Report on running the biggest GPU cluster in Hungary

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The National Information Infrastructure Development Program (NIIF) is (currently maintained by KIFU) operates the largest supercomputers in Hungary, serving the HPC needs of all kind of Hungarian research projects since 2001. Currently 8 running supercomputers with 8888 CPU cores and more than 250 GPUs provide nearly 450 Tflop/s total computing performance for the benefit of the users of universities and academic research institutes. The NIIF HPC infrastructure is part of the European HPC ecosystem, called PRACE. In line with the international trends, more and more portion of our computing capacity is provided by GPGPUs. That's why the deep knowledge of GPUs and GPU applications but also the ability for writing efficient code for the accelerators became crucial importance for our user community. The presentation briefly introduces the HPC infrastructure and services of NIIF and gives information about how users can get access to the supercomputers focusing experiences with GPU usage and CUDA 8.0 upgrade.