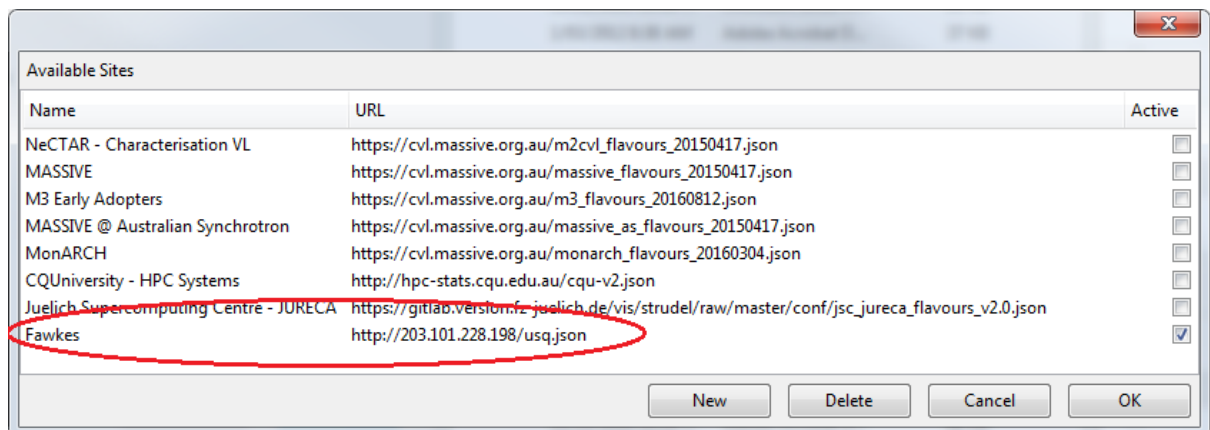
- If you do not have access to the software server or you are not using a USQ University's Windows Computer, get the software from:
 - [PuTTY](#)
 - [TurboVNC](#)
- Download and install the Strudel software from:
 - Windows: [Strudel for Windows](#)
 - Mac OS X : [Strudel for Mac OSX](#)
 - A variety of Linux builds are available at the following link - https://cvl.massive.org.au/launcher_files/stable/

Running the Strudel Software

- Start the Strudel software.



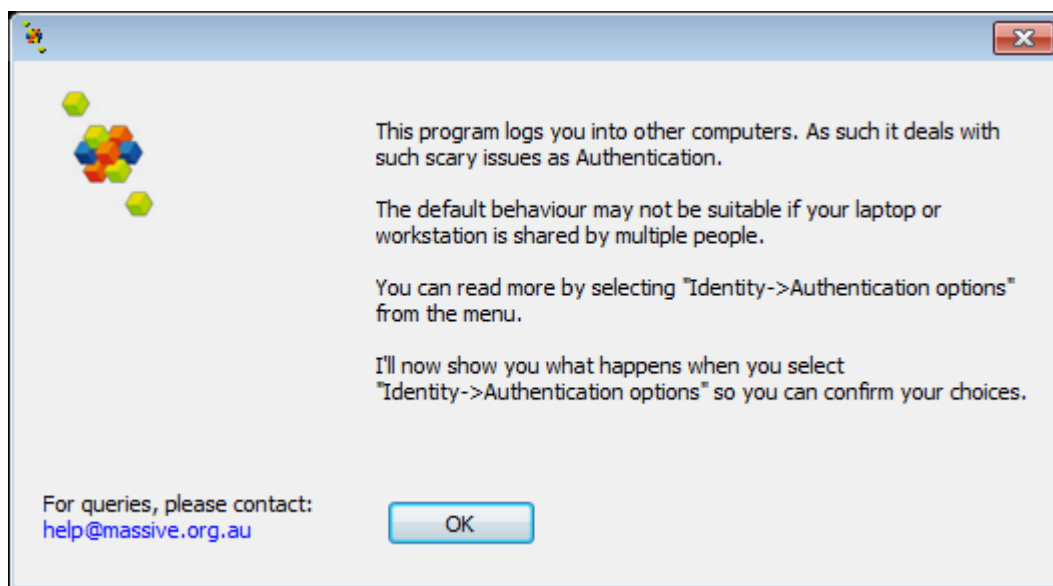
- As a temporary measure you will need to enter the details of the configuration server, which has an URL of <http://203.101.228.198/usq.json>



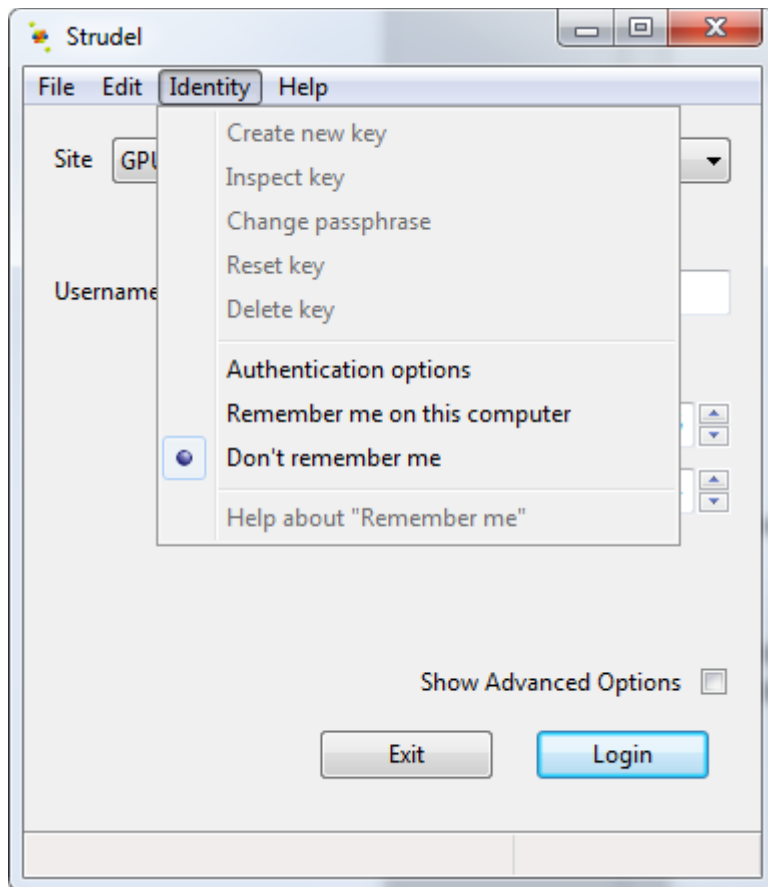
- Ensure all other options are deselected, as can be seen in the image above.
- Within the Strudel software, you will need to select the type of job you would like to run. The options are:
 - GPU Interaction Session – in which you can enter your own values for Memory and PPN (Processors per node – or simply CPU's).
 - Standard Interaction Session - which is similar to the GPU session, without the need to request a GPU node, so these jobs can start on any of the compute nodes.
- Some things to be aware of:
 - You can only have a maximum of one GPU or Standard Session running at once. This is actually a feature – as it is preferred that users only have running

one interactive session at a time. If you want to run lots of jobs, that's what the non-interactive job submissions (batch) are for.

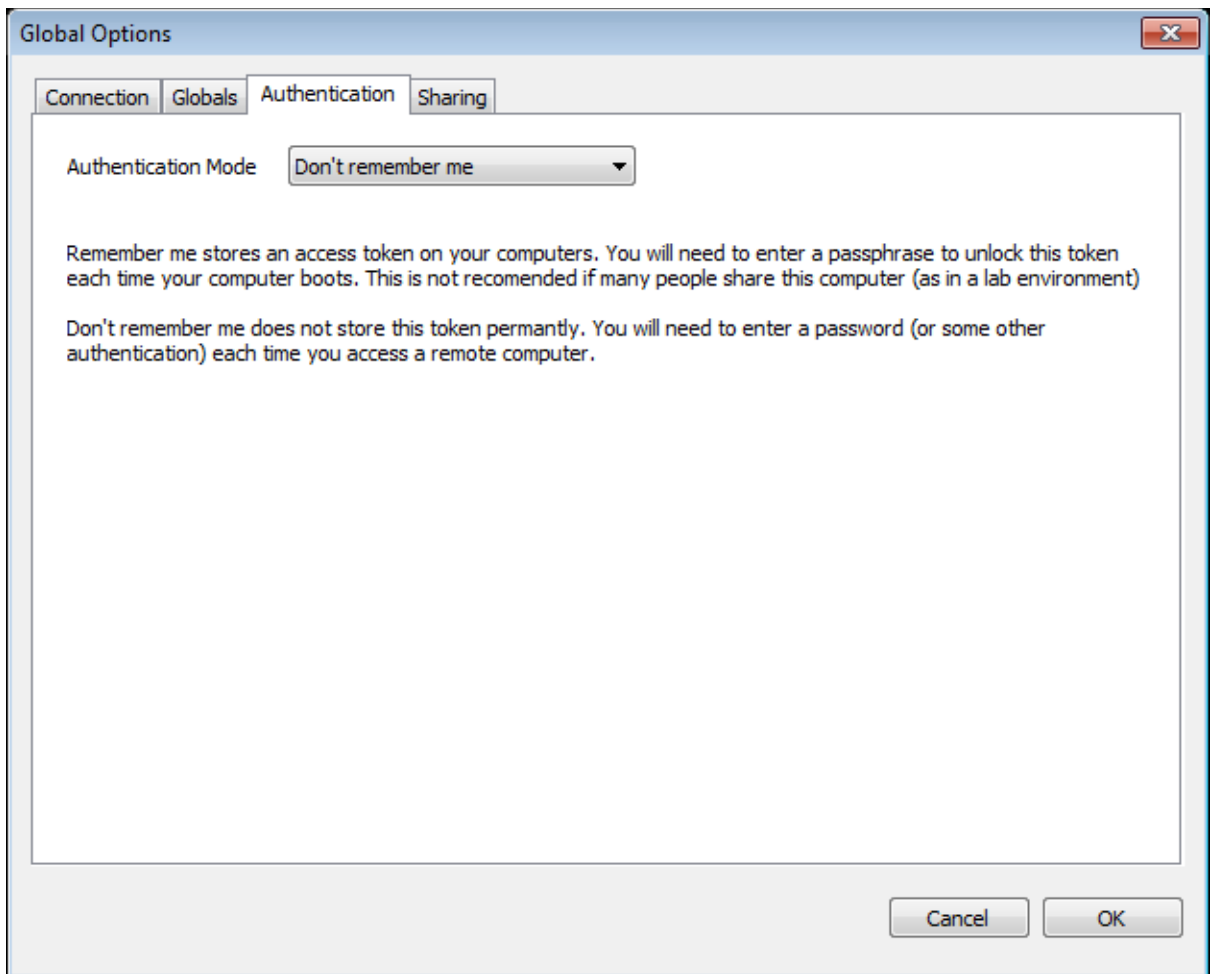
- Depending on the option that is selected, you will enter Username (your USQ username) and other options such as Memory and CPUs. Then click on the login button.
- The first time you use the software, you will be required to select the authentication method.



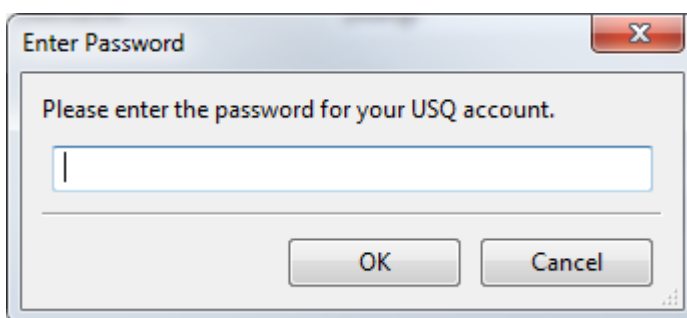
- Click on the “OK” button to continue.
- There are two authentication options:
 - Use of your login password, to use this method select the “*Identity -> Don't remember me*” option.
 - Strudel generated SSH keys, this is the default. To use this method select the “*Identity -> Remember me on this computer*” option. With this method you are only required to enter a pass-phrase.



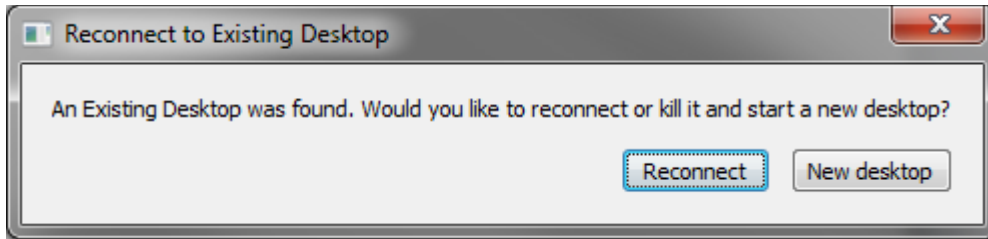
- **Note:** you can also change the setting through Strudel's menu by selecting "Edit -> Preferences -> Authentication Tab", and then select the "Don't remember me option", this will allow you to use the password option, rather than using SSH keys.



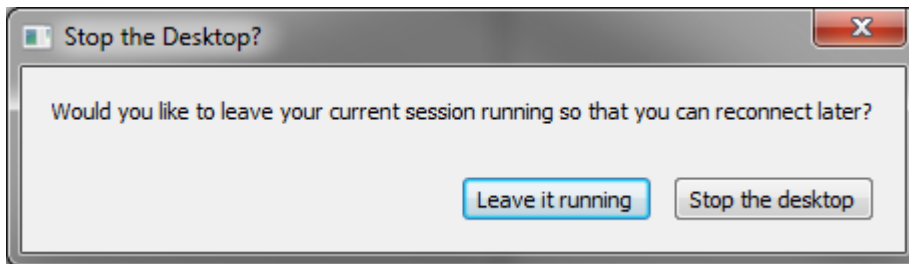
- You will be asked to then enter your USQ password.



- If you select the “Remember me on this computer” option, Strudel will generate and use SSH keys to connect to *Fawkes*, removing having to enter your USQ password whenever you run an interactive job.
- If you already have a "Virtual Desktop (VNC) session running, you will be asked to "Reconnect" if you would like to connect to an existing session, or "New Desktop" if you would like to kill the previous session and start a new session.



- When you are finished with the session (don't log out), simply close the Strudel application. The software will then ask if you would like to leave the session running or not. Depending on the session running, it is recommended to:
 - GPU Interaction Session – once your program has completed its execution, it is recommended to 'Stop the desktop'.
 - Standard Interaction Session - once your program has completed its execution, it is recommended to 'Stop the desktop'.



References

Strudel, (n.d.), Retrieved November 16, 2016, from <https://www.massive.org.au/userguide/cluster-instructions/strudel>

Graphical Connection to the HPC System, (n.d.). Retrieved November 16, 2016, from <https://my.cqu.edu.au/web/eresearch/graphical-connection-to-the-hpc-system>