

CUDA Toolkit v10.0.130

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CUDA Samples

1. Release Notes

This section describes the release notes for the CUDA Samples only. For the release notes for the whole CUDA Toolkit, please see [CUDA Toolkit Release Notes](#).

1.1. CUDA 10.0

- Added `1_Uutilities/UnifiedMemoryPerf`. Demonstrates the performance comparison of Unified Memory and other types of memory like zero copy buffers, pageable, pagelocked memory on a single GPU.
- Added `2_Graphics/simpleVulkan`. Demonstrates the Vulkan-CUDA Interop. CUDA imports the Vulkan vertex buffer and operates on it to create sinewave, and synchronizes with Vulkan through vulkan semaphores imported by CUDA.
- Added `0_Simple/simpleCudaGraphs`. Demonstrates how to use CUDA Graphs through Graphs APIs and Stream Capture APIs.
- Removed `3_Imaging/cudaDecodeGL`, `3_Imaging/cudaDecoded3D9` as the cuvid library is dropped from CUDA Toolkit 10.0.
- Removed `6_Advanced/cdpLUdecomposition`, `7_CUDAlibraries/simpleDevLibCUBLAS` as the CUBLAS Device library is dropped from CUDA Toolkit 10.0.

1.2. CUDA 9.2

- Added `7_CUDAlibraries/boundSegmentsNPP`. Demonstrates `npplabelMarkers` to generate connected region segment labels.
- Added `6_Advanced/conjugateGradientMultiDeviceCG`. Demonstrates a conjugate gradient solver on multiple GPUs using Multi Device Cooperative Groups, also uses Unified Memory optimized using prefetching and usage hints.
- Updated `0_Simple/fp16ScalarProduct` to use fp16 native operators for half2 and other fp16 features, it also compare results of using native vs intrinsics fp16 operations.

1.3. CUDA 9.0

- Added `7_CUDAlibraries/nvgraph_SpectralClustering`. Demonstrates Spectral Clustering using NVGRAPH Library.
- Added `6_Advanced/warnAggregatedAtomicsCG`