

Intro to STORM

- What it is?
- Why use it?
- Safe usage
- How to use it
- The STORM police
- Useful resources



What is STORM

- Shared Unix-based operating system consisting of multiple cores, accessible from the shell.
- STORM2 is made up of four nodes; Blackett, Bayes, Bellman and Dantzig. Each have 112 cores and 500GB of memory (RAM).

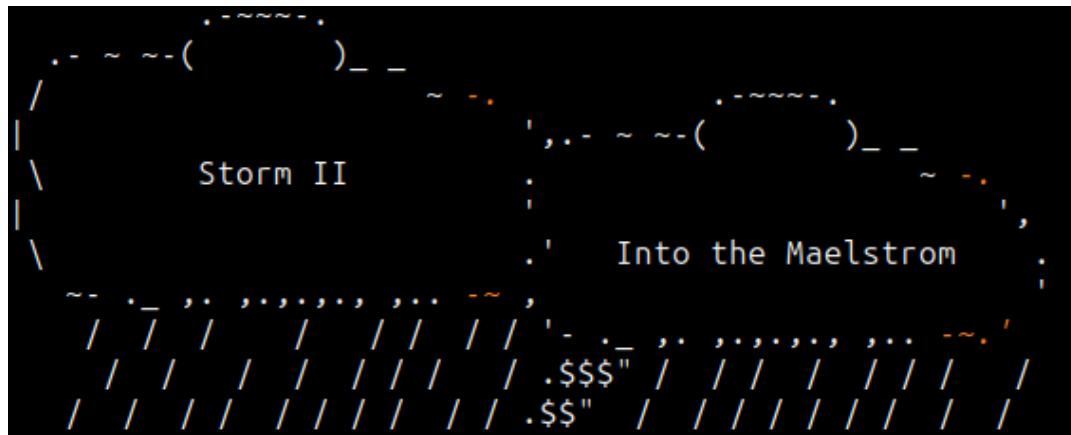


Why use it?

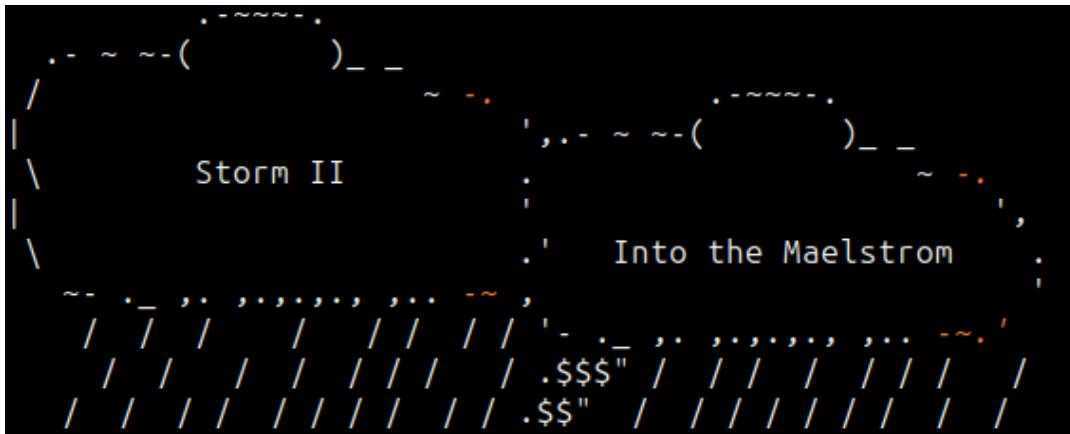
- Are you running multiple jobs?
- Could you parallelise an individual jobs?



Safe usage



Safe usage



- Don't worry – you cannot break anything
- Tips for safe/responsible usage:
 - Don't keep anything on there that isn't backed up elsewhere
 - Follow guidance on use of memory



How to use it?

- First: setup account by asking Dan/Cyrus



How to use it?

Basically:

1. Get what you need onto your area in STORM (scp, rysnc, git, VS)
2. Run a ‘slurm’ script to add your job to the queue
3. Remove your results from STORM



How to use it?

- Let's try:

Login:

ssh <username>@storm2-fe.lancs.ac.uk

Install pyenv:

<https://github.com/grosed/storm2/blob/main/notebooks/brief-intro-to-storm2.ipynb>

Clone this repo:

git clone https://github.com/grahamburgess3/hello-storm



Intermission:
Alternative connection via VS Code...



STORM police

- Each person has a limit of **90 cores** and **500GB** of memory. If a node is down, this is reduced to 60 cores per person.
- There is a total storage limit of 3TB on the machine. **Please do not store files on STORM** as this impacts everyone's ability to use the cluster. Once a job is done, particularly if you are using or generating large files/datasets, delete the large files.



Useful resources

- STORM Teams channel: [General](#) | [Grp-STORM](#) | Microsoft Teams
- [STORM2 Helpful Commands.docx](#)
- Dan Grose's intro: <https://github.com/grosed/storm2>
- Slurm cheat sheet: <https://slurm.schedmd.com/pdfs/summary.pdf>
- Usage guide: <https://ma-info.lancs.ac.uk/books/department-it-services/page/storm-ii-users-usage-guide.>
- Real time usage:
http://storm2/ganglia/?c=Storm2&m=load_one&r=hour&s=by%me&hc=4&mc=2

