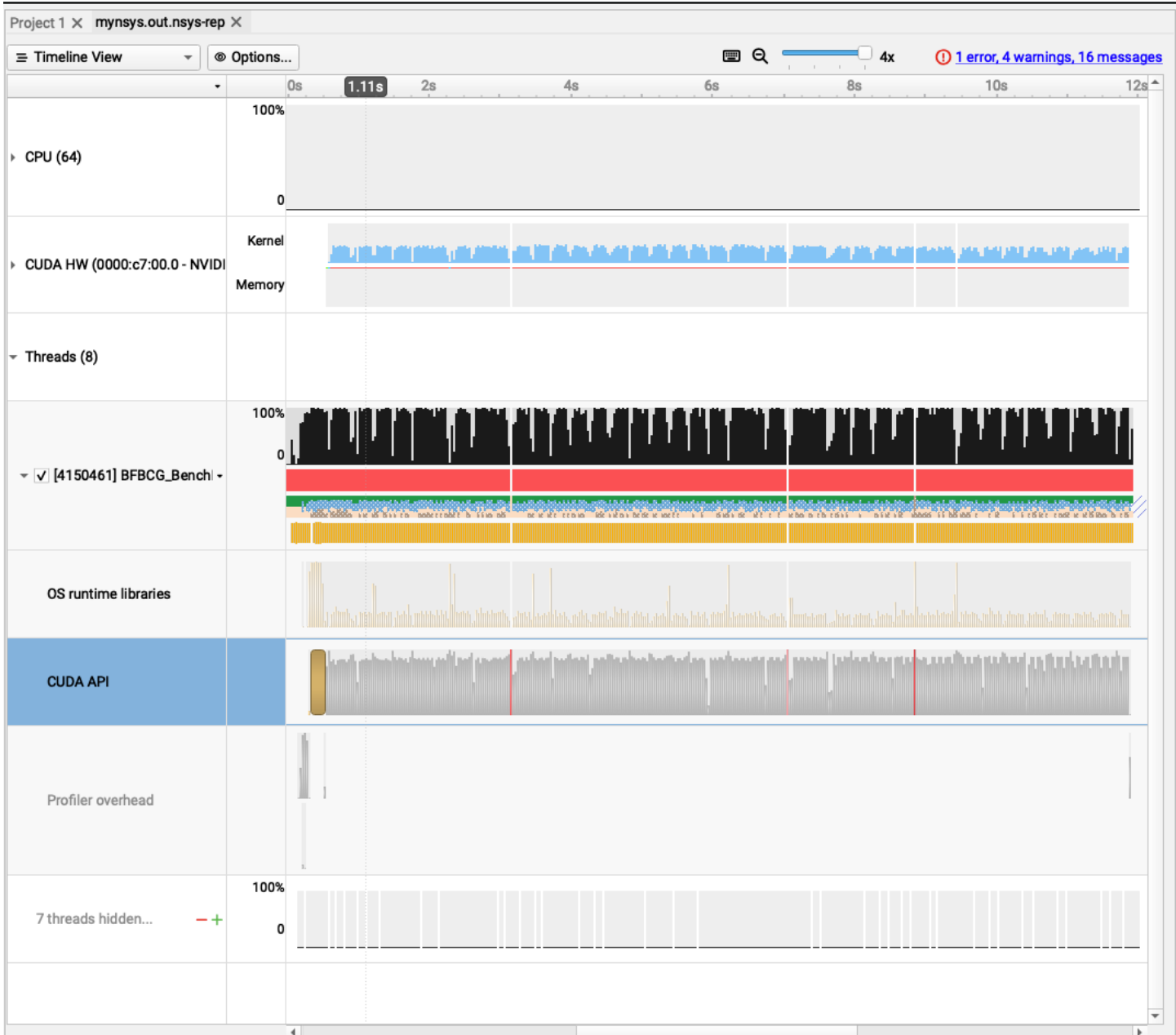


Nsight analysis



Profiling session duration: 00:12.127

Report file	/Users/keita-katsumi/Dropbox/My Mac (Mac-mini.charter.com)/Desktop/mynsys.out.nsys-rep
Report size	64.23 MiB
Report capture time	8/1/2024, 11:14:27 PM
Number of events collected	3,073,327
Number of lost samples	558
Total number of threads	8
Host computer	gpua047.delta.ncsa.illinois.edu
Profiling stop reason	Stopped when last profiled process exited
Imported from	/tmp/nsys-report-3b3d.qdstrm
Import host computer	gpua047.delta.ncsa.illinois.edu
CLI command used	/sw/spack/deltas11-2023-03/apps/linux-rhel8-zen3/gcc-11.4.0/cuda-11.8.0-vfixfmc/nsight-systems-2022.4.2/target-linux-x64/nsys profile -o /u/kkatsumi/Research/Sandbox/BenchMark/script/nsight_out/mynsys.out --stats=true ./BFBCG_BenchMark

Show report file in folder

gpua047.delta.ncsa.illinois.edu (0:0)

Target

Hostname	gpua047.delta.ncsa.illinois.edu
Local time at t=0	2024-08-01T23:14:28.114-05:00
UTC time at t=0	2024-08-02T04:14:28.114Z
TSC value at t=0	396333234984504
Platform	Linux
OS	Red Hat Enterprise Linux 8.8 (Ootpa)
Hardware platform	x86_64
Serial number	Local (CLI)
CPU description	AMD EPYC 7763 64-Core Processor
GPU descriptions	NVIDIA A100-SXM4-40GB
NVIDIA driver version	535.183.01
Max EMC frequency	1.60 GHz
CPU context switch	supported
GPU context switch	supported
Guest VM id	0
Tunnel traffic through SSH	no
Timestamp counter	supported
Profiling session UUID	14b4d868-97ff-42ff-9ed8-99395756ef37
Target name	gpua047.delta.ncsa.illinois.edu

Process summary

Process ID	Name	Arguments
4150461	./BFBCG_BenchMark	

Module summary

Process ID	Module name	Address	CPU time (overall)	CPU time (per process)
4150461	/usr/lib64/libcuda.so.535.183.01	0x7fb625c20000–0x7fb626140000	42.82%	42.82%
4150461	/sw/spack/deltas11-2023-03/apps/linux-rhel8-zen3/gcc-11.4.0/c	0x7fb61ae18000–0x7fb61b72c000	17.42%	17.42%
4150461	/sw/spack/deltas11-2023-03/apps/linux-rhel8-zen3/gcc-11.4.0/c	0x7fb693983000–0x7fb694730000	10.95%	10.95%
4150461	/usr/lib64/libpthread-2.28.so	0x7fb64d7e8000–0x7fb64d803000	8.27%	8.27%
4150461	/usr/lib64/libc-2.28.so	0x7fb64c86e000–0x7fb64ca2a000	5.42%	5.42%
4150461	[vdso] File not found or is not a valid ELF file.	0x7ffc9bd5000–0x7ffc9bd7000	3.37%	3.37%
4150461	[kernel.kallsyms]	[unknown]	3.15%	3.15%
4150461	/sw/spack/deltas11-2023-03/apps/linux-rhel8-zen3/gcc-11.4.0/c	0x7fb67b7c6000–0x7fb68da7e000	3.14%	3.14%
4150461	/sw/spack/deltas11-2023-03/apps/linux-rhel8-zen3/gcc-11.4.0/c	0x7fb68da7e000–0x7fb6936dc000	1.51%	1.51%
4150461	/sw/spack/deltas11-2023-03/apps/linux-rhel8-zen3/gcc-11.4.0/c	0x7fb6280e4000–0x7fb64c66a000	1.32%	1.32%
4150461	/usr/lib64/ld-2.28.so	0x7fb694730000–0x7fb694961000	0.68%	0.68%
4150461	/u/kkatsumi/Research/Sandbox/BenchMark/script/BFBCG_Bei	0x400000–0x414000	0.62%	0.62%
4150461	/usr/lib64/libm-2.28.so	0x7fb64ce4c000–0x7fb64d1ce000	0.62%	0.62%
4150461	/usr/lib64/libnvidia-ptxjitcompiler.so.535.183.01	0x7fb5d0793000–0x7fb5d2000000	0.25%	0.25%
4150461	/sw/spack/deltas11-2023-03/apps/linux-rhel8-zen3/gcc-11.4.0/c	0x7fb6936dc000–0x7fb693983000	0.20%	0.20%

[Show more \(2\)](#)

Information about 1 modules with CPU utilization below 0.01% has been hidden.

Thread summary

Information about 8 threads (that have been active at least once) has been captured during the profiling session.

Information about idle threads is not represented here.

Process ID	Thread ID	Name	CPU utilization
4150461	4150461	BFBCG_BenchMark	86.43%
4150461	4150467	[NSys]	9.12%
4150461	4150470	CUPTI worker thread	3.53%
4150461	4150473	cuda-EvtHandlr	0.89%

Information about 4 threads with CPU utilization below 0.10% has been hidden.

GPU info

NVIDIA A100-SXM4-40GB

Chip Name	GA100
SM Count	108
L2 Cache Size	40.00 MiB
Memory Bandwidth	1,448.39 GiB/s
Memory Size	39.39 GiB
Core Clock	1.41 GHz
Bus Location	0000:c7:00.0
UUID	3d0a80c6-aa45-bcd8-346b-74db2c2905d6
GSP firmware version	N/A

NIC info

No NVIDIA NICs were detected

OpenFabrics Driver

OFED (OpenFabrics Enterprise Distribution) version: OFED is not detected.

Analysis options

Collect CPU IP samples	On
Sampling period	1,000,000 events/sample
CPU IP Sampling Trigger Event	CPU Cycles
CPU IP samples / backtrace	1
CPU profiling scope	process-tree
Collect CPU context switch trace	On
Collect OS runtime libraries trace	On (skip below 1 μs)
Collect CUDA trace	On
CUDA Graph Trace Granularity	Graph
Collect NVTX trace	On
Collect OpenGL trace	On
Collect OpenGL GPU Workloads	On
Collect backtraces	On
Collect OS runtime libraries backtraces	On (skip below 80 μs)
Backtracing algorithm	Use Intel © Last Branch Record (LBR)
Include child processes	On

OpenGL functions

SwapBuffers
eglClientWaitSync
eglClientWaitSyncKHR
eglClientWaitSyncNV
eglCreateContext
eglDestroyContext
eglGetCurrent
eglSignalSyncKHR
eglSignalSyncNV
eglSwapBuffers
eglSwapBuffersWithDamageKHR
eglWaitClient
eglWaitGL
eglWaitNative
eglWaitSync
Show more (291)

NVIDIA Nsight Systems information

Report captured with	2022.4.2.1-df9881f
Report imported with	2022.4.2.1-df9881f
Last saved with	2022.4.2.1-df9881f