

## **New HPC systems at the Air Force Research Laboratory and Navy DoD Supercomputing Research Centers will provide an additional 14 petaFLOPS of computational capability.**

The Department of Defense (DoD) High Performance Computing Modernization Program (HPCMP) completed its fiscal year 2017 investment in supercomputing capability supporting the DoD Science and Technology (S&T), Test and Evaluation (T&E), and Acquisition Engineering communities. The acquisition consists of seven supercomputing systems with corresponding hardware and software maintenance services. At 14 petaFLOPs, this procurement will increase the DoD HPCMP's aggregate supercomputing capability to 47 petaFLOPs. These systems significantly enhance the Program's capability to support the Department of Defense's most demanding computational challenges.

The new supercomputers will be installed at the Air Force Research Laboratory (AFRL) and Navy DoD Supercomputing Resource Centers (DSRCs), and will serve users from all of the services and agencies of the Department.

The AFRL DSRC in Dayton, Ohio, will receive four HPE SGI 8600 systems containing Intel Xeon Platinum 8168 (Skylake) processors. The architectures of the four systems are as follows:

- A single system of 56,448 Intel Platinum Skylake compute cores and 24 NVIDIA Tesla P100 General-Purpose Graphics Processing Units (GPGPUs), 244 terabytes of memory, and 9.2 petabytes of usable storage.
- A single system of 13,824 Intel Platinum Skylake compute cores, 58 terabytes of memory, and 1.6 petabytes of usable storage.
- Two systems, each consisting of 6,912 Intel Platinum Skylake compute cores, 30 terabytes of memory, and 1.0 petabytes of usable storage.

The Navy DSRC at Stennis Space Center, Mississippi, will receive three HPE SGI 8600 systems containing Intel Xeon Platinum 8168 (Skylake) processors. The architectures of the three systems are as follows:

- Two systems, each consisting of 35,328 Intel Platinum Skylake compute cores, 16 NVIDIA Tesla P100 GPGPUs, 154 terabytes of memory, and 5.6 petabytes of usable storage.
- A single system consisting of 7,104 Intel Platinum Skylake compute cores, four NVIDIA Tesla P100 GPGPUs, 32 terabytes of memory, and 1.0 petabytes of usable storage.

The systems are expected to enter production service in the second half of calendar year 2018.

### **About the DoD High Performance Computing Modernization Program (HPCMP)**

The HPCMP provides the Department of Defense supercomputing capabilities, high-speed network communications and computational science expertise that enable DoD scientists and engineers to conduct a wide-range of focused research and development, test and evaluation, and acquisition engineering 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 comprehensive 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 Department of Defense by the U.S. Army Engineer Research and Development Center located in Vicksburg, Mississippi.

For more information, visit our website at: <https://www.hpc.mil>.