



## ANSYS Enables Virtual Systems Prototyping

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PITTSBURGH, Sept. 23, 2014 /PRNewswire/ -- ANSYS (NASDAQ: ANSS) and Modelon have entered an agreement to revolutionize product development – reducing late-stage integration failures, decreasing product development costs and speeding time to market. Combining Modelon's industry-leading systems behavioral modeling tools and solutions, based upon the open standard Modelica® modeling language with ANSYS' system simulation platform and breadth in 3-D multiphysics and embedded software enables users to explore product designs from the complete system all the way down through detailed designs. This multidisciplinary, integrated approach will help companies arrive at better designs earlier, reduce their reliance on costly physical prototyping and virtually eliminate system integration failures.

Model-based design has traditionally focused on a single systems modeling language. But now ANSYS has expanded that definition to include electronics, mechanical and embedded software engineering. ANSYS will incorporate Modelica, a broadly accepted and open standard for the behavioral modeling of mechanical, thermal and thermofluid systems, with ANSYS' existing IEEE-backed VHDL-AMS modeling technology for electrical systems and its SCADE™ technology for embedded software.

"This agreement with Modelon breaks down the remaining barriers to full virtual system prototyping," said Walid Abu-Hadba, chief product officer at ANSYS. "ANSYS users will be able to fully explore how their product will behave – not at the component level, but as a complete system. This quantum leap forward will pay amazing dividends for customers in the future by enabling them to create more innovative products faster than ever."

Enabling this engineering breakthrough is an agreement with Modelon, giving ANSYS customers access to Modelon's Modelica compiler and its best-in-class Modelica solutions within the ANSYS® Simplorer™ product line. The Modelica language and Modelica-based libraries are used across a range of industries for designing and optimizing the performance of multi-domain systems for such applications as active safety, engine control, thermal management, power transfer and environment control. Additionally, ANSYS customers will gain access to Modelon's leading Functional Mock-up Interface (FMI) technology. FMI is used by a range of industrial companies to exchange simulation models among their suppliers and assemble them into virtual system prototypes that can be tested before physical prototypes are available.

In addition to offering a multi-language system simulation environment, ANSYS Simplorer can also replace behavioral models often used during concept design with detailed 3-D multiphysics results to provide a macro view of system performance. Engineering teams can virtually verify and optimize their product designs at all stages of systems engineering – from conceptual and system design to detailed engineering and complete system verification.

"The engineering world is standardizing on Modelica for system modeling and analysis in automotive, aerospace and energy applications," said Hubertus Tummescheit, CEO of Modelon, Inc. "This partnership gives Simplorer users access to application-specific model libraries, toolkits that enable FMI in several third-party products and expertise in a variety of industrial applications."

### About Modelon

Modelon is a global expert in solutions for model-based systems and control design. We give our customers a competitive advantage by delivering a unified picture of subsystem interaction and performance from early in the design cycle all the way to optimal system operation. Our open and flexible tools and model libraries for simulation and optimization accelerate virtual product creation and allow our customers to focus on their core business objectives. With an open standards based platform, we can rapidly integrate, customize, and deploy into any CAE tool chain.

Since 2005, Modelon has been a leader in developing and supporting the Modelica and FMI open standards and communities.

### About ANSYS, Inc.

ANSYS brings clarity and insight to customers' most complex design challenges through fast, accurate and reliable engineering simulation. Our technology enables organizations — no matter their industry — to predict with confidence that their products will thrive in the real world. Customers trust our software to help ensure product integrity and drive business success through innovation. Founded in 1970, ANSYS employs nearly 2700 professionals, many of them expert in engineering fields such as finite element analysis, computational fluid dynamics, electronics and electromagnetics, embedded software, system simulation and design optimization. Headquartered south of Pittsburgh, U.S.A., ANSYS has more than 75 strategic sales locations throughout the world with a network of channel partners in 40+ countries. Visit [www.ansys.com](http://www.ansys.com) for more information.

ANSYS also has a strong presence on the major social channels. To join the simulation conversation, please visit: [www.ansys.com/Social@ANSYS](http://www.ansys.com/Social@ANSYS)

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