

Computational Brain Sciences Group Server (aka the CBS Server)

Suzanne T. Witt, Ph.D.
Tristan Kuehn, M.S.
11 September 2023

What is the CBS server?

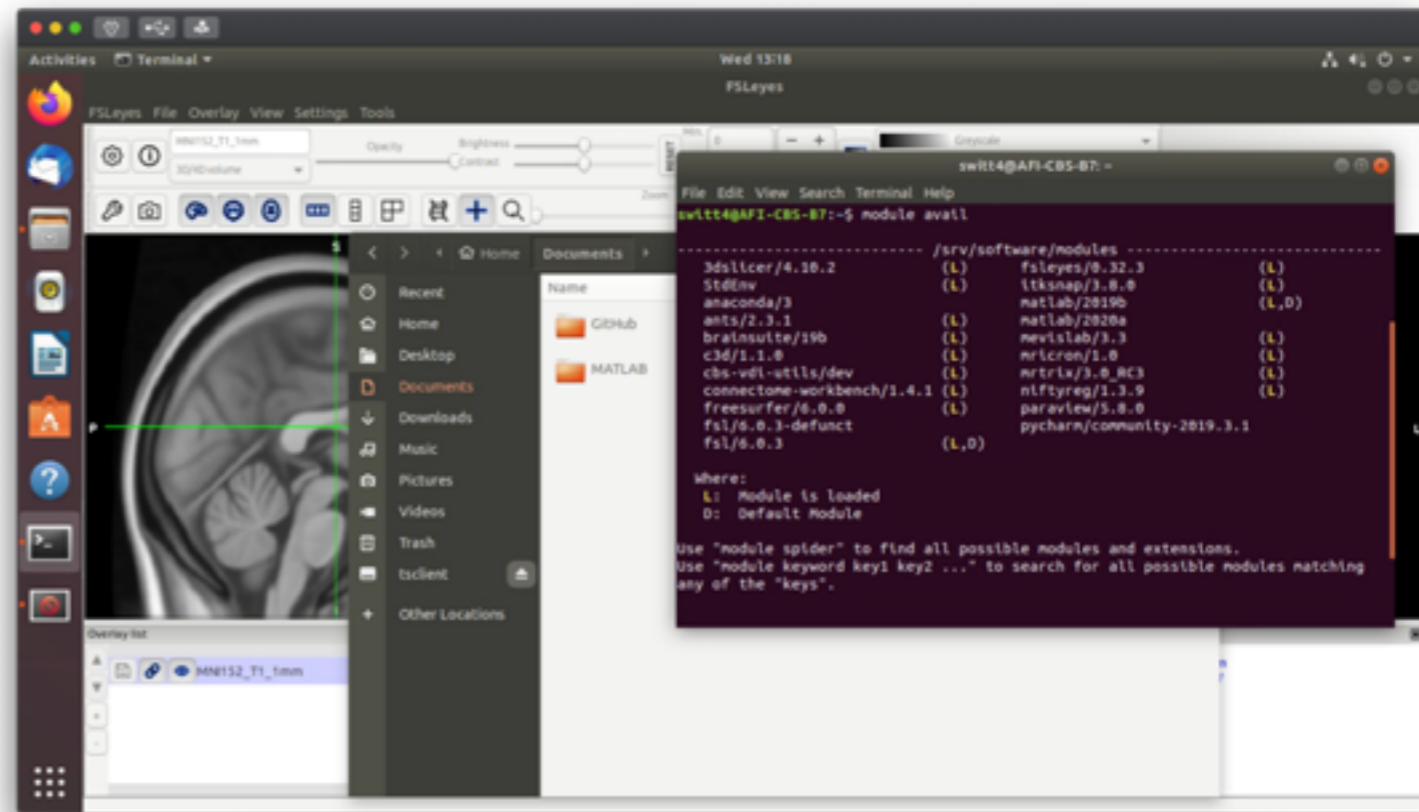
- Locally managed, multi-core computational server
- Designed to replace high-performance desktops
- Provides:
 - central storage for research data
 - central repository of research software
 - custom security access to research data
 - automatic local and off-site backups

What the CBS server isn't

- Not a replacement for HPC systems like Compute Canada
- Not a replacement for local machine backups

How does the server work?

- Access via virtual machines (VM) running Ubuntu
- Supports both GUI and command line
- Access from any active internet connection
- Virtual machines can remain running, even if the user is not actively logged in
- No scheduler or queue manager



File system overview

- **/home**
 - repositories, code, small text files
 - < 10 GB
- **/cifs/<pi_last_name>**
 - data, results, lab-specific software/code
- **/localscratch**
 - temporary
 - interim results for large jobs
 - output for singularity containers

Account types

- Basic User (free): 4 cores/8 GB
- Power user (fee-based):
 - 12 cores/32 GB
 - 12 cores/32 GB + 10 GB GPU

Account details and fee structure

- All user accounts must be associated with an active PI account
- Currently, users need an active Western or Western affiliate email account
- Fee schedule including 67% cost reduction:
 - Storage: \$50/T/year (full price: \$150/T/year)
 - Power user: \$1000/year for first, then \$500 year for each subsequent (full price: \$3000/year and \$1500/year)

How do I get started?

1. Fill out the relevant account request form
2. Download the VMWare Horizon client
3. Follow instructions on the wiki page to set up a new secure connection

Need support, software requests, general questions?

support-cbs-server@uwo.ca

<https://cbs-discourse.uwo.ca>

<https://osf.io/k89fh/wiki/Computational%20Core%20Server/>

FAQs

1. Can I ssh into the server and use it solely from a terminal? **No, the server is designed to be accessed via the virtual machine interface.**
2. Where can I store my data/results? **All research data and associated files should be stored in your PI's datashare. Your home directory should only be used to save small text files, scripts, cloned repositories, etc.**
3. My process doesn't fit in the limits of the Basic/Heavy user account. Can I get more resources? **If your account is a Basic account, you must upgrade to a Heavy user account. If you have a Heavy user account, please contact support.**
4. If there currently aren't many active VMs, can I get access to the unused server resources? **Not yet.**
5. Help! I locked myself out of my account. **Be patient, your account will automatically unlock within 24 hours (most likely sooner).**
6. I need to make a change to my account. **There are links to account change forms on the server wiki page.**
7. Can I get additional software installed? **Most likely, yes. Please make a request to the CBS Server support team. If the support team decides that the software is of suitable general interest, it will be installed centrally. If not, we will help you get it installed for your user account.**

Any questions before the live demo?