Accessing TACC for Your

CSE 5351/4351 Parallel Processing

Homework

*The following directions below assume that you have a TACC account that has been activated and you have paired device for multi-factor authentication (MFA).

For registering a device for MFA follow this link

1. When you open the SSH Secure Shell Client on your PC and enter

ssh <yourTACCusername>@stampede2.tacc.utexas.edu

It will ask for your TACC password. After you enter it, this will now ask you for TACC token that you get from a device you registered for MFA.

This would get you to a login node.

****Do not run your program at a login node. This is a very serious violation that can lead to loss of TACC privileges. You need a compute node to run your program.**

3. To get a compute node, at the login node's prompt (which may be similar to login1$), type

idev -m 30 (or however time you need. m is for minutes and 30 gives you 30 minutes)

Please, be professional and considerate of your fellow users and not allocate more time than you think you will need.

4. At this point, you get assigned a compute node where you can compile and run your code as you wish.

5. You would have saved your program on the compute node prior to compiling and running. You can create a new file and copy your program into it or however else you prefer to get this done. A compute node prompt may be similar to: c557-501.stampede2(1)$

6. Compile: mpicc <filename>

7. A sample run command is: ibrun -np <N> ./<a.out or executable filename> <N> <S> where np and N both stand for the number of processors and S is the number of integers.

For example, for Task 1a with 2 processors and 64 integers,

Run: ibrun -np 2 ./a.out 2 64

Depending on your code, your run command may be different from this format.

8. The supercomputer will produce the times for you at this time.

Hints: You may need to change from seconds to microseconds. The times you see are so small (in microseconds) and they have already been repeated for a total of 100 times and averaged that you can safely pick the lowest time shown for that run.

Remember:

******Do not run your program at a login node. This is a very serious violation that can lead to loss of TACC privileges. You need a compute node to run your program.***