UW Matlab on orca for UW SHARCNET Users

Matlab has been installed on orca to run UW Matlab site license. UW SHARCNET users who have already joined the UW Matlab site license pool can run Matlab jobs on orca. For those who have not acquired a license can purchase one (\$75/year/user) from the UW Scientific Computing Webstore. For details, please go to: <u>http://www.saw.uwaterloo.ca/matlab/</u>

Account Setup

The UW Matlab license server is configured to use UW userids to check out a license. If your SHARCNET username does not match your UW username, please logon to Sharcnet webportal and submit an online ticket <u>https://www.sharcnet.ca/my/problems/submit</u>, we will change your SHARCNET username to your UW username.

Usage

Currently, the Matlab license cap on orca is 50, i.e., a maximum of 50 Matlab jobs can be run on orca simultaneously. The 50 licenses are shared by all Matlab users on orca and may subject to change in the future. The license will only allow users to run serial Matlab jobs.

The procedure to start a Matlab job on orca can be summarized as follows:

- A) Logon to orca (ssh orca.sharcnet.ca)
- **B**) Go to your /work directory: **cd /work/yourid** e.g., [jemmyhu@orc-login2:~] cd /work/jemmyhu
- C) Copy the sample execute file and example: cp ~jemmyhu/Matlab/uwmatlab. cp ~jemmyhu/Matlab/matlab_test.m. e.g., [jemmyhu@orc-login2:~/work/matlab] cp ~jemmyhu/Matlab/uwmatlab. [jemmyhu@orc-login2:~/work/matlab] cp ~jemmyhu/Matlab/matlab_test.m.
- D) Submit the matlab job to the serial queue on orca from current work directory sqsub -q serial -r 1.0d -o matlab_test.log -i matlab_test.m ./uwmatlab

Here option –i is to get the standard input for the job from specified file (matlab_test.m) –o is to append the standard output of the job to the specified file (matlab_test.log) -r runtime (max. 7 days)

E) Create your own matlab (.m) file, and follow the above sqsub command to submit jobs.

For new SHARCNET users, please read the online documents for how to get started with SHARCNET <u>https://www.sharcnet.ca/help/index.php/Main_Page</u>

Please report problems to the online SHARCNET problem tracking system <u>https://www.sharcnet.ca/my/problems/submit</u>