



Press Release

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Hawai'i Undersea Research Laboratory receives powerful new storage solution from Intel and HP

Honolulu, HI – The Hawai'i Undersea Research Laboratory (HURL), based at the School of Ocean & Earth Science & Technology within the University of Hawai'i, announced today that Intel and HP collaborated to provide the organization with a state-of-the-art data storage solution. The new equipment will support HURL in its research efforts by helping to manage a vast collection of video, photo, and scientific data, accumulated over decades in an ongoing quest to explore our planet's oceans.

HURL commands a remotely operated vehicle as well as the only two U.S.-based deep-sea manned submersibles in the Pacific Ocean, *Pisces IV* and *Pisces V*, each capable of diving to 6,200 feet. With technology advances in data and video capture, the amount of data generated on dives continues to increase exponentially. More than 30 years of submersible operations have resulted in nearly 1,900 dives, representing 9,300 hours underwater. HURL's database cataloging the benthic ecology of the Hawaiian Archipelago is derived from the video record of these dives, and they have logged more than 125,000 entries based on 1,100 unique deep-sea animal identifications. Safely storing and managing this precious data presented a significant challenge.



HURL's *Pisces V* submersible is ready for launch.
Credit: HURL

The Intel and HP storage solution will help HURL organize and protect its vast collection of data, and enable easy, secure access by scientific research and education communities worldwide. "It's been challenging for HURL to manage and secure an ever expanding database of videos, photographs, and scientific data—resources that have been collected over many years and exist on numerous types of media" explains HURL's science director Dr. John R. Smith. "Protecting and accessing this data has been a major hurdle for us. We're grateful to Intel and HP for building a solution that

perfectly addresses our challenges.”

HURL’s new storage solution centers on [HP StoreEasy 5000 Storage*](#), a turnkey file server consolidation solution that delivers efficiency, security, and high availability for challenging environments like HURL’s. With the built-in high availability from the active-active, two-node cluster, 192 terabytes storage capacity, and operational simplicity ideal for non-IT experts, this solution scales to support HURL’s current and future data storage requirements.

“Faced with limited IT budget and administration expertise, scientific research organizations require a simple, affordable storage platform with future-proof scalability to accommodate unlimited rich data growth,” said Sean Kinney, director of product marketing, Storage, HP. “In addition to enabling HURL to grow without data capacity limitations, HP StoreEasy Storage with Intel processing power provides around-the-clock access to mission-critical data allowing scientific research to proceed without data center limitations.”

HP StoreEasy 5000 Storage is powered by the Intel® Xeon® processor E5620. The high-performance processing power, along with Intel® Integrated I/O and advanced storage features such as PCIe* non-transparent bridging and asynchronous DRAM refresh, makes the Intel® Xeon® processor E5-2600 product family an ideal choice for storage and communication solutions as well as server and workstation usage. “Intel is proud to have partnered with HP to enable an outstanding research organization such as HURL with this solution” states Dave Boehmer, senior director of storage platform applications engineering for Intel. “The Intel® Xeon® processors that enable HP’s storage solutions deliver the perfect balance of performance and I/O to solve today’s data center storage challenges.”

Additionally, HP Z1 Workstations* based on the Intel® Xeon® processor E3-1280 are deployed for cataloging, editing, and managing the data collected on deep-sea dives. The high performance and superior screen resolution of these workstations provide the ideal tool for sea floor mapping applications, species identification, and cataloging this expansive database.

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* Other names and brands may be claimed as the property of others.

About HURL

The Hawai’i Undersea Research Laboratory (HURL) is based at the University of Hawai’i within the School of Ocean & Earth Science & Technology (SOEST). It is the only U.S. deep submergence facility in the Pacific Rim tasked with supporting the undersea research necessary to fulfill the mission, goals, and objectives of the [National Oceanic and Atmospheric Administration \(NOAA\)](#), along with other areas of national importance.

The School of Ocean and Earth Science and Technology at the University of Hawaii at Manoa was established by the Board of Regents of the University of Hawai’i in 1988 in recognition of the need to realign and further strengthen the excellent education and research resources available within the University. SOEST brings together four academic departments, three research institutes, several federal cooperative programs, and support facilities of the highest quality in the nation to meet challenges in the ocean, earth and planetary sciences and technologies.

www.soest.hawaii.edu