

Remote visualisation - Topaz

Access

All users who have current allocation on Magnus or Zeus are given access to the remote visualisation service.

If you do not have a current allocation and wish to access the remote visualisation service please apply for a directors share or other allocation at [apply.pawsey.org.au](https://pawsey.org.au) or consider using the [Windows workstation](#) service instead.

With the increasing amount of simulation data generated by current large-scale supercomputers, remote visualisation plays an important role in visualising such massive data sets without the need of transferring them from supercomputers back to the user's local machines. This quick visualisation allows users to adjust their workflows without wasting time in downloading and visualising the data on their local machines. Specialised HPC servers with dedicated large-memory nodes and GPU's are employed at major supercomputing centres to support remote visualisation.

Remote visualisation at Pawsey is performed on Topaz, a commodity Linux cluster, provided by Xenon, which will be complementary to Zeus. Topaz is made up of 42 nodes, 20 of which are for remote visualisation with Quadro RTX5000 NVIDIA GPU's.

As Topaz shares the same file systems with other Pawsey supercomputers (Magnus and Galaxy), there is no need to copy simulation data across these supercomputers.

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FAQ:

1. When opening a terminal or xterm session, I cannot access most commands (for example "Module load")

You may need to complete [step 5](#) of the remote visualisation guide, adding bash launch commands to your `.bashrc` file and `.bash_profile`.

2. When starting a remote vis desktop session, I have a black screen instead of a desktop

This can occur when an application you used on Zeus has made config changes to your window manager. As Topaz uses the same window manager, but a different operating system, this can cause incompatibilities with the new system. You can usually fix this issue by deleting /renaming some config files in your home directory and letting the system re-generate them from default settings. To make changes to your home folder without the desktop, either ssh into a pawsey system (eg. topaz.pawsey.org.au) or start an xterm session using the bookmark at motevis.pawsey.org.au. To create a new folder to place the backups in:

Code

```
mkdir backup
```

Then move the following folders to it using the below commands.

folders

```
mv .config backup/.config
mv .cache backup/.cache
mv .fastx_server backup/.fastx_server
mv .dbus backup/.dbus
mv .ICEauthority backup/.ICEauthority
```

and, optionally (if they exist in your user folder, and the above did not fix your issue):

folders

```
mv .local backup/.local
mv .fonts backup/.fonts
mv .gnupg backup/.gnupg
mv .nv backup/.nv
```

If you still cannot get the desktop to show correctly after following these steps, please contact help@pawsey.org.au.