MATH FACULTY COMPUTING FACILITY (MFCF)

MFCF's newsletter with updates on the Math Faculty computing environment.

Fall 2025

MFCF Team update

Robyn Landers, a MFCF legend has retired as of July 31, 2025 after working more than 36 years with the University.

Robyn contributed his knowledge and time to our server rooms, computing needs, client requests and assisted a great deal in Research projects, especially in CFI grant proposals. Beyond his expertise, his gentle nature, attention to detail, exceptional grammar and humour will be missed greatly by our team and clients. We hope Robyn enjoys his retirement as he ventures on fishing trips and motorcycling expeditions while listening to his fine collection of music.

Use Dell Command Update (DCU) to Keep Your System Current

Your Dell computer with Windows has Dell Command Update (DCU) installed. You may have noticed that MFCF staff use this to update your machine when troubleshooting suspected hardware issues. It is recommended that you run DCU to keep your drivers and firmware current and possibly solve some hardware problems without waiting for MFCF to assist.

Use the Search feature to find Dell Command Update and run it. Click on the 'Check' button to check for updates. Choose 'Install' to install any updates that are found.

Use the left hand menu to see the last time updates were installed.

We recommend checking for and installing updates every month to keep your system current.

New GPU Servers Added to MFCF Research Region

MFCF has recently added two new GPU-oriented specialty computing servers to our research computing region's Slurm cluster.

- **gpu-pr1-05**: 2x Intel Xeon Gold (6548Y+, Emerald Rapids) CPUs; 64 cores; 512 GB memory; 2x NVidia L40s GPUs with 48 GB device memory each
- **gpu-pr1-06:** 2x Intel Xeon Gold (6548Y+, Emerald Rapids) CPUs; 64 cores; 512 GB memory; 2x NVidia H100 NVL with 94 GB device memory each.

The L40s GPUs (in gpu-pr1-05) are best suited to AI and machine learning workflows, while the H100 GPUs (gpu-pr1-06) excel at more traditional HPC loads that leverage customized research-oriented GPU-optimized code.

These new servers can be accessed via the research cluster's head node: **rsubmit.math.private.uwaterloo.ca**. See our website for more details on how to use these research servers via the Slurm HPC job management system: <u>How to use Slurm commands</u>

GPU laptops and External GPU enclosure for borrowing

MFCF has several GPU-equipped laptops for short-term borrowing. We also have a GPU in an external enclosure that you can use with your laptop or desktop PC. This may help you get acquainted with GPU computing before moving up to larger servers. Read about them at https://uwaterloo.ca/math-faculty-computing-facility/services/gpu-loaner-laptops.

Send in a <u>request</u> if you would like to sign out one of our GPUs.

In Case You Missed It...MFCF Grad Orientation

Computing for Grad Students

Help us help you

Questions or problems to report? Do you know a way we could make math computing better? Is there something you'd like to hear about in these newsletters? Do you want to write an article? Email Krista Denny at kdenny@uwaterloo.ca or fill out a request. We'd love to hear what you have to say!

