



NEWS RELEASE

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Maui Acquires IBM Cluster

The Maui High Performance Computing Center, as one of the High Performance Computing Modernization Program's (HPCMP) Department of Defense Supercomputing Resource Centers (DSRC), just contracted with IBM to deliver a cluster solution based on IBM's POWER8 server with high-performance, high-bandwidth, NVIDIA GP100 graphical processing units (GPUs). The total life-cycle investment is valued at \$2 million.

The IBM cluster will conjointly provide 458,752 GPU cores integrated with NVLink 1.0. NVLink is a high-bandwidth interconnect that enables communication between a GPU and CPU, and also between GPUs. NVlink supports data transfer rates much greater than that of PCIe. This mitigates the bottleneck of data transfers between processing units, thus resulting in greater application performance. The IBM cluster will be named Hōkūle'a, which means "star of gladness" in Hawaiian, and refers to a star used by ancient Hawaiians in wayfinding techniques of celestial navigation.

Utilizing the GPUs, Hōkūle'a will provided over 690 TFLOPs of supercomputing. As its name implies, it will be used as a test system to evaluate the performance of this novel architecture for DoD-specific software. We anticipate delivery in December of 2016.

EDITOR'S NOTE: The DoD HPCMP provides the DoD supercomputing capabilities, high-speed network communications and computational science expertise that enable DoD scientists and engineers to conduct a wide-range of focused research, development and test activities. This partnership puts advanced technology in the hands of U.S. forces more quickly, less expensively, and with greater certainty of success. Today, the HPCMP provides a complete advanced computing environment for the DoD that includes unique expertise in software development and system design, powerful high performance computing systems, and a premier wide-area research network. The HPCMP is managed on behalf of the DoD by the U.S. Army Engineer Research and Development Center in Vicksburg, Miss. For more information, please visit the DoD HPCMP Web site at: www.hpc.mil.