

## Altair Simulation 2022 Released

April 26, 2022

Latest software updates bolster Altair's connectivity, AEC, and electronics capabilities

TROY, Mich., April 26, 2022 /PRNewswire/ -- Altair (Nasdaq: ALTR), a global leader in computational science and artificial intelligence (AI), announces the release of its latest simulation solutions, which focus on next-generation connectivity, architecture, engineering, and construction (AEC), as well as circuit board and electronic design capabilities; the release also includes a myriad of updates to Altair's traditional solutions. The latest release includes new features and capabilities that broaden, strengthen, and further specialize Altair's comprehensive simulation toolkit.



"The release of Simulation 2022 continues Altair's tradition of leading in computational science and artificial intelligence," said Sam Mahalingam, chief technology officer, Altair. "By adding more features, tools, interfaces, and workflows that let users work faster and more efficiently, we're enabling a better and more sustainable future. Better simulation makes better, smarter products, and we're proud to be at the forefront of tomorrow's connected future."

### **Developing Products for a More Connected Future**

This release's connectivity updates include features that help users simulate antennas with exceptional accuracy, get results and solve bigger problems faster, and broaden users' toolset for advanced driver-assistance systems (ADAS) applications. Altair Simulation 2022 supports the automation of realistic 5G envelope beam patterns and includes features like new hybrid ray-tracing patterns and rotating doppler effects for ray-based solvers.

Additionally, more connectivity features include support for improved computational performance when simulating larger, more complex antennas and their operating environment. Users will benefit from the power to better simulate full-wave antenna and array characterizations so they can reliably analyze wireless systems.

Users will also gain improved ADAS tools that can better consider sensor types like ultrasound, which increases the number of sensors that can be simulated together. Other new ADAS features include the addition of more application-specific and post-processing tools, such as frequency-modulated continuous-wave (FM-CW) radar simulations that target ADAS applications.

# Tools for Resilient, Sustainable AEC Design

Altair Simulation 2022 also includes a myriad of updates for AEC, including support for several new construction standards. Now, users can access every solution with Altair Units licenses and can choose the right AEC solutions for them at the right time throughout the project workflow; newly available Altair Units-accessible capabilities include the former S-FRAME software products as well as SimSolid rapid analysis, HyperWorks advanced meshing, computational fluid dynamics (CFD) wind load simulations, and more.

Tools like S-CONCRETE, S-FRAME, and S-FOUNDATION, which reduce design time and project costs for structural engineers, continue to expand in Altair Simulation 2022 and now include built-in design codes for different American, Canadian, European, and Asian/Oceanian nations so projects and designs are compliant with the latest safety and material regulations.

And solutions like S-TIMBER help engineers and architects address the ever-growing demand for sustainable buildings and structures. S-TIMBER includes advanced analysis capabilities and can simulate the structural response to seismic loading according to NBCC, ASCE, and IB codes. Additionally, it gives users enhanced control over panel modeling to design CLT, Glulam, and Sawn lumber elements for code compliance, so they can deliver projects on time and within budget and design parameters.

#### **Accelerating Smart Device Development**

Altair Simulation 2022 includes more capabilities for circuit board and electronic design tools that enhance users' abilities to design and implement

smart components, products, and systems. Altair PollEx now features expanded design verification, signal integrity, and printed circuit board (PCB) modeling functionalities. It also includes cross probe verification like DFx Excel results and a direct ECAD link to Pulsonix and Altium Designer; the latter feature is also included in PollEx for Altium, a free, recently released tool available to all Altium Designer customers.

Users will benefit from updates to Altair SimLab, which include typical application functionalities like drop test, multiphysics analysis for PCBs, and thermal management simulation that can cover entire systems. And Altair Simulation 2022 also introduces new tools for power electronics and motor drives, including PSIM, which can handle simulation and design for power supplies, motor drives, control systems, and microgrids.

# **Solutions for Every Stage of Product Development**

Altair Simulation 2022 also includes a host of updates that bolster Altair's system-modeling, finite element analysis, design ideation and exploration, and manufacturability solutions' capabilities. Updates to Activate, Compose, HyperWorks, and the Inspire products help users take on new challenges and give them new machine learning libraries, an interactive toolkit to no-code user interface creation, more advanced simulation and manufacturability workflows, and other analysis features so they can optimize designs and visualize even the most complex products and challenges.

Lastly, Altair Simulation 2022 includes new features that greatly augment Altair's fluid, thermal multiphysics, and structural analysis solutions. Tools like AcuSolve, nanoFluidX, EDEM, MotionSolve, Flux and FluxMotor, OptiStruct, Radioss, and SimSolid give users the power to apply simulation to new fields of application, utilize new physics solvers, better integrate related tools for electrification, simulate strength, stiffness, and other physical measures, and take advantage of new optimization features that make better, more efficient designs.

For more information about the latest updates to the Altair simulation suite, visit www.altair.com/simulation-2022.

#### **About Altair**

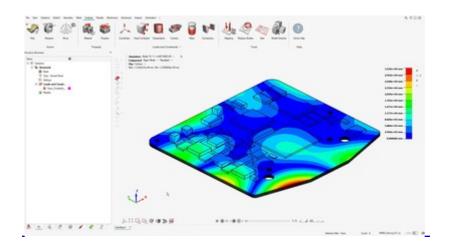
Altair is a global leader in computational science and artificial intelligence (Al) that provides software and cloud solutions in simulation, high-performance computing (HPC), data analytics, and Al. Altair enables organizations across all industries to compete more effectively and drive smarter decisions in an increasingly connected world – all while creating a greener, more sustainable future. For more information, visit <a href="https://www.altair.com/">https://www.altair.com/</a>.

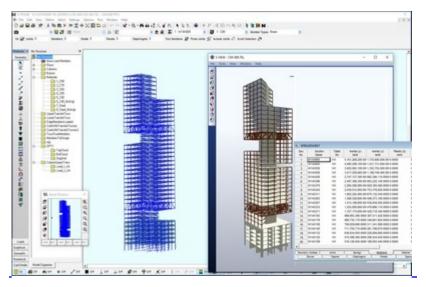
## **Media contacts**

Altair Corporate
Jennifer Ristic
+1.216.849.3109
corp-newsroom@altair.com

Altair Investor Relations
Monica Gould, The Blueshirt Group
+1 212.871.3927
ir@altair.com

Altair Europe/The Middle East/Africa Evelyn Gebhardt +49 7031 6208 0 emea-newsroom@altair.com







© View original content to download multimedia: <a href="https://www.prnewswire.com/news-releases/altair-simulation-2022-released-301532212.html">https://www.prnewswire.com/news-releases/altair-simulation-2022-released-301532212.html</a>
SOURCE Altair