

Accelerator Service

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Previous problem(s)

- Continued the Service prototyping
 - Crafted CudaService, current functionality:
 - Checks if can load libcuda.so (not tested on non-GPU machine)
 - Queries the number of devices and their computing capabilities
 - “Integrated” cuda-api-wrappers
 - A copy in CMSSW root (thanks Andrea for the suggestion)
 - In the process of extending the GPU test to be asynchronous
 - Ability to register std::function/lambda callbacks for streams was the main motivation to start looking to cuda-api-wrappers
 - Callback C API would require more boilerplate
 - Currently debugging a segfault...
- Latest version in GitHub (CMSSW repository):
[makortel:GPU_SiPixel_RawToDigi_100X_AcceleratorService](#)
 - With a messy commit history so expect squashing...

Next problem(s)

- Continue prototyping of Service
 - Finish GPU test
 - Port Raw2Digi to use the Service
 - Cleanup code
 - Prototype if one can do the scheduling without a service
 - OTOH Service provides a global point of interaction that can be easily configured etc
- Cuda-api-wrappers should be integrated properly as an external