

The procedure of loading files on Longleaf in Paraview

Note: This procedure has been tested and confirmed to work as of 1/15/2015.

1. On Longleaf start an interactive SLURM bash session, e.g.

```
srun -t 6:00:00 -p interact -N 1 -n 1 --cpus-per-task=1 --mem=120g --x11=first --pty /bin/bash
```

This gets you an interactive session with 1 CPU, 120 GB RAM, for six hours (in the interact partition).

2. Add the Longleaf paraview module:

```
module add paraview/5.12.0
```

3. Run the hostname command to get the node's IP address which you'll use later:

```
$ hostname -i
```

4. Run the paraview server specifying a port number

```
$ pvserver --server-port=9341
```

Here the port number is (just as an example) 9341. For the port number I recommend choosing a random number between 8000 and 9999. You should see a “Waiting for client...” message.

```
{llianxia@longleaf-login5:~$ srun -t 6:00:00 -p interact -N 1 -n 1 --cpus-per-task=1 --mem=120g --x11=first --pty /bin/bash
srun: job 57274745 queued and waiting for resources
srun: job 57274745 has been allocated resources
Restoring modules to user's default, for system: "longleaf"
{llianxia@b1018:~$ module add paraview/5.12.0
{llianxia@b1018:~$ hostname -i
172.26.113.118
{llianxia@b1018:~$ pvserver --server-port=9341
Waiting for client...
Connection URL: cs://b1018.ll.unc.edu:9341
Accepting connection(s): b1018.ll.unc.edu:9341
```

Now on your **local machine**, bring up a shell and run the following ssh command which does port forwarding:

5. `ssh -N -L 9341:<IPADDRESS>:9341 <ONYEN>@longleaf.unc.edu`

where <IPADDRESS> is the node IP address from step 3. So, in the ssh command you'll need to replace <IPADDRESS> with the IP address from step 3.

Also, 9341 is the port number used in step 4. So be sure to specify the port number that you specify in step 4 in your pvserver command.

Enter your ONYEN password when prompted.

```
15/01/2025 11:19.44 /home/mobaxterm ssh -N -L 9341:172.26.113.118:9341 llianxia@longleaf.unc.edu

-----
The University of North Carolina at Chapel Hill
*****
Unauthorized access to this system is prohibited.

This is a University system intended for University purposes
only. The University reserves the right to monitor the use of
this system as required to ensure its stability, availability,
and security.

Please report any problems to "research@unc.edu", or 919-962-HELP,
or go to https://help.rc.unc.edu for assistance or to submit a
help request.
-----
```

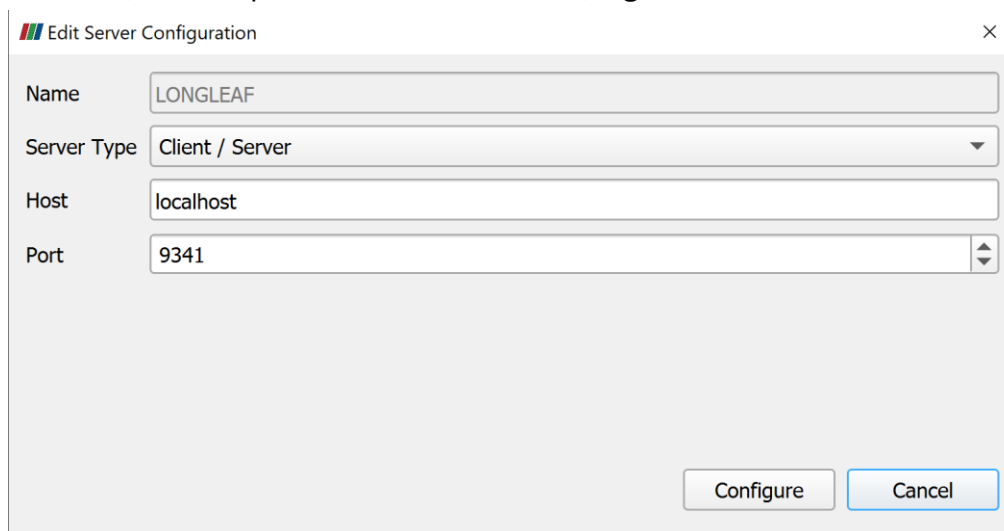
Keep this window open. (I use mobaxterm for the local shell. You can use cmd.exe on Windows or any terminal on Linux or Mac with **ssh** available)

6. Start Paraview 5.12.0 (same version on longleaf) on your local machine

In the Paraview GUI, go to File -> Connect.

Choose Add Server and fill in the four fields.

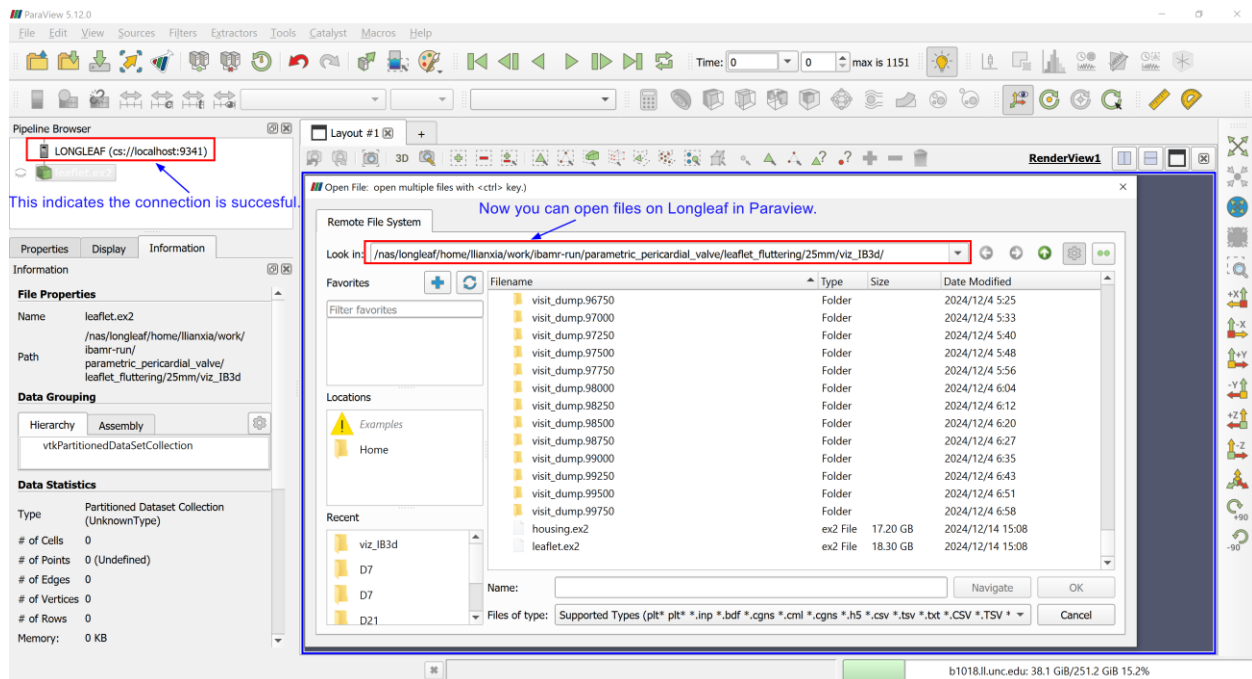
- For Name, just give an arbitrary name.
- For Server Type choose Client / Server.
- For Host, put localhost
- For Port, use the port number from above, e.g., 9341.



Then click Configure. Make sure Startup Type is Manual and click Save.

Then choose the server from the menu and click Connect.

7. Open files on Longleaf.



8. Disconnect and Exit

When you are done:

- In your Paraview client go to File -> Disconnect.
- In your local terminal, kill the ssh connection. For this you can do Ctrl-C.
- Then logoff your interactive SLURM bash session on Longleaf:

\$ **exit**