4 REASONS FOR OIL & GAS FIRMS TO
Adopt GPU-Accelerated Computing *NOW!*

Successful prediction, management, and optimization of exploration and production operations means making better informed decisions faster. Unfortunately, the massive volume of data oil and gas firms must manage has made that goal a real challenge. However, graphics processing unit (GPU)-accelerated computing can turn computing challenges once considered impossible to overcome into immediate financial gain.

1 Faster Time-to-Insight

Using both the latest generation of central processing units (CPUs) for serial processing and powerful new GPUs for parallel processing speeds up the computing process. In addition, because of its design, a single GPU can offer the performance of hundreds of CPUs for certain workloads. This means faster, more accurate modeling for better decision-making across the entire process, from lease selection, to exploration, to processing, to emergency management.

2 Speed to Deployment

According to NVIDIA, which invented the GPU, over 550 high-performance computing (HPC) applications in a variety of data-intensive industries are already GPU optimized and ready to be moved to GPU-accelerated computing systems. Using libraries also allows organizations to adopt GPU acceleration without in-depth knowledge of GPU programming, reducing the time required to achieve results.

3 Cost

A single GPU-based system can replace many CPU-only systems, resulting in a smaller footprint and reduced capital equipment costs as well as lower power, cooling, and other operating costs. GPU-accelerated computing also enables organizations to use virtual workstations for heavy compute environments and tasks rather than buying more physical hardware for visualization and supporting that hardware with increased operating costs.

4 Flexibility

The inherently flexible nature of GPU programmability allows new algorithms to be developed and deployed quickly across a variety of industries. In addition, GPU-accelerated computing can be used for both HPC and artificial intelligence (AI), allowing organizations to more easily migrate to this technology when they are ready.

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