

Best Practices Summary

- Submit Tickets with as much detail as possible, help.nersc.gov
- Use interactive jobs to test and debug code
 - Also good option for profiling code
 - Helpful for debugging or scaling tests
 - Use the debug queue
 - sbatch -q debug -t 10 script.sh
 - Scale testing
 - sbatch -N 2 script.sh or sbatch -N 20 script.sh
- Make use of Python GPU frameworks Available on Perlmutter
- Use Conda for managing custom python environments
- Conda Environments & Software Related to Jobs should be in a container or Global Common
- Use the Job Script Generator for slurm batch scripts
- Use NoMachine to improve the performance of this workflow
- Best choice for large scale IO is always scratch!
- If your data is too large and you need to read it off CFS, use /dvs_ro instead of /global
- Avoid ACLs over DVS







Final Thoughts

- Thank you to all of our Presenters!
 - more information on each speaker is available on the Event Page
 - https://www.nersc.gov/users/training/events/2024/new-user-training-february2024/
- Please complete Day 1 Survey
 - https://forms.gle/kKKrrbPa5bEh4AhX9
- Please complete Day 2 Survey
 - https://forms.gle/EZwm554pLUckKhd69
- Slides will finish uploading today. Video will be available in about a week.
- Utilize the Q&A Document for an additional questions after training until Monday 2/19/2024 EOD
 - https://docs.google.com/document/d/18Seqgp2-exFPDTZfETBpzsaVziK2Skr6sFo3ShwILYA/edit







Future Trainings

Join Us for Data Day, February 21-22

- NERSC is hosting a hybrid two-day event on February 21-22, 2024 to showcase the latest and greatest data-focused tools for scientific computing on Perlmutter. The presentations are set to occur in a fully hybrid format at NERSC, featuring speakers onsite.
- For more information and to register, please see the <u>event page</u>.

Join Us February 23 for Perlmutter and Data Day Office Hours!

- To help NERSC users make the best use of best practices on optimal performance on Perlmutter nodes,
 NERSC is offering virtual office hours on February 23 from 9 am to noon (Pacific).
- Users are welcome to bring questions and their own applications to get one-on-one help.
- For more information, please see the <u>event page</u>.
- Performance Portability Series, next event Feb 26
- More upcoming training events at <u>https://www.nersc.gov/users/training/events/</u>







Thank you for Attending and Welcome to NERSC







