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# DOE High Performance Storage Systems (HPSS) eclipse one exabyte in stored data.

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## **DOE High Performance Storage Systems (HPSS) eclipse one exabyte in stored data.**

**Summary:** A significant milestone has been achieved by one of the DOE's longest running multi-laboratory and industry collaborations. Active archival long-term storage data housed at the Department of Energy High Performance Storage System (HPSS) laboratories has recently eclipsed over one exabyte (1 quintillion bytes) of information.

HPSS is a development collaboration that leverages software to meet the most challenging long-term scalable storage requirements. The Department of Energy is in collaboration with industry partner IBM for HPSS code development that involves five DOE development sites and IBM.

The DOE software development sites are Lawrence Livermore National Laboratory, Oak Ridge National Laboratory, Sandia National Laboratories, Lawrence Berkeley National Laboratory, and Los Alamos National Laboratory; all of which run production instances of the software they co-develop. Additional DOE laboratories that run production HPSS instances include Brookhaven National Laboratory, Argonne National Laboratory, and Pacific Northwest National Laboratory.

The HPSS collaboration is in its 29<sup>th</sup> continuous year, representing a rare multi-decadal industry partnership developing an ever-evolving scaled-out data storage system that is used by numerous government, research, and academic institutions across the globe.

The collaboration has fostered a multi-generational brain trust in support of over one exabyte of DOE's long lived "crown jewels" of High Performance Computing production archival data. HPSS has kept pace with the demands of the terascale and petascale computing eras and continues to advance to meet the demands of the upcoming exascale computing era.

For more details on HPSS, see this web site: <https://www.hpss-collaboration.org/>

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**High Performance Storage System**



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