**Eleanor**

One virtual machine per student, created using the University of Edinburgh’s Research Cloud Computing Service, Eleanor, which has been deployed on the OpenStack cloud computing platform.

The machines were launched from an Ubuntu 22.04.3 LTS with Xfce Desktop Environment image, which has been saved to be re-used for future instances of the course.

Each virtual machine was provisioned with 4 virtual CPU cores, 8GB of RAM and 80GB of local disk. These resources could easily be increased using the OpenStack platform if required. Network storage was also mounted on each machine to enable access to the course materials and the transfer of outputs off the machine.

Local accounts with randomly generated passwords were created for the students on the machines. Each student accessed their assigned machine through Remote Desktop using their assigned username and password.

Applications: list here the applications installed on the VMs

**Eddie**

The students made use of NVIDIA A100 20GB Multi Instance GPUs (MIGs) on the University of Edinburgh’s Research Compute Cluster, Eddie. The Eddie compute cluster uses the Altair Grid Engine Scheduler and the Rocky Linux 9 operating system.

To enable shorter queuing times for the students, 10 MIGs were ringfenced for them for the duration of the course. The ringfenced MIGs were on a single compute node with 64 CPU cores and 768GB of system RAM.

Each student also had access to a 10GB home directory, a 2TB scratch area and dedicated staging nodes with the same network storage as the virtual machines mounted on these.

Applications: The students used GROMACS 2024.4 with GPU support, which is installed on Eddie as a module for community-wide use. (if any other applications were used, put them here)