Nsight analysis

1. Compile .cu file
2. Get the executable file
3. Create a script folder
4. Move the executable file to the script folder
5. Change directory to script folder
6. Make nsight\_out folder
7. Change directory to the nsight\_out
8. Get the path with pwd
9. Copy the path
10. Set path like

OUTPUT\_DIR =~/u/kkatsumi/Research/Sandbox/BenchMark/script/nsight\_out

1. Check echo $OUTPUT\_DIR
2. Back to script directory
3. Creat .sh file with

nano nsys\_wrap.sh

1. Then copy and paste this shell, which is available in the same folder
2. #!/bin/bash
3. # Use $PMI\_RANK for MPICH, $OMPI\_COMM\_WORLD\_RANK for openmpi, and $SLURM\_PROCID with srun.
4. if [ $SLURM\_PROCID -eq 0 ]; then
5. nsys profile -o ${OUTPUT\_DIR}/mynsys.out --stats=true "$@"
6. else
7. "$@"
8. fi

15. srun --account=bchn-delta-gpu --gres=gpu:1 ./nsys\_wrap.sh ./BFBCG\_BenchMark

//The BFBCG\_BenchMark should be replaced with the excutable file.

16. If all the steps correct, it allocate GPU and execute the file.

17. In the nsight\_out, there should be available mynsys.out.nsys-rep.

18. Download it from VS code with right click option.

19. Open NVIDIA Nsight System.

20. Open the mynsys.out.nsys-rep.

A screenshot of a computer

Description automatically generated