



## Media Alert

### CST STUDIO SUITE 2018 Released

**Darmstadt, Germany, January 8, 2018, Computer Simulation Technology (CST), part of SIMULIA, a Dassault Systèmes brand, today announces the release of its flagship EM simulation software, CST STUDIO SUITE® 2018.**

The electromagnetic (EM) simulation software CST STUDIO SUITE is used by industry-leaders to design, analyze and optimize components and systems across the EM spectrum. The CST® Complete Technology approach means that all solvers are available within a single graphical user interface, with strong links between different solvers. The 2018 release of CST STUDIO SUITE develops on previous success with a range of new features for simulating entire systems with hybrid methods.

One key strength of CST STUDIO SUITE is the ability to link multiple simulations with different solvers into a single workflow with System Assembly and Modeling (SAM). In 2018, the improved Assembly Modeler offers users a more efficient way to combine multiple components into a system employing a 3D environment optimized for complex models. This is complemented by new features for EM/circuit co-simulation and the Hybrid Solver Task providing bidirectional solver coupling between the Time Domain and Integral Equation Solvers – a major step forward for hybrid simulation.

For bio-EM simulations, the voxel poser tool, previously a separate product, is now integrated directly into the CST STUDIO SUITE interface, offering users direct access to the voxel poser during the modeling process. Body models using the tetrahedral mesh can now move realistically to simulate breathing, which is important in the design of medical devices.

Filter Designer 3D, CST's tool for designing cross-coupled filters and calculating coupling matrices, is now connected directly to the powerful optimizers in CST STUDIO SUITE. This means that the optimizers have access to the coupling matrix calculation, allowing faster and more intelligent filter tuning.

Photonic and terahertz applications are a growing trend, and CST STUDIO SUITE offers a new alternative interface for these areas, with direct access to optical features. It also now allows simulations to be set up using wavelength rather than frequency. CST STUDIO SUITE 2018 introduces the ability to calculate farfields on multilayer substrates, which is useful both for photonic applications and for simulating antennas printed on complex PCBs.

Behind the scenes, the core of the software is as ever fine-tuned to optimize performance on the latest hardware, and CST STUDIO SUITE is being introduced to the Dassault Systèmes 3DEXPERIENCE® platform with links to other SIMULIA tools.

*“CST has long had industry-leading solver technology, and in this new release we have leveraged synergies between them resulting in new powerful hybrid simulation methods,”* said Dr Peter Thoma, Managing Director R&D, CST. *“With CST STUDIO SUITE 2018, we’re integrating CST software with the Dassault Systèmes 3DEXPERIENCE platform, which connects CAD, PLM, collaboration and other leading edge simulation software, in order to provide a complete multi-domain and multiphysics solution.”*



### **Availability**

Customers with active maintenance contracts can download the newest version from the support area of the CST website at [www.cst.com/support](http://www.cst.com/support).

For more information about this release including the Update 2018 Technology Highlights webinar visit <https://www.cst.com/2018>.

### **Highlights of CST STUDIO SUITE 2018.**

- General
  - Assembly Modeller with fast 3D system viewer
  - Integrated voxel model poser for human simulation
  - Breathing body models
  - Hybrid Solver Task for bi-directional coupling of T and I Solvers
  - Nastran surface mesh import
  - Space map Drude material
  - Farfield calculation on multilayer substrates
- Filter Designer 3D
  - Direct link to optimizer
  - Diplexer design
- Transient Solver
  - SPICE circuit import as 3D lumped element
- Integral Equation Solver
  - Dielectrics in Characteristic Mode Analysis (CMA)
- Particles Dynamics
  - True transient 3D-EM/circuit co-simulation for PIC and Wake Field Solvers
- Interference Task
  - Radio Library
- EDA/Multiphysics
  - Coupling from CST PCB STUDIO® to CST MPHYSICS® STUDIO for thermal PCB analysis



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### About CST- Computer Simulation Technology

Founded in 1992, CST is a market leader in delivering 3D electromagnetic (EM) field simulation tools through a global network of sales and support staff and representatives. CST develops CST STUDIO SUITE, a package of high-performance software for the simulation of EM fields in all frequency bands. Its growing success is based on a combination of leading edge technology, a user-friendly interface and knowledgeable support staff. CST solutions are used by market leaders in a diverse range of industries, including aerospace, automotive, defense, electronics, healthcare and telecommunications. CST is part of SIMULIA, a [Dassault Systèmes](#) brand. Further information about CST is available on the web at [www.cst.com](http://www.cst.com).

### About SIMULIA

The SIMULIA brand of Dassault Systèmes enables users to leverage physics-based simulation and high-performance computing to power sustainable innovation for products, nature, and life. Powered by Dassault Systèmes' 3DEXPERIENCE platform, SIMULIA realistic simulation and optimization applications accelerate the process of making mission-critical design and engineering decisions before committing to costly and time-consuming physical prototypes. [www.3ds.com/simulia](http://www.3ds.com/simulia).

### About Dassault Systèmes

Dassault Systèmes, the 3DEXPERIENCE Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 220,000 customers of all sizes, in all industries, in more than 140 countries. For more information, visit [www.3ds.com](http://www.3ds.com).

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