



## Press Release

### CST STUDIO SUITE Version 2017 Now Shipping

**Darmstadt, Germany, March 15 2017, Computer Simulation Technology (CST) announces the release of the 2017 version of the electromagnetic simulation tool, CST STUDIO SUITE®. The latest edition includes a range of new tools for synthesis and analysis and improvements to existing features.**

CST STUDIO SUITE is an electromagnetic (EM) simulation software package with solvers for a wide of applications across the electromagnetic spectrum, as well as multiphysics and particle applications. All of the CST® tools are available within a single graphical user interface and can be linked together for straightforward hybridization of simulations. CST STUDIO SUITE is used in leading companies across the high-tech and manufacturing industries to develop new ideas, optimize products, and ensure standards compliance. The 2017 release of CST STUDIO SUITE builds on the success of previous releases with new features for broader and more in-depth analysis of EM systems.

The new tool Filter Designer 3D (FD3D) can automatically synthesize cross-coupled and diplexer filter designs to meet the specifications, including transmission zeroes, Q-factor, and equiripple. The complex and sensitive nature of these filters makes them challenging to design and tune with traditional methods. Coupling matrix extraction with FD3D offers an efficient way to fine-tune 3D filter structures.

The new Interference Task offers a straightforward approach for investigating potential EMI issues using coupling data from simulations. The Interference Task shows at a glance which combinations of RF systems can potentially lead to co-site interference problems, allowing mitigation approaches to be tested on a virtual prototype.

The ray-tracing Asymptotic Solver in CST STUDIO SUITE can now directly calculate the coupling between antennas. The Asymptotic Solver can simulate extremely large platforms such as aircraft, ships, and buildings very efficiently, making it well suited to many kinds of antenna placement scenarios. This can be combined with the Interference Task for detailed co-site analysis of vehicles, vessels, and aircraft.

Version 2017 also sees the expansion of CST MPHYSICS® STUDIO tools with the Conjugate Heat Transfer (CHT) Solver. This uses computational fluid dynamics (CFD) to simulate the flow of air through devices, taking fans and vents into account. With the CHT Solver, users can include the cooling systems in their multiphysics simulation, allowing these systems to be designed and optimized before constructing prototypes.

Behind the scenes, the core of the software is as ever fine-tuned to optimize performance on the latest hardware.



*“Innovators are always looking for new ways to improve their products and brand new solutions to long-standing problems,”* said Dr Peter Thoma, Managing Director R&D, CST. *“By expanding the feature set of our software, we hope to enable our users to analyze and optimize their systems in greater detail than ever before.”*

Shipping of CST STUDIO SUITE 2017 has now started, and electronic delivery is available from the CST support area [www.cst.com/support](http://www.cst.com/support).

### Highlights of CST STUDIO SUITE 2017

- General
  - Shared 3D component library
  - Parametric tuning
  - Simulation workflows on Linux
  - Voxel model poser for human simulation
- Design and analysis tools
  - Filter Designer 3D – new
  - Interference Task – new
  - Improved Array Wizard
- Transient Solver and TLM Solver
  - New port types
  - Automatic detection of identical ports for arrays
  - Lossy metal with coating and surface roughness
  - Anisotropic thin-panel material
  - Voxel import for TLM Solver
- Frequency Domain Solver
  - Lumped element SPICE circuits integrated in 3D model
- Automatic workflow wizard for biased ferrites integral equation solver
  - Tabulated surface impedance material
  - Automatic creation of nubs for wire antennas
- Asymptotic Solver
  - Antenna-to-antenna coupling



- 2D nearfield monitors the Low Frequency Solver
  - Electrical machine simulation wizard
  - Efficiency maps
- Particle Tracking Solver
  - Plasma sheath emission model
- CST MPHYSICS STUDIO
  - Conjugate Heat Transfer Solver for electronics cooling
  - Moving media for thermal simulation
- EDA
  - Power Integrity Solver performance improvement
  - Expanded IBIS support

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### About CST- Computer Simulation Technology AG

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. On September 30 2016 CST joined the SIMULIA brand of Dassault Systèmes. Further information about CST is available on the web at [www.cst.com](http://www.cst.com).

### About SIMULIA

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### About Dassault Systèmes

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