

# USER GUIDE FOR *GETEXAMPLE*

## I. GENERAL INFORMATION

## II. SYSTEM OVERVIEW

**T**HIS userguide outlines steps to using *getexample* which was designed using HPC resources at Pawsey Supercomputing Centre. It is simple tool designed to simplify examples to assist users to do little or no modification to use to run their own jobs. In this appliance, directories are created in which each directory have three(3) most important aspects. The *getexample* full directory consists of a *Source Code in C or Fortran*, *SLURM* and an executable *README* with all instructions given on how to run code on each step and where to access the output results from the job. The MYGROUP and MYSCRATCH directories are effective in the development of this implementation and in the extraction of job results.

### A. Acronyms and Abbreviations

- ALPS—cray Application Level Placement Scheduler
- GNU—GNU's Not Unix
- HPC—High Performance
- LAMMPS—Large-scale Atomic/Molecular Massively Parallel Simulator
- MOM—Message Oriented Middleware
- MPI—Message Passing Interface
- NUMA—Non-Uniform Memory Access
- OMP—Open Multi-Processing
- SGI—Silicon Graphics
- SLURM—Simple Linux Utility for Resource Management
- SSH—Secure SHell

## III. HOW TO USE THE *Getexample* ON PAWSEY SUPERCOMPUTING CENTRE RESOURCES

The *getexample* tool currently provides examples for Magnus and Zeus which are easily accessible from both of the resources. However, it provides examples that are applicable to the supercomputer in use. Therefore, if you login from Magnus, you can only display the Magnus examples. To view the Zeus examples, you need to login with your Zeus account.

To use the *getexample*, follow the steps listed below:

- 1) To have access to the examples, login from either Magnus or Zeus, using the following commands respectively.

```
ssh -X myusername@magnus.pawsey.org.au
ssh -X myusername@zeus.pawsey.org.au
```

If you are using a Windows machine, you need to use `ssh -X` (a relaxed security mode). If you are a Mac user, you need to specify `ssh -Y` instead.

- 2) To view the examples within the *getexample*, simply type:

```
getexample
```

This lists all the examples available for the supercomputer you are utilising.

- 3) To require one of the examples, simply type:

```
getexample <name of the example>
```

This creates a directory with the same as the example on where you access the *getexample* from and copies the files of the example into this directory.

- 4) To see the example, change your directory from your current directory to the new directory created by typing:

```
cd <name of the example>
```

- 5) To list the files located in this example directory, type:

```
ls
```

- 6) To run the example, simply type:

```
./README
```

To understand what the README does, we recommend you to read the descriptions located with the README script.

## IV. CONCLUSION

This Pawsey Supercomputing Centre produced tool is mainly implemented to make it easy for new users to understand how to run codes by using simple commands. The Pawsey Centre hopes this userguide will be helpful to the everyone in need of it. Should the user require further information on the use Magnus and Zeus, do not hesitate to visit the website by following the links below:

- Magnus: <https://support.pawsey.org.au/documentation/display/US/Magnus+User+Guide\#MagnusUserGuide-Loggingin>
- Zeus: <https://support.pawsey.org.au/documentation/pages/viewpage.action?pageId=2162999>

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