

Day 1 - 9th April 2018

HPC Autumn Session

Linux Review (optional)

9.00am - 10.30am

Raijin Essentials

11.00am - 5.00pm

Dr. Yue Sun, NCI



Pre-requisites

Knowledge of the Bash (or another Linux shell) command line interface is prerequisite for the Raijin Essentials course. If you have no prior experience with Bash or Linux we strongly recommend that you attend the brief Linux Review course on Day 1 of the program, which is scheduled for 9:00-10:30am. You may also wish to review online Linux tutorials, such as <https://ryanstutorials.net/linuxtutorial> before attending the course. Linux Review is optional if you have a working knowledge of basic Linux shell commands.

Objectives

Do you need to:

- submit jobs on Raijin
- manage files at NCI
- look up user/project usage
- monitor jobs on Raijin
- interact with NCI helpdesk

This training aims to provide you with the skills and knowledge necessary to submit jobs with proper resource request and monitor their efficiency and usage on Raijin.

Learning outcomes

At the completion of this training you should have the skills and knowledge to:

- login to Raijin
- create job submission scripts
- tailor job resource requests
- manage your software environment
- understand project accounts
- submit jobs on Raijin
- monitor jobs status
- interact with NCI helpdesk

Topics Covered

Key topics covered in this training include:

- **Raijin Job Queues: Status, Structures and Limits**
 - live status web portal
 - processor profiles on compute nodes
 - memory on compute nodes
 - local disk on compute nodes
 - resource charging
 - walltime limits and exceptions
- **Software Environment**
 - how to use software modules
 - software groups and license access
 - license live status web portal
- **Filesystems**
 - filesystems available on Raijin
 - I/O speed
 - backup policies
 - quota policies
- **Job Submission Utilities**
 - resource request including processor, memory, local disk, walltime, software and filesystems
 - working directory
 - email notification
 - output and error log
 - hyper-threading
 - interactive jobs
- **Job Monitoring Utilities**
 - job status in the queue
 - job local disk access
 - job efficiency
- **Interacting with the Helpdesk**
 - information on opus.nci.org.au
 - submitting help requests via email and the NCI support portal