Altair HyperWorks Unlimited is a fully managed HPC appliance for CAE, available in both physical and virtual formats and offering unlimited use of a wide variety of Altair software. Altair’s CAE cloud appliances address the unique needs of enterprises by simplifying access to HPC infrastructure at an affordable cost. This gives engineers and scientists access to hardware, software, and HPC support that enables robust product designs.

### Product Highlights

- Preconfigured and ready to use on day one
- Simplified IT administration
- Unlimited use of Altair HyperWorks™ solver applications
- Altair PBS Works™ suite to create the ideal user experience
- Full global support from Altair
- Powered by 2nd Generation Intel® Xeon® Scalable processors
- Third-party ISV applications supported through a bring-your-own-license (BYOL) model

### HyperWorks Unlimited

Today's engineering teams need to deliver robust, innovative products at an ever-increasing pace. That requires processes and solutions that enable the exploration of multiple scenarios, and it's limited by the ability to mobilize resources quickly. Firms need on-demand access to HPC and data management that can be supported with minimal IT burden.

Powered by Altair’s enterprise software, Altair PBS Works™, HyperWorks Unlimited® appliances provide users with a secure platform, either on-premises or in the cloud, to run, monitor, and manage simulations and meet their growing computing needs.

### HyperWorks Unlimited Physical Appliance

An on-premises HPC solution that is optimized for CAE with powerful Intel-architecture-based processors and properly configured software, offering unlimited use of Altair software within the appliance.

### Benefits

Altair is the only company to offer best-in-class application software and HPC workload management tools within an industry-leading licensing and business model to fit a range of simulation needs.

### HyperWorks Unlimited Virtual Appliance

A CAE cloud solution that brings software, platform, and infrastructure as a service to Altair customers within a single and intuitive portal. It leverages Altair's patented licensing system, providing access to a selection of HyperWorks® products and a modern, scalable, industry-leading Intel-processor-based HPC infrastructure through a secure and efficient web-based platform.
HyperWorks Unlimited delivers a unique value to organizations by providing all the hardware, off-the-shelf software, and support they need to quickly and easily integrate engineering processes.

Because Altair is productizing HPC for companies of all sizes, high-performance computing capabilities are no longer the exclusive domain of large organizations.

• Robust Design Capabilities: Unlimited HyperWorks Units for usage within the appliance for massive virtual exploration.

• Productized HPC: This turnkey system, based on powerful Intel Xeon processors for HPC, is simple to deploy and loaded with HyperWorks applications, plus PBS Works for workload management. Installation takes hours vs. days or weeks. Only Altair delivers both HPC workload management and simulation applications. Nobody understands the needs of HPC users better.

• Powerful HPC Solutions: Integration of the Altair HyperStudy™ design exploration engine with PBS Works lets engineers vary designs to perform design of experiments (DOE) and stochastic and numerical optimization studies, then submit the runs directly to the HPC system. The PBS Works suite provides a modern and intuitive framework for:
  - Resource provisioning
  - Workload management and scheduling
  - Security and licensing
  - Remote visualization, notification, and collaboration

• Innovative Licensing Model: Leverage Altair’s licensing system to access HyperWorks products on a secure HPC infrastructure. Particularly relevant for compute-intensive solvers for structural, electromagnetics, fluid dynamics analysis and optimization.

• Industry-Leading Platform: HyperWorks Unlimited is based on the latest Intel Xeon Scalable processor, Intel's industry-leading, workload-optimized platform with built-in AI acceleration. This provides the seamless performance foundation that enables a new level of consistent, pervasive, and breakthrough performance.

• Third-Party Solver Support: Open architecture allows third-party solvers to be fully integrated for a monthly fee on a BYOL model.

Who Needs HyperWorks Unlimited?
Both the HyperWorks Unlimited Physical Appliance and HyperWorks Unlimited Virtual Appliance are effective high-performance computing solutions for companies of all sizes, providing a competitive advantage to users in a broad range of industries.

• Small firms can now perform complex engineering and simulation, once only available to OEMs, without the need for extensive capital and IT resources. HPC capabilities are democratized so everyone can engage in DOE and become more competitive in a matter of minutes.

• Medium businesses can now afford to expand their HPC resources because they are no longer constrained by solver licenses.

• Larger organizations with distributed regional engineering centers, which otherwise would have no local HPC compute resources or support, can quickly add new and additional capacity with local support at the department level.

What Users Are Saying
75% of users that employed HyperWorks Unlimited computing resources in a trial found it useful to their projects.

100% were able to complete an equal or greater amount of work when compared to their previous computing environment.

"This is the way HPC should be for all CAE engineers — this simple, this powerful, this reliable." — Stanley Black & Decker

88% of participants in the HyperWorks Unlimited trial rated their experience positive or extremely positive.

"Altair’s cloud solutions, namely the HyperWorks Unlimited Virtual Appliance, allow us to seamlessly scale our CAE needs through a simple, application-aware web browser gateway. We use HyperWorks on the cloud exactly the same way we would use it on our desktops, with the added ability of setting up large runs directly on the HPC infrastructure and post-processing all the runs on the server side, eliminating the need for downloading large result files."

— LeanNova

100% of HyperWorks Unlimited trial participants would recommend HyperWorks Unlimited to a colleague or friend.

"For companies like ours looking to do large-scale exploration, the ease of instantaneously accessing CAE and HPC without the massive integration expense and large deployment time is extremely beneficial. Altair is uniquely eliminating the barriers to HPC with its technologies and business model on the cloud." — LeanNova