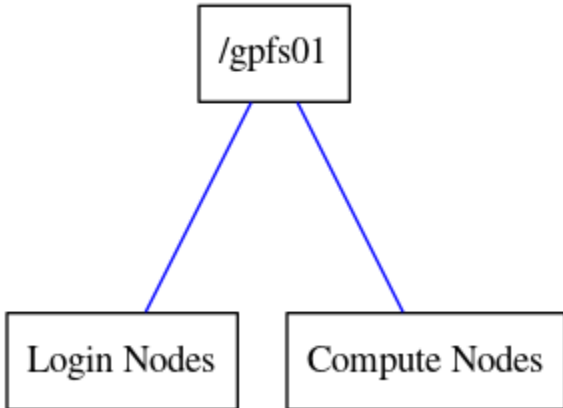
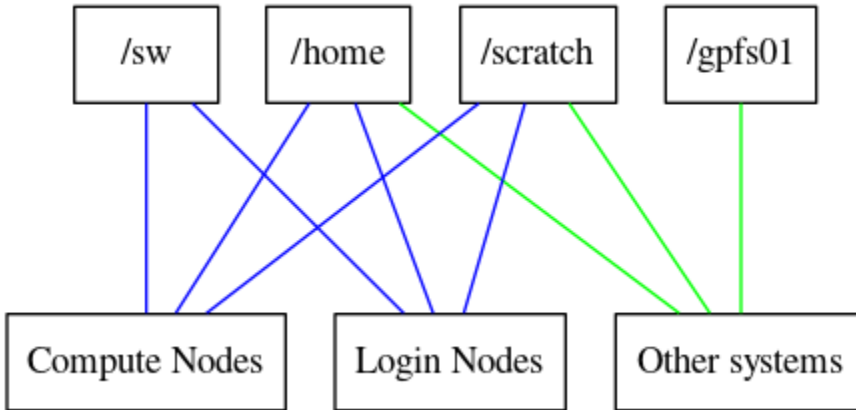


HPC File Sharing

Access to HPC services can be visualized/described (user perspective) as:



At least 50Gb/s of connectivity exists for all connections above. **Note** that all connectivity is shared.

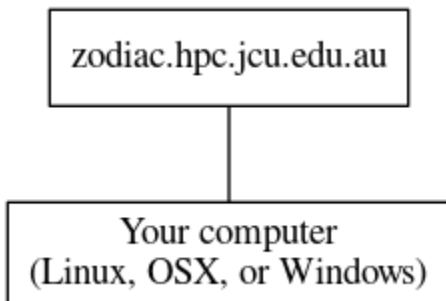


At least 50Gb/s of connectivity exists for all **blue** connections above. At least 2Gb/s of connectivity exists for all **green** connections above. **Note** that all connectivity is shared.

HPC staff have been directed to turn off all SMB fileshares on public networks - triggered by external security/risk assessment.

A limited number of licenses for MountainDuck have been purchased as an SSH-based alternative to SMB fileshares. Individual researchers or research groups could purchase MountainDuck licenses, should Technology Solutions decide against supporting this product.

There is increasing pressure from government and universities to use cloud resources rather than purchasing infrastructure. As at 24-March-2021, JCU will be purchasing a significant amount of cloud storage capacity for research use. This purchase may mean that budget for replacing storage currently used for researchers' home directories will be removed and HPC will only provide scratch space in future.



The SSH protocol can be used to transfer files to and from HPRC storage. Five (5) examples of software/commands that can be used are the title for this section. Other options may/will exist.

WinSCP will provide the best user experience on a Windows PC. MountainDuck will provide the best user experience on a Mac.

The connection between `zodiac` and your computer is not managed by HPC staff.

By default, HPRC accounts are created so that only the owner can read and/or write (inc. modify) files. Owners may relax these permissions - an action that could require HPC staff actions.

Before making such changes, be aware of the following :

1. Giving other people read-only access to your data, means they can copy your data and share that copy with others.
2. Giving other people write access to your data, means they can delete/modify your data. Files on HPC are not backed up, due to extreme costs involved.
3. Group(s) can be created for your internal data sharing requirements. You can request to have your primary group changed, but each account only has 1 primary group.

In summary, think very carefully before giving write access to your HPC home directory.