NCHC Grace Workshop

Hands-on & “Bring Your Own Code”

NCHC 2025

Disclaimers and Best Practice

1. **Do not copy in or execute any sensitive information, data or code** -- These are shared system and protection is only enforced by Unix permissions. NVIDIA is not responsible of any loss of data

2. **Do not keep the machines busy 100% all the time** – As these systems are shared among a small group of users (5~6 max), you will inevitably compete for system resources. If you want to measure time in a quiet environment, coordinate with the other in the same group.

3. **Take benchmarks results as tentative and preliminary** – The systems have been setup in the past week and not fully tuned. This workshop is about demonstrating the technology, not competitive benchmarking. If you are looking at proper benchmark resources, get in touch with NVIDIA.

How to login to the system

VM tunnelling

You will be assigned a **PUBLIC** and **PRIVATE** SSH keys

```
$ ssh -i ~/rdmaworkshopXX' -t rdmaworkshopXX@155.248.177.18  ssh rdmaworkshopXX@gw.hpcadvisorycouncil.com
```

XX = [01-30]

IMPORTANT: the login nodes are x86! Do start an interactive session using the command

```
$ interactive-compile
```

I am in… what should I do?

Benchmarks

- 00-arm-kernels
- 00-gemm_example
- 00-hello_world
- 00-stream

Applications

- 01-cp2k
- 01-hpcg
- 01-lulesh

Bring Your Own Code

(BYOC)

- NVIDIA people are here to assist, gather feedback, answer question
- Success is being able to compile and run
- 99% of things works but if there are gaps please speak out! (we can only fix/improve what we know)

NOTE: two reservations in place for today workshop, valid until 6pm

- **gg-nchc** for Grace-Grace nodes
- **gh-nchc** for Grace-Hopper nodes