Guide: Migrating from login01 to login02 on the Clinwulf Cluster

This guide explains how to configure your environment on the new login02 head node of the Clinwulf cluster.

The Problem: The new cluster (login02) has a different setup than the old one (login01).

1. Your home directory path has changed from /home/your_username to /ifs/home/your_username.
2. The Slurm scheduling commands (like squeue, sbatch) are not in your default PATH.
3. Your personal Anaconda/Miniconda installation is broken because it has the old, incorrect home directory path hardcoded in its configuration files.

This guide will help you fix both issues.

Part 1: Fix Slurm Commands

The simplest fix is to automatically load the Slurm module every time you log in. You can do this by adding a command to your .bashrc file.

Run the following command in your terminal on login02:
(This command appends the required line to the end of your .bashrc file.)
echo "module load slurm/slurm/23.02.8" >> ~/.bashrc

After running this, **log out and log back in**. The squeue command should now work automatically.

Part 2: Fix Your Existing Anaconda/Miniconda Environment

This is a two-step process: first, we manually patch a key Conda script, and then we let Conda fix the rest of its own files.

Step 2.1: Patch the conda script

We will use a command to find and replace the old, incorrect path inside the main conda script.

IMPORTANT: In the command below, replace your_username with your actual username (e.g., pdutta).

IMPORTANT: Change 'your_username' to your actual username before running!
sed -i 's|/home/your_username|/ifs/home/your_username|g' $HOME/anaconda3/bin/conda

For example, user pdutta would run:
sed -i 's|/home/pdutta|/ifs/home/pdutta|g' $HOME/anaconda3/bin/conda
This command edits the file $HOME/anaconda3/bin/conda in place, replacing all instances of the old path with the new one.

Step 2.2: Re-initialize Conda

Now that the main script is patched, we can run conda init to let it fix all of its other configuration files automatically.

$HOME/anaconda3/bin/conda init

You will see output showing that it has modified your .bashrc and several other files. This is exactly what we want.

Step 2.3: Finalize the Fix

This is the most important step. For all the changes to take effect, you must **close your terminal and start a new SSH session.**

1. Log out
exit

2. Log back in
ssh your_username@login02.uhmc.sbuh.stonybrook.edu

After you log back in, your conda command should work perfectly. You can test it with conda info --envs, which should now list all of your old environments correctly.

Best Practice: Update Your Scripts!

To avoid future problems, **stop using hardcoded paths** in your scripts. Always use the $HOME environment variable, which automatically points to the correct home directory.

Bad Example (will break):
python /home/pdutta/my_project/analysis.py
Good Example (will always work):
python $HOME/my_project/analysis.py

Review your Slurm submission scripts and other shell scripts to make this change.