

In a Nutshell

Cray and Altair provide the market-leading HPC hardware and software required to optimize performance for compute-intensive work. With Cray systems running Altair software, companies of all sizes gain the highest available levels of scalability, speed and efficiency.

“We need the highest levels of performance in the systems that make this level of prediction possible, which is why we choose proven, reliable industry leaders like Cray and Altair.”

–UK Met Office

“The Cray XC supercomputer with PBS Professional will allow our users to expand the scope of their research efforts with a proven, well-integrated solution they can rely on.”

–Japan Advanced Institute for Science and Technology (JAIST)

Why Altair and Cray

With a combined 68+ years delivering cluster and supercomputing solutions to thousands of companies, Altair and Cray know how to meet the needs of HPC users better than anyone.

HPC Passion	For Cray and Altair, HPC is more than a business focus - it's the shared passion that powers our collaboration, so our many users benefit from the experience and output of two of the most trusted names in HPC.
Comprehensive HPC Offerings	From hardware systems spanning compute, storage and data analytics, to an award-winning portfolio of HPC and design software, Cray and Altair provide the surest path to addressing computing challenges for companies large and small.
Shared Customer Focus	Choosing an HPC provider is as important as choosing a product. Cray and Altair have well-earned reputations for service and support excellence, with experts who provide the domain knowledge, responsiveness and dedication required to ensure implementation success.
Addressing Big Challenges	For decades Cray and Altair have worked with users across a range of industries to solve big compute challenges. By leveraging Cray's supercomputing and infrastructure products in collaboration with Altair's HyperWorks design suite and PBS Professional for optimized scheduling, organizations have been able to successfully address some of the world's largest simulation challenges.
Customized Industry Solutions	Cray and Altair actively collaborate to create, test and optimize joint solutions for specific industry segments and use cases. This collaboration begins with architecture, where we pinpoint optimal system configurations. It extends to our laboratories, to ensure our respective hardware and software components interoperate reliably. And our R&D groups go beyond that – exploring best practices and optimizations to yield the highest possible performance levels.

Sample Solution Collaborations

- Crash/Safety Simulation:** Altair has tested RADIOSS software on Cray XC40 systems to over 16,000 cores, giving engineers the power to improve speed and accuracy of design analysis.
- HPC Workload Management:** PBS Professional is Cray's preferred workload manager, offered via an OEM agreement that lets Cray easily integrate and bundle PBS units with new systems shipped globally.
- Oil & Gas Component Engineering:** With Altair's AcuSolve CFD solver running on Cray systems, operators and engineers can perform advanced subsea design analysis with better speed, scalability and accuracy.
- Aerodynamics Systems:** With Altair's HyperWorks Virtual Wind Tunnel running on Cray systems, manufacturers can predict external aerodynamic performance without the need for numerous physical tests.



A deep-sea riser model and virtual wind tunnel model from Cray-Altair benchmarking