

New Multiteraflop Computing Facility at ASL

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The parallel computing facility at the ASL is now powered by a multiteraflop computing infrastructure, working on industry and federal research projects.

Massively parallel simulations for various applications are all utilizing this newly upgraded IBM cluster with specialized simulation tools for atomistic to engineering scale modeling. Applications range from preventing icing on aircraft wings, advanced materials to store hydrogen, modeling of paint spray robotics, corrosion lifetime prediction, and harnessing energy using new generation catalysts,

A network of client workstations, laptops, and tablet terminals can submit jobs remotely to this high-performance computing (HPC) cluster and receive results upon completion. GPU (graphics processing unit) accelerated computing and visualization facilities can provide real time and interactive access to data.

In addition, the efficient General Parallel File System™ (GPFS™), high-bandwidth 40 gbps Infiniband™ network connecting the computing nodes, and access to nationwide supercomputing network in Spokane's newly constructed data center, have made ASL's HPC facility a one-of-a-kind dedicated research computing facility in the region.