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## Acquisitions

***Bentley Acquires elcoSystem Software for Electrical Engineering in Buildings, Plants, and Utilities to Provide Time and Cost Efficiencies***

7 March 2012

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Bentley Systems, Incorporated announced at its second Annual Corporate Update conference call yesterday, that it has acquired the elcoSystem software business of Hannappel Software GmbH, based in Wiesbaden, Germany. The elcoSystem line of software for electrical engineering is already a fundamental component of Bentley's [Raceway and Cable Management](#) and [Building Electrical Systems](#) offerings under a distribution agreement with Hannappel. Through this acquisition, Bentley further extends its ability to deliver the next level of intelligent and efficient electrical engineering workflows across a wider range of use cases. The [elcoSystem](#) products are designed to serve the needs of buildings, campuses, factories, communications, process manufacturing, rail and transit, and utilities, and are widely used by commercial, domestic, and electrical contracting companies, along with large engineering and AECO firms.

Bentley Raceway and Cable Management V8i integrates functional design with detailed physical design and includes a wide range of 2D and 3D design tools. By providing users with early and accurate material requirements via automated intelligent functions and highly realistic 3D design simulation, Bentley Raceway and Cable Management V8i improves quality, leads to increased safety in construction, and enhances operations management through the integrity of a comprehensive as-operated model across constant retrofits.

Bentley Vice President Ken Adamson said, "On behalf of the entire Bentley team, I welcome our new colleagues from Hannappel Software. We look forward to working with them and taking advantage of their electrical system expertise to bring the next phase of innovation to the users of Bentley Raceway and Cable Management and Bentley Building Electrical Systems."

Adamson continued, "At the same time, the modular nature of the elcoSystem line will enable us to leverage these capabilities with other Bentley products such as [Bentley Substation](#), the first integrated software for intelligent electrical and physical substation design, our [promis•e](#) software for the generation of electrical system schematics and supporting documentation, our new [AECOSim](#) family of interdisciplinary building design, analysis, and simulation software, and our plant design applications such as [OpenPlant](#) and [AutoPLANT](#)."

Said Oliver Hannappel, former managing director of Hannappel Software and now Bentley director Electrical Engineering, "We are extremely pleased to join the Bentley team and expand the scope of our development innovations as we benefit from the breadth and depth of Bentley's product offerings. We've been in business as an electrical consulting firm for 50 years and have been developing software for the electrical industry since the early 1980s. Now that we are part of Bentley, we have the unique opportunity to help create the first comprehensive and fully integrated solution for the electrical industry and broader infrastructure community.

"An early focus of the team I now head up at Bentley will be integration opportunities with Bentley Substation. This software empowers project teams to design substations 30 percent faster than they typically can with non-integrated applications, features a single interface for substation design, and provides a common intelligent information model that enables users to design more precisely. These clear advantages quickly resonated with the infrastructure community and have resulted in a growing number of Bentley Substation users around the world, including Central Southern China Electric Power Design Institute, CPS Energy, Iberdrola, Chinese State Nuclear Power Planning Design and Research Institute, ETSA, TransGrid, LTL Holdings, and ENMAX. With the addition of elcoSystem's advanced functionality, this innovative product will become even more successful."

Features of the elcoSystem R4 and R5 product lines include:

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electrical design tools

2D and 3D workflows

conceptual and detail design

lighting calculations via bi-directional interfaces to DIALux and RELUX

energy analysis

automatic generation of bill of quantity, schedules, and reports

cable and breaker sizing

short circuit calculations

selectivity analysis

For additional information about elcoSystem software, visit [www.bentley.com/elcosystem](http://www.bentley.com/elcosystem). For additional information about Raceway and Cable Management, visit [www.bentley.com/raceway](http://www.bentley.com/raceway). For additional information about Bentley Building Electrical Systems, visit [www.Bentley.com/BBES](http://www.Bentley.com/BBES).

For additional information about promis•e, visit [www.Bentley.com/promis.e](http://www.Bentley.com/promis.e).

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## CIMdata News

### ***CIMdata Publishes “Simulation Management: A Vision of PLM-to-Simulation Workflow Supported by Customized Software Modules”***

6 March 2012

“Research highlights the body-in-white analysis and how conduction and CFD link together seamlessly at Daimler AG”

CIMdata, the leading global product lifecycle management (PLM) consulting and research firm announces the publication of a new paper that highlights the body-in-white analysis and how conduction and CFD link together seamlessly to target a reduction in turnaround time and an increase in the number of simulations.

The vision and implementation of integrating a simulation management system into a PLM environment at Daimler is now mostly in place. Customized add-on modules for the simulation make it easier for a non-CAE or -CFD expert to perform the work. PLM/XML provides the foundation to drive the data across the whole process. Geometry and material data are imported into the system, and temperature results and the recommendations for placing thermocouples for physical testing are generated. The results are extraordinary as the level of simulation is second to none.

This report is based on a presentation made by Thomas Walker, Manager of CD-adapco’s CAE Custom Tools Worldwide Engineering Services, at CIMdata’s PLM Road Map conference in the fall of 2011, with added participation by Walter Bauer, Manager of Vehicle Thermal Management at Daimler AG.

“Simulation Management: A Vision of PLM-to-Simulation Workflow Supported by Customized Software Modules” is available for download at:

<https://plmforesight.cimdata.com?download=SimulationManagement>

# CIMdata PLM Industry Summary

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## About CIMdata

CIMdata, a leading independent worldwide firm, provides strategic management consulting to maximize an enterprise's ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM) solutions. Since its founding in 1983, CIMdata has delivered world-class knowledge, expertise, and best-practice methods on PLM solutions. These solutions incorporate both business processes and a wide-ranging set of PLM enabling technologies.

CIMdata works with both industrial organizations and suppliers of technologies and services seeking competitive advantage in the global economy. In addition to consulting, CIMdata conducts research, provides PLM-focused subscription services, and produces several commercial publications. The company also provides industry education through PLM certificate programs, seminars, and conferences worldwide. CIMdata serves clients around the world from offices in North America, Europe, and Asia Pacific. To learn more about CIMdata's services, visit our website at [www.CIMdata.com](http://www.CIMdata.com) or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA. Tel: +1 (734) 668-9922. Fax: +1 (734) 668-1957; or at Oogststraat 20, 6004 CV Weert, The Netherlands. Tel: +31 (0) 495 533 666. Follow the PLM News at <http://twitter.com/#!/CIMdataPLMNews>

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## Company News

### *Aras Joins 3D PDF Consortium as Founding Member*

8 March 2012

Aras® announced that the company has become a founding member of the 3D PDF Consortium. The 3D PDF Consortium is a global initiative dedicated to the promotion, development and adoption of 3D PDF as an open standard for visualization, collaboration, data exchange and the long-term archiving of 3D data. Aras supports 3D PDF for its potential as a truly open, ubiquitous format that is free of vendor restrictions and limitations.

The 3D PDF Consortium organization is focused on the ongoing development of the ecosystem of industry-specific companies and end-users, international standards organizations, governmental organizations, software vendors, systems integrators, and developers with a vested interest in seeing 3D PDF and the PRC data format continue to be developed as a truly open standard for visualization, collaboration, data exchange, and the long term archiving and retrieval of engineering, manufacturing, AEC/BIM, geospatial, and scientific, cultural and historical information.

“We take an open approach to the market and believe that 3D PDF will become a pervasive standard moving forward so we're proud to be in on the ground floor,” said Peter Schroer, President of Aras. “3D PDF is the only neutral visualization format that can hold text, binary / scan data, 2D and 3D data, and still be readable 99 years from now, which is why U.S. government and military programs are standardizing on it and why we support the mission of the 3D PDF Consortium.”

### **About 3D PDF Consortium**

The 3D PDF Consortium is a community of companies interested in collaboration of dynamic 3D data through PDF files. Software providers, systems integrators, government agencies, and businesses that provide and consume 3D data solutions look to the 3D PDF Consortium to demonstrate the success of these solutions within the market and promote 3D PDF as a solution to improve business results. The 3D

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PDF Consortium promotes 3D PDF adoption through demonstrating best practices and generating awareness of the power of 3D-enabled PDF to solve a multitude of communication and collaboration challenges across various industries. For more information on the 3D PDF Consortium, please visit <http://www.3DPDFConsortium.org>.

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## ***Autodesk Digital STEAM Curriculum Is Awarded ISTE Seal of Alignment***

8 March 2012

[Autodesk, Inc.](#) announced that its Autodesk Digital STEAM Workshop, a classroom curriculum for teaching science, technology, engineering, art and math (STEAM) through design, has been recognized by the International Society for Technology in Education (ISTE).

After completing a review of Autodesk Digital STEAM Workshop, ISTE recognized Autodesk with its Seal of Alignment for Proficiency for supporting the implementation of ISTE's National Educational Technology Standards for Students (NETS•S).

The Digital STEAM Workshop is a curriculum that is built around Autodesk software products that are widely used in the design industry. Currently there are 23 lessons in the curriculum, and each lesson uses at least one of four Autodesk products: AutoCAD, Autodesk Inventor, Autodesk Revit Architecture or Autodesk Maya software. The projects are all tied to real-world, engaging challenges that give students the opportunity to use Autodesk software to solve substantive problems.

ISTE determined the Digital STEAM Workshop supports its standards, which include:

Applying existing knowledge to generate new ideas, products or processes

Creating original works as a means of personal or group expression

Using models and simulations to explore complex systems and issues

Communicating information and ideas effectively to multiple audiences using a variety of media and formats

The Autodesk Digital STEAM Workshop brings a new approach to teaching design, sustainability and creative problem-solving through interactive learning games, real-time 3D project viewers and design-thinking videos. This project-based learning workshop helps engage students while teaching and reinforcing the learning of core subjects.

Each project within the workshop includes comprehensive teacher resources such as lesson plans, project briefs, a pre-test and a post-test. Teachers do not have to be experts in Autodesk software to bring Autodesk Digital STEAM into their classrooms because extensive support materials are included with the workshop to guide students through projects and design processes.

For more information about Autodesk Digital Steam Workshop, visit [http://students.autodesk.com/?nd=digital\\_steam](http://students.autodesk.com/?nd=digital_steam).

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## ***Cadence Appoints Martin Lund to Lead SoC Realization Business***

5 March 2012

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Cadence Design Systems, Inc. announced the appointment of Martin Lund to the position of senior vice president of research and development for the SoC Realization Group, a business which provides differentiated standards-based design intellectual property (IP) and services to the electronics industry. Lund's primary focus is to expand the Cadence design IP portfolio, enabling customers to realize their System-on-Chip (SoC) products faster, cheaper and with higher quality. He joins Cadence from Broadcom, where he served for twelve years, most recently as senior vice president and general manager of Broadcom's Network Switching Business. Lund succeeds Sanjay Srivastava, who moves into a new role as strategy advisor to Cadence CEO Lip-Bu Tan.

"SoC Realization is a strategic growth area for Cadence," said Lip-Bu Tan, president and CEO. "While at Broadcom, Martin Lund grew the company to become the global leader in Ethernet switch SoCs for data center, service provider, enterprise, and SMB markets, and successfully drove several strategic acquisitions. His extensive operational experience equips him well to scale our SoC Realization business."

"Cadence is in an excellent position to deliver differentiated IP for memory, storage and connectivity," said Martin Lund. "Customers are looking to Cadence to be their trusted partner in delivering these IP reliably and with high quality. This is an exciting time to join Cadence and I am looking forward to helping accelerate the company's success."

Lip-Bu Tan continued, "I want to thank Sanjay Srivastava for successfully guiding our IP strategy following the acquisition and integration of Denali. I look forward to working with him in his new role."

Prior to Broadcom, Lund held various marketing and senior engineering management positions in the Network Systems Division of Intel Corporation and at Case Technology, a European networking equipment manufacturer acquired by Intel in 1997. Lund is an inventor on 26 issued and pending US patents. He holds a technical degree from Frederiksberg Technical College and Risø National Laboratory at the Technical University of Denmark.

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## ***Cadence Offers IC Design Program for Start-ups in Australia***

6 March 2012

Cadence Design Systems, Inc. announced it has launched a business incubation program for Australian integrated circuit (IC) start-ups designed to enhance the region's entrepreneurial environment. By providing EDA solutions, this unique program will help remove some of the barriers to entry that new IC design companies face in the marketplace. Since many Australian design firms focus on mixed-signal design, the IC program for start-ups aligns with Cadence® technology strengths, while encouraging and supporting the expansion of the IC design and semiconductor industry in Australia.

"Being part of the program has enabled us to focus on designing our chip at a low burn rate, which is critical for a start-up," said Pat Kelly, CEO of Nitero, a fabless semiconductor company that is working on next-generation 60 GHz WI-Fi solutions for portable platforms. "Accessing leading-edge Cadence EDA technology and solutions has provided us with a unique advantage in the marketplace."

The Cadence® IC design program offers small and medium enterprises access to the Cadence suites of analog, custom, digital and PCB/package/board design software, as well as Internet training. The program is available through NICTA, Australia's Information and Communications Technology Research Centre of Excellence.

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NICTA is funded by the Australian Federal and State Governments and universities to develop technologies that generate economic, social and environmental benefits for Australia. NICTA collaborates with industry on joint projects, creates new companies, and provides new talent to the ICT sector through a NICTA-enhanced Ph.D. program. With five laboratories around Australia and over 700 people, NICTA is the largest organization in Australia dedicated to ICT research.

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## ***CD-adapco Announces the Opening of Its New State College, PA Office***

2 March 2012

Due to recent growth, the CD-adapco office in State College, PA moved to a new spacious and modern suite last weekend. The space houses much of CD-adapco's Pre/Post Processor Development team.

You are invited to visit the new office whenever you are in the State College, Pennsylvania area.

CD-adapco - State College

330 Innovation Blvd., Suite 202

State College, PA 16803

Tel: (+1) 814 861 1651

Fax: (+1) 814 861 1652

Email: [info-us@cd-adapco.com](mailto:info-us@cd-adapco.com)

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## ***Cimatron Celebrates 30 Years as a CAD/CAM Leader***

6 March 2012

[Cimatron Limited](#) has kicked off its celebrations marking 30 years as a leader in the CAD/CAM software field with Mr Danny Haran, Cimatron's President and CEO, issuing the following statement:

"Operating as a successful business continuously for 30 years is an achievement by any standard. However, it is not simply Cimatron's longevity that is impressive, but also its ability to remain an industry leader throughout its entire lifespan.

"Cimatron was one of the first to realize the potential offered by the emerging computer aided design and manufacturing technologies in the early 1980s. While the field was still in its infancy, we pioneered CAD/CAM software solutions that were revolutionary for their time.

"Over the years we've been at the forefront of innovation. We developed the world's first integrated CAD/CAM software, the world's first CAD/CAM software for the PC, the world's first electrode solution, the world's first application for micromilling, and the world's first toolpath calculation acceleration device.

"These firsts are merely the tip of the iceberg in terms of Cimatron's significant overall contribution to the CAD/CAM field. Many of us remember how, in the 1970's, producing a quality mold or die tool could take months. Today, production takes a few weeks or even days thanks to the technology pioneered by us and other companies. As we enter our fourth decade of innovation, we are constantly

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looking at ever more innovative ways to help our customers reduce their manufacturing times, improve their product quality and increase their profitability, and I am very excited about our future plans in this respect.

"Our contribution to the machining field has also been significant. As demand for speed and accuracy grows, we see increasing numbers of part manufacturers introducing Multi Tasking Machines to their workshops. While these machines save set-up time and increase accuracy and productivity, they are extremely complex to program efficiently. Our GibbsCAM software is among the world's very few CAM solutions capable of powering these machines, supported by thousands of post processors. We see a great potential in the MTM market and look forward to introducing more innovations in this field over coming years.

"Our pace of innovation over the past three decades has been matched by a growth in our profitability levels - some of the highest in the industry - and a significant expansion in our customer base that today exceeds 40,000 installations, across more than 40 countries.

"An important element in our success over the years has been our many customers and business partners whose loyalty and support have been instrumental to our high levels of performance and profitability. We especially value their high expectations of us as these have helped drive our ongoing commitment to innovation.

"I also salute our committed staff at our offices worldwide, and across our R&D, QA, sales and marketing, finance and administration divisions. They are undoubtedly one of the most dedicated and professional workforces in the industry.

"Thank you to all those who have participated in this three decades-long journey. It is far from over however, as we intend to continue it for the next 30 years and well beyond."

For a brief history of Cimatron, visit our website

[\[http://www.cimatron.com/Group/general.aspx?FolderID=5469&lang=en\]](http://www.cimatron.com/Group/general.aspx?FolderID=5469&lang=en).

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## ***FISHER/UNITECH Announces Grand Opening of West Warwick, Rhode Island Office***

5 March 2012

FISHER/UNITECH announced the grand opening of its new office space in West Warwick, RI. The new location is larger than the company's North Kingstown office space and will accommodate more students for training events.

FISHER/UNITECH's new office is located at Gardens Office Park, Suite 306, 1300 Division Road, West Warwick, RI 02893. A series of Grand Opening events are planned throughout the month of March to give prospects and customers alike an opportunity to meet local FISHER/UNITECH staff, test drive SolidWorks 3D CAD, SolidWorks Simulation, SolidWorks Enterprise PDM or 3DVIA Composer software and grab a bite to eat.

SolidWorks Solutions Seminar

Friday, March 16th

9:00 am – 12:00 pm

Power Users Clinic: Large Assembly Management

Thursday, March 22nd

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11:30 am – 2:00 pm -Lunch included

SolidWorks 2012 Launch

Friday, March 23rd

1:00 pm – 5:00 pm

Night School: Sheetmetal & Weldments

Thursday, March 29th

6:00 pm – 8:00 pm

Power Users Clinic:Template Creation for Automation

Friday, March 30th

11:30 am – 2:00 pm - Lunch included

More details on Rhode Island Grand Opening events in March can be found on [FISHER/UNITECH's website](#).

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## ***Growth of WorkNC in Brazil Supported By New Subsidiary***

6 March 2012

Sescoi has opened a new subsidiary in Brazil to develop sales and technical support and services for its [WorkNC automatic CAD/CAM](#) software and its [WorkXPlore 3D](#) high speed viewer, bringing advanced manufacturing software and knowhow to engineering companies in the country.

[Sescoi](#) has been serving its OEM automotive customers and their suppliers in Brazil for a number of years via its WorkNC distributor, T-Data Processamentos, and has now acquired the company. The existing engineering staff will be employed by Sescoi Brasil and will remain at the same offices at Rua Paraiba 192-SI 03, 09521-070 Sao Caetano do Sul – São Paulo.

Cyrille Schneider has been appointed Business Development Manager for Sescoi Brasil. He will lead the new subsidiary with the aim of building and managing a network of distributors to service the growing demand for top-end CAD/CAM software and CNC machining knowhow in this emerging market.

Cyrille is a French national and has been living and working in Brazil for the past 10 years so is a fluent Portuguese speaker. His background includes a diploma in mechanical and production engineering from the University Institute of Technology of Mulhouse in France, a period as an Industrial Designer at Solvay Automotive in France and Country Manager for a Spanish company operating in Brazil. He is also an active member of the business community in São Paulo.

Cyrille Schneider says, “Brazil’s economy grew by 7.5% in 2010 and it is a net exporter to China. There is huge potential for expansion within the engineering sector as part of the country’s predicted growth pattern. I am delighted to be able to provide Brazilian manufacturers with a top-level, easy to use CAD/CAM system such as WorkNC.”

Bruno Marko, President of Sescoi International, says, “Brazil is of course a very important future market so we naturally wanted to build our local presence and service our important customers directly through the creation of Sescoi Brasil. We provide world leading, advanced manufacturing software solutions and support which will help engineering companies in Brazil compete successfully in the local and global marketplaces. Our technology and knowhow will help them to achieve the productivity and efficiency improvements required to sustain rapid growth.”

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## ***Mentor Graphics Signs KETIV Technologies as a Distributor for CAD/CAM Software and Services***

7 March 2012

Mentor Graphics Corporation announced it has signed KETIV Technologies, Inc., an established leader in delivering CAD/CAM software and services, as a new distributor for California, Arizona, Nevada, Washington and Oregon. With over 25 years of experience serving engineering and design professionals, KETIV will provide consulting, training, delivery and implementation of the Mentor Graphics® technologies, particularly system design, analysis and manufacturing.

In addition, KETIV will leverage their existing knowledge and represent Mentor Graphics solutions for the [PCB systems design](#), [cable harness](#) and [system modeling](#) markets. The Mentor Graphics product portfolio represented by KETIV includes the Expedition® Enterprise and PADS® PCB design flows; the HyperLynx® family of high-speed PCB simulation and analysis tools; the VeSys® and Capital® Harness™ platforms; and the SystemVision® product line.

As one of the first resellers of AutoCAD products in the country, KETIV has established a reputation as a trusted and respected partner, investing resources to understand the needs of its customers matched with products and services to achieve business goals. “Mentor Graphics is a leader in EDA technologies, known for providing its customers with best-in-class service and innovative products,” stated Anthony Rodriguez, vice president of KETIV Technologies, Inc. “Our shared business philosophy of transforming the customers’ success through technologies and support is a perfect match, and we look forward to a long-term partnership with Mentor.”

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## ***OptiTex Appoints Asaf Landau as CEO***

6 March 2012

[OptiTex](#) announced the appointment of Asaf Landau as CEO. OptiTex also announced a recruitment drive within the company as a response to strong global demand for its 2D and 3D CAD/CAM and virtual prototyping solutions in the apparel, automotive, aeronautics, industrial fabrics and upholstery industries.

Mr. Landau has a proven record driving business growth as a founder and executive in both market leading software companies and startups. Most recently, he founded Evolgen, a venture-backed software startup. Prior to that, Landau held senior positions at Mercury Interactive (acquired by Hewlett-Packard for \$ 4.5B), including leading the Software as a Service (SaaS) and the Performance Tuning Business Units. Before joining Mercury Interactive, he held senior General Management and Sales & Marketing positions at an ERP/CRM consultancy and at a manufacturing company.

Ran Machtiger, who founded OptiTex in 1988 and led the company to reach its current status as the CAD leader in the cut-fabrics industries, will take the position of Chairman of the Board of Directors.

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## ***PTC and DoD STARBASE Bring Science and Technology Opportunities to Georgia, Michigan and***

## ***Minnesota Students***

6 March 2012

PTC® announced it is continuing its support of the United States Department of Defense-sponsored STARBASE national youth program to deliver STEM learning opportunities to students in Georgia, Michigan and Minnesota. The program's goal is to motivate young people to pursue science, technology, engineering and math (STEM) education and careers.

Since its inception in 1989, the DoD STARBASE program has introduced 3-D engineering design and manufacturing using PTC software to over 610,000 students across 75 locations in the United States and expects an additional 70,000 students to participate in 2012. The program provides students with 20-25 hours of real world STEM experiences. The program is a hands-on, minds-on inquiry based curriculum that encourages teamwork through challenging activities.

### **STARBASE Robins Program, Robins Air Force Base, Georgia.**

The Houston County Board of Education believes a vibrant engineering and technical education is beneficial to civic, economic and intellectual activity for its county and its state. "In order for our students to succeed and address the challenges of the workforce, we have to better prepare them with curriculum and programs that encourage critical thinking," said Barbara Wall, director of career, technical and agricultural education, Houston County Board of Education. "PTC provides the software and technology to learn design and engineering skills and STARBASE gives us the program to apply the concepts in a real world scenario."

### **STARBASE One Program, Selfridge Air National Guard Base, Michigan.**

Students who attend the classes at STARBASE One experience a leading edge curriculum which incorporates physics, chemistry, technology, engineering, math and STEM careers. STARBASE One offers a first class facility that includes workstations equipped with PTC software for modeling, a space exploration lab module, a full scale space shuttle simulator and a Mars room which gives students the chance to manipulate robotic systems. The children recently had the opportunity to design and assemble a space shuttle flashlight using PTC software in a Design and Stratasys Dimension 3D Printers for Manufacturing class.

"PTC is proud to be part of a technology movement that seeks to bridge the gap between school and industry in order to encourage more STEM-related careers," said Adam Haas, STARBASE program manager, PTC. "Together with our customers like Michigan-based General Dynamics, we will continue to develop a new generation of students that will have the technical knowledge and skills to work for companies like it across all industries around the globe." General Dynamics continues to support the Michigan programs by providing laptops for computer activities.

### **STARBASE Minnesota, Minnesota Air National Guard Base, St. Paul, Minnesota.**

"PTC has been a long time advocate of STEM programs through its support of initiatives like the *FIRST* robotics programs and now STARBASE," said Kevin Tanner, vice president North America technical sales, PTC. "We have a large, state-of-the-art research and development center in Blaine, Minnesota with hundreds of the brightest and most innovative software developers. We are proud to host students from all over Minnesota for training and mentoring, and the opportunity to build stronger STEM programs in the communities across our state."

## **About STARBASE**

# CIMdata PLM Industry Summary

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STARBASE is a Department of Defense program that serves young people in communities across the country by offering students an opportunity to participate in a variety of hands-on learning experiences designed to increase interest in and knowledge of science, technology, engineering and math (STEM). You can visit their website at <http://www.dodstarbase.org>.

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## ***Sescoi Expands its Asian Market with a New Distributor in Malaysia***

5 March 2012

Sescoi is expanding its Asian network of offices and distributors by appointing WCS Solution as Malaysian distributor for its [WorkNC CAD/CAM](#) software, and for [WorkXPlore 3D](#), its high-speed view, mark-up and analysis system.

Located in Penang, WCS Solution aims to provide a complete productivity package for the 3D engineering design and manufacturing process and has a team of skilled engineers capable of offering the highest levels of support. The company works across a wide range of industries within the region including automotive, mold and die, aerospace and medical which maps exactly to the type of customers using [Sescoi's software](#) elsewhere around the world.

Mr Eddie Wong from WCS Solution says, "WorkNC is renowned for being extremely reliable and easy to use and it has been well proven in European, US and Japanese markets where it is used to program advanced CNC machinery, right up to full 5-axis, on the most complex components. Asian companies are facing challenging times. Some of it is out of their control such as natural disasters or economic downturn, so to mitigate against this they are looking for cost savings and productivity improvements through better equipment and know how."

WCS Solution helps companies in the region by supplying training to increase skill levels, advice and consultation for the manufacture of complex parts and reliable support. By offering WorkNC and WorkXPlore 3D they will be able to deliver improved quality, shorter lead times and reduced costs through manufacturing parts right first time and through faster machining and programming.

WorkNC offers automated programming even for parts which require 5-axis machining. This makes it easy to prepare CNC programs on the shop floor, if desired, maximizing the productivity of machine operators and enabling companies to reliably manufacture high value parts which would have previously been impossible for them. WorkNC engineers have worked in collaboration for many years with all leading CNC machine tool makers, including DMG, Hermle, Makino and Mikron, to develop top quality postprocessors.

WorkXPlore 3D helps companies to work collaboratively with more people within an organization and its supply chain. By involving more people at an early stage, designs can be optimized far more quickly and tasks can be completed concurrently, reducing development time and avoiding expensive changes during manufacture.

Bruno Marko, President of SESCOI says, "WCS Solution addresses the type of customers which will benefit from our products the most and it has the exact skills and experience we are looking for in a distributor. We are already making big strides in China with some of its largest companies, such as Foton Mould Co. and Shanghai Superior Die Technology, using WorkNC, while in Japan, WorkNC has been the most popular CAM system amongst toolmakers for several years in a row. Our reputation is built on the quality of our software and the service we offer. By working in partnership with WCS

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Solution we will be able to provide the productivity advantages which we deliver to our customers world-wide to manufacturers throughout Malaysia.”

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## ***Trubiquity Accepted as Member of the ProSTEP iViP Association***

6 March 2012

Trubiquity GmbH, Mannheim, Germany, has been accepted as a member of the [ProSTEP iViP Association](#) an international association that has committed itself to developing innovative approaches to solving problems and modern standards for product data management and virtual product creation. ProSTEP iViP combines the interests of manufacturers, suppliers and IT vendors, in close cooperation with research and science institutes, to provide members with the long-term competitive advantages that more efficient processes, methods and systems provide.

ProSTEP iViP membership will afford Trubiquity the opportunity to impact development of software solutions and standards for the product development process, participate in technologically sophisticated project work gaining further knowledge of the processes, methods and systems involved in modern product development and benefit from the Association’s extensive technology network.

### **About Trubiquity**

[Trubiquity](#) is a global provider of MFT (managed file transfer), process automation and integration solutions for 6,500 companies with 60,000 users in the automotive, aerospace, manufacturing, retail, finance, healthcare and consumer goods industries. Trubiquity is headquartered in Troy, Michigan, USA, with facilities in Carlsbad, California and international offices in Germany and the United Kingdom.

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## ***Two Decades for Alphacam’s Italian “Super Specialist”***

March 2012

“If you have a CNC machine to run or axis to move, Alphacam is the solution.” That is the personal maxim of Marco Silva, General Manager of Italian software vendor Licom Systems s.r.l.

As well as providing the Alphacam CAM system to the Italian metalworking, woodworking, stone and plastics processing industries, Licom also works closely with end-users on support services, training, bespoke applications and post processors. Marco Silva says they choose to specialise fully in Alphacam. “To be successful in this competitive market we realised we must be a ‘super specialist’ and not waste resources in something not related to our main business.”

With two offices – in Turin and the outskirts of Venice – and a representative near Naples, Licom works with OEMs such as the SCM Group and Biesse, and large international firms including aerospace company Alenia, Anglo-Italian helicopter manufacturer AgustaWestland, and Italy’s largest power company Enel.

“And a big success for us, is the thousands of medium and small companies that form the Italian economic base,” he says. These include metalworkers with mills and lathes, and a growing market amongst aluminium cutting firms. A large slice of their turnover also comes from wood industry OEMs

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and every type of industrial woodworking from furniture to doors, sign-makers, craftsmen and joinery.

Alphacam is used in two applications for the Italian plastics market – panel cutting, and trimming for thermoformed products. “Trimming is especially important in the thermoform market, where Alphacam creates the paths for CNC machines trimming off the scraps and cutting holes,” explains Marco Silva. For this type of strategy the tool position is calculated normal to the face direction following a drive curve. Using Alphacam on 5-axis machines means emphasis is placed on tolerances more normally associated with injection moulding.

Stone manufacturers use Alphacam for 3- and 5-axis machines and robots producing sinks, shower bases, stairs and other building constructions, along with religious images and bas-relief sculptures.

An additional string to Licom’s bow is working with other Alphacam resellers writing post processors and macros for Italian machine tools that are sold worldwide. They have also developed their own automatic production management system ‘Gestione Produzione Automatizzata’ (GPA). “This is an application we wrote in VB and .Net to use Alphacam as a full automatic processing system, reducing any potential bottlenecks from the order right through to production.”

Marco Silva says their wood and stone customers find it particularly useful. “With GPA they can read and machine solids automatically. GPA is programmed using a set of more than 100 macros to read dxf files, apply parametric geometries, read the parameters from the SQL database, carry out nesting if necessary, apply toolpaths and output NC files automatically.”

He says that while Italy is a mature CNC market, there are still major opportunities for growth, including orders from the OEMs using Alphacam who are exporting their machines worldwide, especially to the Middle East, the Emirates and North America.

“Also, many small to medium size companies realise they must invest in software and efficient production processes to survive in the current difficult economic climate, and Alphacam can be used to drive machines from all manufacturers.” It is proving especially popular for 5-axis machines and for companies wanting to automate as much of their manufacturing process as possible to cut costs and improve efficiency.

Licom is playing its part in helping the Alphacam R & D team’s ongoing enhancements to provide solutions that he says no other software can. “As we see users regularly, we readily understand their specific requirements and pass them on to the developers for inclusion in the twice-yearly updates.”

The company started life as Sycam in April 1992, later becoming a reseller for Alphacam’s forerunner, Licom. In 1995 they became a subsidiary, and decided to maintain the Licom name in Italy when the software rebranded as Alphacam. Marco Silva runs the company with Giovanni Pichioldi, and they employ a total of 13 staff.

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### ***Visual 2000 On-Demand Training Solution Connects with Busy Fashion Companies***

9 March 2012

[Visual 2000 International Inc.](#) announces a new Visual 2000 On-Demand Training solution that provides clients with priority access to exclusive, remote training classes focused on their specific needs. Subscribers to the new premium service can invite Visual 2000 training professionals to remotely and securely access their ERP, PLM, or other Visual 2000 software solutions to deliver hands-on education

on any functional aspect of the fashion-focused software. The convenient, individualized training program is designed to help apparel and fashion companies maximize their system investments and improve personal and overall business productivity.

The On-Demand Training program is available to all Visual 2000 clients through a monthly subscription plan. For a flat fee, subscribers may schedule up to three hours of online training per month for an unlimited number of employees. Subscribers receive priority access to Visual 2000 resources with training requests served in the order they are received.

Visual 2000 customers may inquire or subscribe to the On-Demand Training program by contacting their local customer service center. Subscription fees can be paid separately or added to standard maintenance invoicing.

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## Events News

### ***Bimba Shows Off New 3D CAD Product Configurator Powered by PARTsolutions on iPad at the National Fluid Power Association Conference***

9 March 2012

[Bimba Manufacturing](#) presented their new online 3D CAD product configurator and catalog powered by [PARTsolutions](#) at the [National Fluid Power Association Annual Conference](#) March 8, 2012 in Kohala Coast, HI. Bimba showed the audience of executives how they are using technology as a competitive advantage, using an iPad to demonstrate 3D CAD product catalog and configuration capabilities.

Bimba's new 3D digital parts catalog empowers design engineers to access and configure high-quality product data and 3D models that can be instantly downloaded in more than 150 native and neutral CAD and graphic formats. Bimba selected PARTsolutions based on its expertise, ease of use, stunning visual graphics, as well as its ability to provide native CAD file formats that run across multiple web browsers, devices and CAD systems.

[Click here](#) to view a video of the Bimba 3D configurator in action.

PARTsolutions recently joined the National Fluid Power Association (NFPA) to show their support for an industry to which many of its customers belong.

PARTsolutions joins the NFPA as a Service Supplier Member, comprised of companies that sell fluid power components and materials, or provide business or other essential services to the industry.

Other presenters at the four day conference included Ken Gray, Global Product Manager at Caterpillar; John Caslione, President and CEO of GCS Business Capital; and Haiyan Wang, Founding and Managing Partner of China India Institute. These speakers were carefully chosen by NFPA to appeal to executives across all spectrums and to address a variety of unique business strategies.

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### ***CD-adapco's STAR Global Conference 2012 Has Sold Out***

6 March 2012

With only a couple weeks to go, CD-adapco has completely sold out its STAR Global Conference 2012.

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The overwhelming response to this event is due to a few key factors.

- There will be an Keynote presentation given by Phil White, co-founder of Cervélo
- The conference agenda includes over 50 presentations from industrial leaders like Airbus Military, Lockheed Martin, BMW, Mercedes-Benz, Ford, Nissan, Atkins, MSi Kenny, Tetra Pak, Wärtsilä, Behr, Ford, and Magna Powertrain, each of whom will reveal the secrets of their engineering successes
- Over 20 industrial technology partners and sponsors are attending
- CD-adapco's engineering simulation specialists, developers and management will also be on hand to meet and network with attendees.
- The conference will include an open discussion with a specially selected panel of experts including analysts, media and innovative industrial users.
- Training & Workshops
  - STAR-CCM+ v7 Orientation Training
  - Best Practices in Turbulence and Heat Transfer Modeling
  - Best Practices in Meshing and Surface Preparation
  - ICE (Internal Combustion Engines)
  - Chemical (DARS)
  - Battery Design
  - Electric Motors
- Attendees will receive a Power-on-Demand license that allowing them to run STAR-CCM+ on an unlimited number of cores for 100 hours.

Be sure to register early for next year's STAR Global Conference 2013 which is being held at the Sheraton Lake Buena Vista in Orlando, FL, USA on March 18-20.

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## ***CENIT Hands-on SAP PLM 7.02 Workshop***

March 2012

Join CENIT for an opportunity to learn about the new SAP PLM 7.02 release in a hands-on, 2 day workshop at their offices in Auburn Hills, Michigan. Discover the new approach to document, material, and BOM management for discrete industries.

Let their experts guide you through key innovations in PLM 7 such as:

Web-based user interface and object navigation

Engineering Change Management with Engineering Record

Advanced functions: Cross-object lifecycle status management, BOM Redlining, Document Browser, Product Structure Management (PSM) and Product Structure Synchronization (PSS)

SAP Visual Enterprise solutions (formerly Right Hemisphere)

PLM 7 add-on tools for complex workflow and process management

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You will be able to explore and work in a live SAP PLM 7.02 system for the duration of the workshop.

**When:** March 28 - 29, 2012

**Where:** Auburn Hills, Michigan

**Early registration fee:** \$680 (Regular Fee \$980)

[Register](#)

See [event home page](#) or contact [Paul Cassidy](#) for further details.

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## ***Delcam to Launch New Orthotics CAD/CAM Software and Scanner in Leipzig***

9 March 2012

Delcam will launch a new version of its design software for custom orthotic insoles developed specifically for accommodative orthotics, plus a more portable foot scanner, at the Orthopadie exhibition to be held in Leipzig from 16th to 18th May. In addition, the 2012 versions will be launched of the company's OrthoMODEL Pro software for the design of corrective orthotics and foot-positive patterns, and its OrthoMILL software for the automated machining of all types of orthotic insoles.

The new "real-time design" version of OrthoMODEL for accommodative orthotics will benefit practitioners treating patients with diabetes and clients needing comfort insoles produced from EVA and similar softer materials. It has been developed principally to meet the increased need for orthotics to provide proactive care of the feet of diabetic patients. Insoles give pressure relief across the foot, so improving patient outcomes and limiting treatment costs by reducing the risk of ulceration and eventual amputation.

With such clear medical and economic arguments in their favour, the manufacture of insoles for diabetic patients is seeing a large increase in demand as the spread of the disease is reaching epidemic levels. The volumes now required can only be met through the application of modern CAD/CAM technology in place of the traditional process using plaster casting.

With its more specific focus, the new version of OrthoMODEL is even easier to use than the previous more generic software. The design of the orthotic is created automatically from the prescription and the scan of the foot. Sculpting, cuts and additions, such as met domes to provide relief for ulcerated regions, can be added at any stage. The complete design can be visualised and modified in real time as the prescription is input so that the practitioner or laboratory can be sure they are happy with the shape being generated before it is sent for manufacturing.

The new scanner, to be called the iQube mini, will also benefit practitioners by providing a more portable device than Delcam's current iQube model. The new model weighs less than six kilos, within dimensions that are acceptable as airline carry-on luggage.

The new device is accurate to less than 100 microns and very quick, with a typical scan taking between three and five seconds. It is supplied with an adaptor bracket so that it can be used for weight-bearing, semi-weight-bearing and weight-off measurements, with a suitable stand, such as a tripod or many standard VESA television mounts.

As with all of Delcam's products for the orthotics industry, the new software and scanner have been developed in association with Delcam customers from laboratories, podiatrists and orthotists around the

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world, coupled with Delcam's knowledge of footwear design and manufacture gained from its relationships with leading brands such as Nike and Reebok.

Both the new software and the new scanner are fully integrated into Delcam's Order Manager workflow management system to provide both practitioners and manufacturing laboratories with a simple method for tracking the progress of orders from patient consultation to delivered insole.

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## ***Delcam to Show Easier Inspection Software at Control***

6 March 2012

Delcam will demonstrate the 2012 release of its PowerINSPECT inspection software at the Control exhibition to be held in Stuttgart from 8th to 11th May. The new version includes a number of extra options to make inspection easier, plus the addition of basic reverse engineering functionality to the point-cloud module.

PowerINSPECT combines the ability to work on all types of inspection device with a comprehensive range of measurement routines for making simple measurements, for inspecting geometric features and for checking complex surfaces. The resulting reports present detailed information in easy-to-read formats that can be understood by all engineers, not just inspection specialists.

One option in the 2012 release offering significant time-savings, as well as improved ease of use, is the new mirror command that has been added for symmetrical components. This allows the inspection sequence to be mirrored from one half of a component to the other half, or from the left-hand version of the design to the right-hand copy. The new feature also reduces the possibility of programming errors and improves the consistency of the results between the two halves or parts.

The range of dimensions that can be displayed on the model has been increased to include more types of distance, angles and diameters, and radii. The options to display the various dimensions from the increased range have been made more versatile, to ensure the reports remain easy to read with only the required dimensions shown.

There are two important additions to the PowerINSPECT 2012 point-cloud module for laser scanners and other point-cloud devices. STL export provides basic reverse engineering functionality for scanned data. The STL files can be used within Delcam's PowerSHAPE Pro design software for more advanced reverse engineering operations. Point-cloud display has been enhanced with an option to show any back-facing points in a second colour. This highlights any discontinuities in the data, including gaps or other problem areas, and so makes it easier to identify areas that may need re-scanning to capture the complete model.

Of more general benefit is the ability to measure edge points directly; it is no longer necessary to measure the surface first. This makes the process both easier and faster. However, it is recommended that both the edge and the surface should be checked if there is any likelihood of the part being distorted, for example, when checking sheet-metal components.

The inspection of castings and forgings, and similar near-net shapes, has been improved with the addition of a new best-fit option. This centres the component within the measurement data collected with PowerINSPECT so that the largest possible minimum stock is located around the part. It ensures that positive material exists in all areas of any semi-finished part before it is sent for further machining. The option can be used in combination with the PartAligner software to minimise set-up times.

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A number of enhancements have been included to give faster and easier programming, with less chance of errors. A new “lock workplane” option automatically creates a datum scheme within PowerINSPECT’s GD&T True Position, matching the part’s coordinate system, while standard tolerances for Limit and Fit to ISO 286 and ISO 2768 have been included so that they can be selected from a pre-defined list.

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## *Distinguished Speakers to Provide Insights on Advanced Computational Design at SmartGeometry 2012 Conference*

8 March 2012

Bentley Systems, Incorporated announced that registration is now open for the SmartGeometry 2012 Conference. This widely acclaimed conference is the world’s premier event focused on computational and parametric design tools, technologies, and methodologies that allow and encourage new forms of architectural and structural expression. The conference takes place March 23-24, 2012, at Rensselaer Polytechnic Institute (RPI), in Troy, New York, and carries the theme “Material Intensities – Simulation, Energy, Environment.” Among this year’s many distinguished speakers providing insights on advanced 3D design are Enric Ruiz-Geli, director, Cloud 9 Studio; Robert Hull, Department of Material Science and Engineering, RPI; Manfred Grohmann, Bollinger+Grohmann Engineering; Perry Hall, visual artist and musician; and Evan Douglass, dean of the School of Architecture, RPI. For additional information about the conference and to register, visit <http://www.SmartGeometryConference.com/2012>.

The SmartGeometry 2012 Conference includes:

**“Talkshop” Day, March 23** – Through a series of panel discussions, this interactive first day provides an opportunity to share with tutors and participants critical reflection on the advanced design work of the previous four days during the SmartGeometry 2012 Workshop companion event. The hands-on workshop is being held March 19-22, 2012, at the Experimental Media and Performing Arts Center at RPI and is being hosted by RPI. It enables architectural and engineering professionals, academics, and students to explore this year’s challenge, “Material Intensities.” The challenge recognizes that the built environment comprises spaces and boundaries abundant with vibration, fluctuating intensities, shifting radiants, and flows, rather than inert constructions enclosing physically sealed spaces. It invites workshop participants to realize digital design prototypes infused with material behavior employing GenerativeComponents – Bentley’s generative design software.

**“Symposium” Day, March 24** – Day two includes insightful presentations by renowned experts on the theory and practice of computational and parametric design approaches. Annually, this is regarded as the world’s premier symposium on the interaction of new technologies, methodologies, and principles with design practice. The speakers will showcase major projects that explore the range of ways in which material informs design.

**Reception, March 24** – The conference ends with a social gathering celebrating the innovation, creativity, and leadership of the generative design community. It also provides an opportunity to view the work developed during the four-day workshop.

Commenting on this year’s conference agenda, SmartGeometry Director Xavier De Kestelier said, “The yearly SmartGeometry event combines an active workshop environment with two days of dynamic presentations and debates on how computational design impacts the built world. Every year SmartGeometry evolves by setting ourselves a new challenge; this year’s challenge, entitled Material

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Intensities, strives to energize our digital prototypes and infuse them with material behavior through simulation and a focus on energy and environment. By combining the worlds of practice, industry, and academia, all engaged in active design and research, SmartGeometry events continue to push the boundaries of design and computation through leading-edge developments and discussion.”

For additional information about, or to register for, the SmartGeometry 2012 Conference, visit <http://www.SmartGeometryConference.com/2012>.

## About GenerativeComponents

Empowered by computational methods, the designers can direct their creativity to deliver inspired, sustainable, better-performing buildings that are freer in form and use innovative materials and assemblies. GenerativeComponents facilitates this by allowing the quick exploration of a broad range of “what-if” alternatives for design components ranging from conventional building elements such as curtain walls, paneling, and stairs to overall building configurations and form for even the most complex buildings.

Among the leading architects and engineers around the world already taking advantage of this generative design software are Arup, BDP, Buro Happold, Foster + Partners, Grimshaw Architects, Henning Larsen Architects, HOK, KPF, Lem3a, Morphosis, PLP/Architecture, Populous, SHoP Architects, Snøhetta, Stantec, UNStudio, and Zaha Hadid Architects. GenerativeComponents is available for download at no cost at <http://www.bentley.com/gc>.

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## ***Ferrari Formula 1 Show Car to be Showcased at Inforum 2012***

8 March 2012

[Infor](#) announced that the 2012 Ferrari Formula 1 show car will be on display in the [Inforum 2012](#) Exhibit Hall to help support the key conference theme of "engineered for speed."

The Ferrari F1 show car will provide conference attendees with a great photo opportunity and the chance to win Grand Prix tickets. Infor recently became an official supplier of the [Scuderia Ferrari](#) race team. As a result, the Infor logo will be proudly displayed on the Ferrari F1 show car appearing at Inforum 2012 and on the official race car competing on the Grand Prix circuit.

"Nothing conveys the message of speed better than Ferrari and Formula 1," said Charles Phillips, CEO of Infor. "Enterprise software users are asking for faster deployments, quicker time to value, and speedier upgrades, and the Ferrari F1 show car represents what we are now delivering to the market in the form of innovative software and technology that make up our Infor10 release."

The Ferrari F1 show car will be on display in the center of the exhibit hall in front of a massive video wall, where exclusive footage of a Ferrari F1 driving experience will help attendees feel the power and thrill of accelerating up to 200 mph on a Formula 1 race course.

Inforum 2012 is the shared event for Infor and Lawson customers taking place April 22-25 at the Colorado Convention Center in Denver. The conference will deliver more than 700 educational sessions for Infor and Lawson customers, while the exhibit hall will showcase the companies' latest products and give attendees the chance to test drive many of those products.

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## *Geomagic CEO, Ping Fu, to Present Technology and Fashion at SXSW*

6 March 2012

Geomagic® announced that CEO, Ping Fu, an expert in 3D imaging technologies, will be leading a presentation on Technology and Fashion at SXSW 2012, March 9-13, 2012 in Austin TX. Joining Ping for the presentation will be three leading clothing innovators: Alison Lewis, founder of [Agent of Presence](#), Janet Hansen, Chief Fashion Engineer at [Enlighted Designs](#) Inc., and Sheridan Martin, senior UX designer at Microsoft.

This engaging session will show the language of art and design expressed through the intertwining of technology and fashion. Actual examples of wearable technology will be on display during the event, which use recent and new technologies to make amazing clothes: face masks that are a perfect fit using 3D scanning, 3D printed shoes, clothes that display carefully designed lighting as art and 'print' words from Twitter and other sources interactively on the fabric. This session highlights a few of the amazing things that can be done when technology is combined with creativity. The Technology and Fashion presentation will debut at 11:00 am at the Driskill Hotel Ballroom on Monday March 12, 2012. ([http://schedule.sxsw.com/2012/events/event\\_IAP100180](http://schedule.sxsw.com/2012/events/event_IAP100180))

Janet Hansen of Enlighted Designs specializes in the artistic integration of electronic lighting with fabrics, using LEDs and EL wire as decorative elements. A former rocket scientist, she has been creating custom illuminated clothing and costumes for nearly 15 years. Her pieces are used by a wide range of professional entertainers, including pop stars, DJs, dancers, magicians, and team mascots.

Alison Lewis recently founded Agent of Presence. To showcase how data can be used to connect us and be beautiful, she is presenting a dress that lights up with the wearer's [heartbeat](#). Her prior work includes a [blog site](#) that features many DIY and instructional articles on how to create electronically infused fashion and home accessories, showing how technology can be harnessed to ignite a tech spark in the DIY and fashion design communities.

Sheridan Martin will be showing a beautifully crafted "Printing Dress" which displays LED signals as well as lit words from a Twitter account or other sources across the dress. In this dress, everything is functional from buttons to the hem. (<http://www.microsoft.com/presspass/Features/2011/aug11/08-03printingdress.mspx>).

Perfect-fit 3D face masks, arm pieces and 3D printed shoes will also be featured by Ping Fu, demonstrating the power, potential and beauty of the 3D 'capture, modify, make' environment that has been evolving in recent years.

"This presentation is about understanding how far technology has come and how it already affects our environments in beautiful ways," said Ping Fu, CEO, Geomagic. "But it is also about the future, the potential. How the impossible is becoming possible and can be expressed through many artistic forms including fashion."

"Electrically infused fashion used to be exclusively for stage shows and special showcases," said Alison Lewis, Agent Of Presence. "By making electronics part of the aesthetics of fashion, we can make it available for the masses to enjoy and use. The future is changing so that we can all fit in this new space."

Ping and her co-presenters are coming together for the first time to deliver a demonstration of current technologies and a glimpse into the future. At the same time, they hope to inspire females into design, engineering and science fields through their work.

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Continued Ping, “This presentation shows that engineering and science technology can be used to successfully create beautiful expressions of art just like you will see during this event, with presenters who embody fun, technology, art and fashion. We hope it will encourage more people to consider how technology can be used in creative, compelling ways.”

Geomagic is also a founding member of the Entrepreneurial Alliance of the National Center for Women and Information Technology ([NCWIT](#)) which is hosting events throughout SXSW at the [Moonshine Grill](#) in alliance with Turner Broadcasting Inc. NCWIT is a community of over 300 companies, universities and non-profits throughout the USA that work together to increase diversity in IT and computing fields. Attendees will be able to see and talk with Ping Fu at the NCWIT location as well as find out more about how diversity in engineering and scientific fields can strengthen companies’ performance.

The Technology and Fashion presentation will debut at 11.00 am at the Driskill Hotel Ballroom on Monday March 12, 2012. ([http://schedule.sxsw.com/2012/events/event\\_IAP100180](http://schedule.sxsw.com/2012/events/event_IAP100180))

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### ***Gerber Technology to Attend Texprocess Americas Show***

6 March 2012

Gerber Technology's highest priority at Texprocess Americas is its focus is entirely on overcoming customers' challenges.

Sam Simpson, vice president of Global Sales for Gerber Technology, explains, "We understand that individuals attend Texprocess Americas because they have business challenges they're determined to resolve. We would like to dedicate our time at Texprocess to understanding these challenges and exploring options because we're confident we can help – as we've helped thousands of others confronting similar challenges."

Gerber has a suite of automation solutions to draw upon – from computer-aided pattern design systems and product lifecycle management software to precision spreading and cutting systems. These solutions enable users to maximize productivity and material utilization, minimize labor costs, ensure product quality and accelerate time to market.

The company's North American sales team has more than 300 years of combined experience – serving customers in every sewn and flexible materials market imaginable. Aerospace. Apparel. Retail. Composites. Furniture. Technical textiles. Transportation interiors.

And its network of agents and distributors supports customers in more than 130 countries – with knowledge of local issues and regional markets.

Sales, product and applications specialists from Gerber Technology invite visitors to Texprocess Americas to communicate their challenges in an open forum or one-on-one.

Texprocess Americas takes place April 24-26, 2012 in Atlanta, Georgia. Stop by to speak with Gerber Technology personnel in **stand 3041**.

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## ***GO2cam 5-Axis CAM Showcased at Industrie Paris***

7 March 2012

CAD/CAM vendor GO2cam International is now delivering a comprehensive CAD/CAM solution including 5-Axis strategies to its customers. This CAD/CAM software will be showcased at the upcoming Industrie Paris manufacturing exhibition from 26-30th March 2012.

GO2cam International has partnered with ModuleWorks, a supplier of CAD/CAM components, to provide state-of-the-art 5-Axis machining technology to its customers. The new release of GO2cam features the full range of ModuleWorks 5-Axis strategies integrated with the new GO2cam CAD/CAM product. Strategies include multi-pass roughing, swarf, Contouring, Flowline and 3>5 Axis conversion to provide a powerful set of flexible 5-Axis tools to meet all machinists' needs.

Mathilde Borel, Marketing Executive for GO2cam International, comments "We have seen increasing demand for 5-Axis machining and by partnering with ModuleWorks we've been able to complement our existing machining strategies with ModuleWorks' comprehensive range of 5-Axis toolpaths. Time to market has been very quick and customers are already seeing the benefit. It's a win-win all round."

David Plater, Technical Director for ModuleWorks adds "We're delighted to have a new partner, GO2cam International. ModuleWorks will participate at Industrie Paris and will show the new 5-Axis module of GO2CAM. It highlights the benefits of the partnership with ModuleWorks, delivering industry proven technology to customers in a short period of time."

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## ***LFM User Meeting - USA 2012 Date Announced***

8 March 2012

AVEVA announced LFM Software will hold its User Meeting – USA 2012 at The Woodlands Waterway Marriot Hotel and Convention Centre, near Houston, TX on Thursday 19 April following SPAR 2012.

"The LFM User Meeting is a forum for users to Learn, Feedback and Meet", comments Gary Farrow, VP 3D Data Capture Business Management, LFM Software. "It provides new customers from a range of backgrounds and industries, with a valuable opportunity to learn about the innovative new 3D laser scanning solutions that LFM can offer. Participants will gain insight into best practices and learn about advanced new features of LFM, designed to improve efficiency and productivity in the field".

Farrow further adds, "In addition a customer feedback session will allow users to share their experiences of LFM laser scanning software and to provide their suggestions for future development. This is also a great opportunity to network with peers and industry leaders from around the globe".

The agenda includes presentations on:

- AVEVA's recent acquisition of LFM Software
- An LFM overview and demonstration to attendees how users' feedback has been implemented in the new software release
- The most significant changes to the LFM suite and the key aspects of the latest release of LFM.

**Event details:**

# CIMdata PLM Industry Summary

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Thursday 19 April 2012 8.30am-5.00pm

The Woodlands Waterway Marriot Hotel and Convention Centre, near Houston, TX

**To register:** visit <http://www.lfm-software.com/usermeeting>.

LFM is a 3D laser scanning software package, which is relevant throughout the laser data and asset lifecycle. LFM is hardware and software vendor neutral. It accepts data from all 3D laser scanners and exports to 3D integrated plant design systems CAD and Review platforms. To learn more visit <http://www.lfm-software.com/>

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## ***Presentation of the ProSTEP iViP Initiative "Codex of PLM Openness" on March 08, 2012***

7 March 2012

The ProSTEP iViP Association will present at the IT-Congress automotiveDAY (CeBIT, Hannover, Germany) on May 8th, 2012 at 17h45 the Codex of PLM Openness (CPO) for establishing a common understanding on openness of IT systems in the context of Product Lifecycle Management (PLM). Speaking on behalf of the initiative will be Elisabeth Hoeflich (CIO Continental AG) and Karl-Erich Probst (CIO BMW Group). Aside from Continental AG and BMW the IT users and IT providers Daimler, Dassault Systèmes, IBM, Oracle, PTC, SAP, Siemens PLM Software, T-Systems and Volkswagen were involved in developing the CPO.

Please find detailed information for interested companies at <http://www.prostep.org/en/cpo.html>

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## ***Radan to Exhibit at WESTEC 2012***

9 March 2012

Radan is demonstrating the benefits that it brings to the sheet metal fabrication industry at WESTEC 2012, taking place March 27 – 29, 2012, at the Los Angeles Convention Center, Los Angeles, California.

Along with showcasing enhancements and additional functionality contained in the latest release - Radan 2012 R1, visitors to **booth #3022** will see how Radan plays a vital role in helping manufacturers gain the most from their machine tool investment.

As a leading CAM software for sheet metal fabrication, Radan drives punching, profiling, nesting and bending functions for machines from a wide range of manufacturers. Radan can process entire assemblies or individual parts without file transfer, automate the programming of CNC press brakes, provide vital collision detection and design verification, and ensure peak machine efficiency. Radan assists customers in increasing their material utilization and reducing inventory, while providing a significant return on investment.

Radbend, which is Radan's solution for offline press brake programming will also be on display in **booth #3022**. Generating accurate bend allowances means Radbend ensures that all bending is totally accurate and repeatable. The software gives manufacturers full, accurate 3D model simulation of the bending process, including advanced features such as automatic bend sequence calculation, automatic tool selection and automatic finger-stop placement, offering simple programming and high productivity.

# CIMdata PLM Industry Summary

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As it programs and verifies bending operations offline it frees up valuable machine time and improves first-off reliability, reducing manufacturing costs. Many customers use it extensively to prove out prototypes. Costly mistakes are also eliminated with automatic detection of collisions both with the tooling and the machine tool itself.

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## ***SPRING Technologies with SICOM Nominated for INNOVATION Awards 2012 at Industrie Paris 2012***

29 February 2012

SPRING Technologies is a major player in the market for simulation and optimization software dedicated to production processes and resources. It is one of five companies that have just been shortlisted in the "Productivity" category of France's Trophées de l'Innovation INDUSTRIE 2012 award.

The selected product is its new solution called **SICOM** (Scalable and Interoperable Corrective Maintenance).

On February 13 2012, a jury of leading trade journalists specialized in a range of industrial sectors examined 128 submissions before shortlisting 19 innovations in 5 categories (environment, ergonomics, productivity, technologies and safety/security). The innovations will be competing for the Trophées de l'Innovation INDUSTRIE 2012 award and 5 of the 19 companies will be spotlighted on Tuesday March 27 at the exhibitors' gala evening at Salon Industrie, Paris-Nord Villepinte.

### **SPRING extends NCSIMUL SOLUTIONS with SICOM**

SPRING has unveiled SICOM, a solution that delivers real-time management of corrective maintenance processes in the machining workshops, while enhancing their performance.

SICOM is instrumented, interconnected and intelligent, enabling real-time management and predictive optimization of corrective maintenance processes, minimizing NC machine-tool downtime and reducing the amount of time spent on maintenance operations.

More details will be announced shortly.

### **CEO Gilles Battier says**

"We are proud to have been nominated in the 'productivity' category, because this is the area where we make our n 1 commitment to our customers. For over 25 years, innovation has been a core concern and our credo has always been about helping our customers to increase their productivity. Every year, we invest 20% of revenue in R&D. SICOM is the result of this research and our strong investment in the SYSTEMATIC competitiveness cluster. So it is very satisfying and logical for this groundbreaking software to be nominated for an award that recognizes the capacity to innovate".

For more information, visit [www.springplm.com](http://www.springplm.com)

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## ***SURFCAM 6 to Be Unveiled at WESTEC 2012***

1 March 2012

Surfware, Inc. will be demonstrating the upcoming release of its flagship product, SURFCAM 6, at

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WESTEC 2012 this year taking place from March 27th - 29th, 2012 at the Los Angeles Convention Center.

Surfware is pleased to unveil this upcoming release of SURFCAM at WESTEC 2012 and invites you to stop by **booth #2920** where members of the SURFCAM Team will be on-hand to offer demonstrations of SURFCAM 6's functionality and many of the new features included in this version. Some of the new and features in SURFCAM 6 include:

- A 64-Bit Version
- New Tools and Materials Database Engine
- Faster Verification Technology
- Updated Interface
- Completely redesigned Help System
- Four new toolpath strategies
- Updated CAD translators (plus RHINO CAD translator now included)
- Updated and New Post Processors
- Updated Integration to FARO and MicroScribe Arms
- Newest Versions of editNC and SDNC included
- Enhanced TRUEMill toolpath calculator
- Refined TRUEMill toolpath algorithms
- Plus much more.

SURFCAM products have been installed on more than 26,000 systems worldwide over the past 20 years. In that time, SURFCAM has grown to support 14 languages and has gained an outstanding reputation for training and providing the highest level of technical support to its customer base.

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## ***WEBCAST: Aras EPLM for SolidWorks Enterprise PDM***

6 March 2012

Discover What Users, Media and the Engineering Community call a "Huge Gain for SolidWorks Users

Built on top of SolidWorks® Enterprise PDM, Aras EPLM™ extends the capabilities of SolidWorks EPDM with packaged functionality for corporate-wide PLM business processes.

Join them for this live webcast and see the newest features & functionality in Aras EPLM, including:

Enhanced SolidWorks Look & Feel

Item-based Multi-Level BOM & BOM Redline

Additional Enterprise Change Management Functionality

Classification for Parts, Documents and Items

Configuration Management

Approved Manufacturer / Vendor Management

Integrated Project Management

**Webcast:** What's New in Aras EPLM

Thursday, March 22nd - 11:00am Eastern Time

*REGISTER NOW* - Aras EPLM Webcast

<http://www.araseplm.com/webcast>

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## Implementation Investments

### *Autodesk Names Green Structures as Inventor of Year for 2011*

8 March 2012

Autodesk, Inc. has named Green Structures as the Autodesk Inventor of the Year for 2011 for developing the Ventive energy-efficiency system that is ideal for building retrofits.

Members of the Autodesk manufacturing community from around the world chose the U.K.-based company by voting on the community website. Green Structures uses [Autodesk Inventor software](#) and a range of other [Autodesk Digital Prototyping](#) solutions to transform the way energy systems are planned, designed, constructed, maintained and operated within the built environment. The company was originally named Autodesk Inventor of the Month December 2011.

As a member of the Autodesk Clean Tech Partner Program — an initiative that provides Autodesk Digital Prototyping software to emerging and established clean tech companies — Green Structures is an innovator in passive heat recovery ventilation and thermal energy storage systems.

The firm's Ventive heat recovery ventilation system works with existing chimneys to channel air and heat. This system contrasts with current mechanical heat recovery ventilation systems, which require that complex ductwork be installed throughout an entire building. Ventive can be installed in less than 30 minutes, providing a far faster and less expensive alternative for retrofitting buildings with the latest green technologies.

[Green Structures](#) relies on Autodesk Inventor, as well as [Autodesk Ecotect Analysis software](#), [Autodesk Simulation Multiphysics](#) software and [Autodesk Revit Architecture software](#) in its product design and development. Access to Autodesk design and simulation technology provided a more controlled environment to test designs, helping to make the design process less costly, faster and with less guesswork.

### **Autodesk Simulation Software Saves Time and Money**

Green Structures accelerated the prototyping process for its Ventive heat recovery ventilation system through the use of Autodesk Simulation software to digitally simulate wind tunnel tests and perform heat transfer analysis, saving on physical testing costs of approximately \$1,550 (£1,000) per day.

Autodesk reseller Envisage helped provide training and support to enable Green Structures to more quickly implement Autodesk Digital Prototyping software in the design process.

### **About the Autodesk Inventor of the Month Program**

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Each month, Autodesk selects an Inventor of the Month from the users of Autodesk Inventor software, which takes manufacturers beyond 3D to Digital Prototyping. Winners are chosen for engineering excellence and groundbreaking innovation. For more information about the Autodesk Inventor of the Month Program, contact [IOM@autodesk.com](mailto:IOM@autodesk.com).

## About the Autodesk Clean Tech Partner Program

The Autodesk Clean Tech Partner Program supports the efforts, innovations and environmental advancements of clean technology pioneers, providing software to design, visualize and simulate their ideas through Digital Prototyping. Clean tech companies in North America, Europe, Singapore and Japan are invited to apply to receive up to \$150,000\* worth of software for only \$50. Access to a collection of Autodesk industry-leading software includes up to five licenses of Autodesk Product Design Suite Ultimate, AutoCAD Revit Architecture Suite, Autodesk Simulation Mechanical, Autodesk Inventor Publisher and Autodesk Vault Professional software. Get [more information](#).

## About Envisage

Envisage is a UK-based Autodesk reseller that supplies complete 2D and 3D CAD/CAM systems including hardware, networking and bespoke programming. For additional information, visit <http://www.envisageuk.com>.

\*Value is based on a package of up to five commercial licenses of each application.

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## ***BEIRENS Selects MSC Software's SimXpert to Develop Chimneys that withstand Wind and Earthquakes***

8 March 2012

[MSC Software Corporation](#) announced that BEIRENS, a leading manufacturer of chimneys for district heating, industrial processes and energy generation, has selected SimXpert, MSC Software's multidisciplinary simulation solution.

The company's principal objective is to validate a range of loading scenarios for chimney structures like wind or seismic activities, in compliance with the EUROCODE norm. In addition, BEIRENS plans to utilize MSC Software's solutions to further optimize their products by minimizing weight and production costs, and maximizing stability.

For more than 30 years, BEIRENS has been developing new products and manufacturing techniques to meet customers' changing requirements for improved quality and services with respect to environmental and health questions. Through significant R&D efforts, the company has been able to introduce new innovations into the market, for example the Gigogne chimneys, which combine several concentric flue liners for the evacuation of combustion gases with a minimal number of chimneys.

"The need to be compliant with the new EUROCODE norm, which requires manufacturers to validate a chimney's structure under seismic and wind conditions, was a principal reason for BEIRENS to invest in new simulation tools," explained Benjamin Laurent, responsible for product and project development at BEIRENS. "SimXpert, along with the MSC Nastran solver, allows us to achieve the results required in addressing the complex seismic analysis responses. We found that SimXpert was the best solution for our needs in terms of price and performance."

Engineers at BEIRENS not only use SimXpert for validation of their chimneys and integrated silencers

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under exceptional loads like earthquakes or explosions, but also to optimize the product structure, especially the behavior of contact parts in assemblies. After becoming trained in the software, they started to automate recurrent tasks like the definition of contact situations in assemblies, using the template functions in SimXpert. CAE expert Aurélien Jeanneton explains the benefits: "Meshing and simulation in SimXpert is significantly faster compared to our old application, and the results are much more accurate. We perform many simulations that we could not before."

"Manufacturing of industrial chimneys is a relatively small but highly competitive market with very strict health and safety regulations," says Kais Bouchiba, Senior VP EMEA at MSC Software. "For an innovative leader like BEIRENS, using the right simulation tools to develop new technologies and validate their compliance creates an important competitive advantage, and we are happy to help."

## About BEIRENS

With over 170 employees, BEIRENS designs, manufactures, installs and maintains free standing and self-supporting welded chimneys for district heating, industrial process and energy generation plants. In partnership with the CERIC Laboratory, the company also addresses the needs of the renewable energy sector, offering custom-made installations for biogas and biomass energy production. BEIRENS is part of the French POUJOLAT Group, Europe's leading manufacturer of metal smoke evacuation systems, which employs 1,400 people worldwide and is active in 30 countries.

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## *Cadac Organice Issues Case Study about Project Collaboration in SharePoint*

6 March 2012

Cadac Organice has issued a case study about Engineering Project Collaboration in SharePoint.

One of the main features of project-driven engineering industries is that companies collaborate in project teams. In the AEC project teams consist of architects and one or more engineering and construction companies. And in the owner/operator market, owners collaborate with EPC or EPCM contractors, sub contractors, vendors and suppliers.

To collaborate in project teams, it is very important that information is shared and exchanged in an efficient manner. But how do you efficiently share and exchange documents? How to ensure everyone has access to the right information? How to manage and control document distribution? How to ensure everyone is aware of their tasks? Collaboration requires a flexible environment for managing, sharing and exchanging information and documents.

It is not always possible to communicate with project partners in a uniform way. Some partners still depend on paper, for example due to legal reasons. Other partners are able to communicate through email, and exchange documents as an attachment or through FTP. And sometimes partners are able to collaborate fully digital in an extranet environment. Either way, you need to be able to support any form of collaboration with external project partners.

Cadac Organice has issued a case study about Engineering Project Collaboration in Microsoft SharePoint. The case study describes how project teams are able to manage and share documents with internal disciplines and external partners. It describes how documents can be exchanged on paper, through email or extranet collaboration, in line with individual requirements, capabilities and contractual relationships.

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The case study about Engineering Project Collaboration is available for download from <http://www.organice.com>.

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## ***CDS CAD Download Solution Now Live on Boca Bearing Company Website***

6 March 2012

CDS (Catalog Data Solutions) announced that the [Boca Bearing Company](#) website now incorporates the CDS CAD download solution.

Boca Bearing Company, headquartered in Boynton Beach, FL, is one of the most trusted names in ceramic bearing and lubrication technology. "Our customers have been demanding downloadable CAD models of our products and we're delighted to meet that demand and save designers time," said Jason Flanzbaum, Vice President, Boca Bearing Company. "Our website is now a key sales tool not only to enable customers to quickly find the 'right' product, but equally importantly, to help customers 'design-in' our products by offering CAD downloads that simplify the process. After evaluating several vendors, we chose the [CDS ModelServer](#) SaaS solution for its flexibility, adaptability and configurability."

CDS helps industrial suppliers and distributors grow sales and strengthen customer loyalty through interactive online product catalogs, ecommerce, 3D CAD model delivery and product configurator solutions.

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## ***CONTACT Software Italia Wins Betamotor as New Customer***

5 March 2012

CONTACT Software Italia has won one of Italy's renowned motorbike manufacturers as new customer. Betamotor S.p.A, based in Rignano sull'Arno near Florence, is known around the world for its off-road vehicles marketed under the BETA brand. More than 70% of annual production is exported abroad; the brand has become something of a synonym in the trial sector. The company decided to combine its changeover from Pro/Engineer Wildfire to PTC's Creo with a long-term improvement of its product development process (PDP). In order to better support this process, the existing team data management system is to be replaced by CONTACT's workspaces technology and the PDM/PLM platform CIM DATABASE.

Betamotor will implement CIM DATABASE as the leading system for process management, making valid and secure CAD data, product documents and parts lists available throughout the company. The CONTACT workspaces will enable the motorbike manufacturer's development team to work together in an autonomous, synchronised and more efficient manner. The major benefit to the design engineers is that they can run through various product options in their CAD system during the early PDP stages, with no unnecessary administrative overhead. At the same time, data management is made considerably easier thanks to the Workspace Manager's extensive support functions for reconciling data with the central PDM/PLM backbone. "Developers are the guarantors of a company's innovative potential," says Dr. Silvio Giancaspro from CONTACT Software Italia. "And Betamotor sees us as the best partner to support their engineers' needs."

Betamotor has been closely linked to the development of the motorcycle throughout its history. Founded

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in 1904 as an artisanal bicycle producer under the name "Società Giuseppe Bianchi", the company developed into a genuine motorbike manufacturer during the 40s, as the world became increasingly motorised. The BETA brand, from the initials of the two partners Enzo Bianchi and Arrigo Tosi, was used to market the motorbikes from then on. This specialisation has led to a consistent dedication to competitive events, the ideal testing facility for developing Beta bikes: first of all in motocross and enduro, followed later by the trials sector, as well.

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## ***EPIC GROUP to See Epic Growth in TUKATECH Partnership***

2 March 2012

Tukatech announced that Epic Group, one of Asia's most prominent garment manufacturers, has converted all of their CAD systems to Tukatech's TUKAcad. Epic Group has a reputation for utilizing advanced techniques and cutting edge technology to produce highly technical garments for a global customer base.

Based in Hong Kong, Epic Group was founded in 1971 and has manufacturing facilities in Bangladesh, Vietnam, and Sri Lanka. Epic Group produces over 4 million garments each month, many of which are treated at the company's in-house facilities that specialize in wet and dry processing, embroidery, printing and wrinkle-free post-cure treatments. CEO Ranju Mahtani and his team have focused on developing and improving the science and technology of garment production, and believe that switching to TUKAcad was the next logical step in operating cutting edge production facilities.

Epic Group until recently, utilized garment production software from Lectra, Gerber, Assyst, Optitex, and Morgan. Ranju Mahtani, the CEO and founder, Dinesh Virwani, Managing Director, and the rest of the leaders at Epic Group decided to convert all of their systems to Tukatech's TUKAcad.

TUKAcad's 2012 edition will give Epic Group's pattern makers the ability to build accurate patterns, calculate and make adjustments for shrinkage, verify grade on the blocks, verify measurements as per requirements, make corrections and alterations to existing patterns, and better utilize fabric during the marker making and cutting processes. TUKAcad 2012 is also fully integrated with TUKA3D, Tukatech's standard setting three-dimensional garment designer and fit simulator. Epic Group has many facilities around the world, (CIPL, EGMCL, Epic Vietnam, and PGCL) and by replacing the multitude of CAD systems previously in place with TUKAcad, the company has instituted a standard software throughout their operation, improving both communication and compatibility between each unit.

"Tukatech's staff members were very cooperative during the installation process, and provided overall guidance and suggestions for our cutting room," said Virwani. "While our installation process is still continuing, we have already seen our pattern makers more than double the number of patterns they can produce in one day."

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## ***From Engineering Success to Cycling Victory: STAR-CCM+ and the Cervélo S5***

6 March 2012

Perhaps more than any other sport, top-level cycling is dominated by aerodynamics. Drag makes up 80-90% of the resistance experienced by an average rider on a flat road. 80% of this drag is due to the rider,

with the remaining 20% down to the bicycle itself.

Since 1995, Cervélo's mission has been to produce lighter, stronger and more aerodynamic cycles using the most advanced technology in both engineering and manufacturing, with the aim of helping their customers win races. The S5 is the most advanced aerodynamic road bicycle ever developed by Cervélo. Inspired by the demands of the world's top pro riders, the S5 deploys everything Cervélo has learned in 16 years of aerodynamic design and is based on extensive wind tunnel testing and Computational Fluid Dynamics simulation.

This new video looks behind the scenes, and examines the extensive role that CD-adapco's STAR-CCM+ CFD software played in the design and testing of the S5, backed with extensive computer resources provided by Intel and R Systems. Cervélo's engineers carefully simulated each component on the S5, looking for ways to minimize aerodynamic drag. Each small reduction in drag allows the cyclist to ride faster for the a given energy expenditure – which over the course of a race can deliver the vital seconds that turn failure into victory.

Designed around the principle of automation, the overriding goal of STAR-CCM+ is to empower engineers, like those at Cervélo, to concentrate on engineering analysis, freeing them from the repetitive routine tasks traditionally associated with preparing and running simulations. This cooperative and integrated approach allowed Cervélo engineers to focus their time on generating a constant stream of useful information to guide the design process, ultimately resulting in faster, more innovative, and better engineered bicycles, which get to market first.

In the design of the S5, Cervélo ran simulations using the STAR-CCM+ Power-on-Demand licensing scheme on R Systems HPC resources powered by multi-core Intel processors. STAR-CCM+ Power-on-Demand allows users to run STAR-CCM+ simulations using an on-demand cloud computing service such as that available at R Systems.

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## ***GENPRO Significantly Increases Investment in AVEVA PDMS***

6 March 2012

AVEVA announced that GENPRO Engenharia S.A. has made a significant new investment in AVEVA PDMS software after achieving substantial engineering and business benefits from its existing implementation. A key reason for GENPRO's selection of PDMS is the software's ability to easily interface with other engineering disciplines, while delivering the highest possible production output. The result has been improved design quality and shorter project schedules, which has led directly to GENPRO's new investment in additional PDMS licenses. GENPRO will be using AVEVA PDMS on a number of large projects in the rapidly growing Brazilian chemical, petrochemical and nuclear sectors.

“AVEVA PDMS interfaced very successfully with our mechanical, piping, electrical and instrumentation applications, as well as other engineering disciplines. It has proven to be uncomplicated to install, straightforward to manage, and the training time for our engineers has been surprisingly short”, said Waldir Pimentel Junior, Corporate Systems Manager, GENPRO. “Much of our work involves large engineering contracts that have very tight schedules and we are unwilling to compromise on design quality as pressure on delivery and budgets increase. We were impressed with the new features within PDMS since they allow us to work faster while meeting our quality standards. A major selling point was the capacity for customization that allows us to create features for our own modelling requirements and methodology. To date, all of our projects using AVEVA solutions have been delivered

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on time, within the original budget, and most importantly, they meet or exceed our customer's quality standards. Further investment with AVEVA is an essential strategy for the overall growth of our business”.

“AVEVA PDMS was the first 3D engineering design system that GENPRO implemented. They have a great deal of project experience with our software, so this additional investment is a real vote of confidence in the benefits that PDMS brings to their business and in our close working relationship”, added Santiago Pena, Senior Vice President, Latin America, AVEVA. “GENPRO has integrated PDMS with their own Bill of Materials solution, in addition to applications from other vendors. We are always excited to see the different ways in which our technology is being implemented and customized by our customers. The GENPRO deployment provides another great example of how AVEVA's open solution approach can meet the individual business needs of our customers”.

AVEVA PDMS 3D design software is part of the AVEVA Plant portfolio. For further information visit <http://www.aveva.com/plant>

GENPRO Engenharia S.A. is located in São Paulo/Brazil with 1000 employees GENPRO large projects include Petrobras Premium I and II Refineries, REPLAN's Propylene Unit, Plant of POY-PET (Partially Oriented Yarn - Polyethylene Terephthalate) and LABGENE – Nucleoelectric Generation Laboratory for Brazilian Navy.



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## ***Global Financial Services Firm Increases Capacity 35% With EMC Documentum xCP***

7 March 2012

EMC Corporation announced that Viteos Capital Market Services Ltd. has significantly improved operational efficiency, achieved global industry compliance, reduced customer onboarding time, and expanded its business, gaining a 35% increase in transaction capacity by deploying [EMC® Documentum® xCP](#), an integrated platform for building dynamic business solutions and an action engine for Big Data.

### **Customer Benefits:**

- **Increased Efficiency and Capacity by 35%** -- As a result of deploying Documentum xCP, Viteos enhanced efficiency and capacity by automating its organizational processes to reduce paperwork and errors. Time to onboard new clients has decreased from months to weeks.
- **Achieved Global Industry Compliance** -- Automated enforcement of policies, process repeatability, and full audit trails enabled Viteos to reduce risk and achieve both regulatory and legal compliance in each country in which the company operates.
- **Significant Cost Savings via Paperless Environment** -- Viteos dramatically reduced operational costs by employing Web-based access and eliminating paper-based processes resulting in dramatic cost reductions, improved worker productivity, better decision making, and enhanced service levels across its global clients.

### **Customer Challenges and Solution:**

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Viteos Capital Market Services is a global fund administrator and operational outsourcing service provider to the alternative investment community, offering tailored solutions for hedge funds and institutional investors. With a global delivery model combining real-time technology with 24x7 operations worldwide, Viteos required a more robust and scalable information management infrastructure that would support its growing business, and extend its existing Microsoft SharePoint interface without disrupting its current users.

Viteos began working with EMC as part of a project aimed at improving operational growth, meeting regulatory compliance, and increasing efficiency. Viteos selected Documentum xCP as the back-end document repository and leveraged its existing SharePoint deployment as the front-end user interface providing transparency to its customers while saving time and costs associated with training.

Using Documentum xCP, Viteos was able to establish a standardized platform, which included EMC® Captiva® for integrated [enterprise capture](#), [business process management](#) (BPM), and document management, along with a broad feature set, enabling the company to address applications and processes in every area of the business. The solution, which is fully compliant with industry and legal regulations, also includes VMware for virtualization, reducing data center power and the number of physical servers.

## **Customer Quote:**

*K.B. Venkataramanan, senior vice president and CIO of Viteos*

"We were outgrowing our previous infrastructure and needed a solution that could automate repeatable manual processes, reduce paperwork, meet compliance standards, scale up or down to meet changing business environments – all while keeping costs down. Not only have we met all our goals with Documentum xCP, we have grown our business by 15 percent year over year."

## **Executive Quote:**

*Rohit Ghai, Vice President and General Manager, Content and Case Management Group, EMC Information Intelligence Group*

"EMC is pleased to work with Viteos to transform their operations. The financial services market is a key vertical market for us, as compliance, operational efficiency and delivering optimal customer service are key requirements. Global brands around the world rely on the EMC Documentum brand for meeting those and a variety of other needs. Increasing business transactions 35% and growing 15% year over year are impressive accomplishments; we're thrilled to play a part in the success at Viteos."

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## ***Korean Air Upgrades to Oracle E-Business Suite 12.1 and Adds New cMRO Functionality to Transform Its Operations***

5 March 2012

News Facts

[Korean Air](#), the largest airline in Korea and one of the top airlines in Asia, has implemented Oracle solutions, including [Oracle Complex Maintenance, Repair and Overhaul \(cMRO\)](#), and upgraded to the

# CIMdata PLM Industry Summary

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Oracle E-Business Suite 12.1 to update and expand its ERP system and help improve the efficiency of its aircraft maintenance.

Oracle cMRO, an aircraft maintenance application for transportation and defense operations, has enabled Korean Air to accurately forecast time and cost of maintaining and repairing its aircraft, based on real-time information, thus helping ensure planned maintenance is completed on time for the company's flight schedules. As a result, Korean Air has attained fewer disruptions to its flight schedules and more on-time departures.

Korean Air upgraded its existing Oracle E-Business Suite Financials, Supply Chain Management and Advanced Supply Chain Planning applications to the latest version to help integrate every aspect of its back-end operations.

Korean Air also integrated Oracle's Demantra Demand Management with Oracle cMRO. This system takes maintenance plans into consideration when developing material consumption plans. As a result, the company can precisely forecast the resources required to maintain its fleet of aircraft and keep mandatory components and parts available for repair work.

With Oracle Business Intelligence Enterprise Edition, Korean Air has been able to analyze the profitability of a flight within three hours after the departure by linking the financial, revenue, and management accounting systems. The automated accounting processes have reduced account closing times and enabled the airline to minimize risks while providing more accurate decision-making.

Since 2007, Korean Air has established advanced business infrastructure with the industry's broadest range of Oracle solutions including the Oracle E-Business Suite 12.1, Oracle Business Intelligence Enterprise Edition, Oracle Database, Oracle Real Application Clusters (RAC), Oracle Master Data Management Suite, and Oracle Fusion Middleware across finance, catering and aircraft maintenance.

Korean Air selected Oracle Consulting as the company's implementation partner.

As a result of the implementation, Korean Air expects work processes to be standardized, integrated and streamlined, thus significantly increasing the company's efficiency.

Korean Air has been an Oracle customer since January 2007. It went live on Oracle E-Business Suite 12.1 in January 2011.

## Supporting Quotes

“With the Oracle E-Business Suite and Oracle Complex Maintenance, Repair and Overhaul, Korean Air has greatly enhanced efficiency and productivity, reduced costs and generated more profit,” said Sangman Lee, CIO, Korean Air. “In order to differentiate ourselves from other leading airlines as the world's first-class airline, we have developed the best systems and IT environment.”

“In the airline industry, it is essential for a company to accurately forecast the time, resources and spare parts for maintaining its fleet of aircraft,” said Hannes Sandmeier, Vice President of Applications Development, Oracle. “In order to streamline work processes, attain fewer disruptions in their schedules and increase their on-time departures, Korean Air implemented Oracle Complex Maintenance, Repair and Overhaul, Oracle's Demantra Demand Management and the Oracle E-Business Suite. These improvements have increased Korean Air's efficiency, helping them generate more profit for the airline.”

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## *Radan Doubles Output for Aerospace Engineer*

7 March 2012

Radan CAD/CAM software makes a continuing impact on an aerospace company's bottom line, by halving the time to set up machining programs for its lasers and turret punches.

Kevin Travis, CAD/CAM Engineer with Swift-Cor Aerospace, says Radan also provides optimum material yield and minimum waste on cutting aluminium, stainless steel and titanium components for commercial jets and military aircraft, while giving him the confidence that every part will be completely accurate.

"Although our machines' factory stated capabilities are + or - .005 of an inch, driving them with Radan increases that accuracy to + or - .003 of an inch. Our machines can achieve accuracy beyond what they were designed for."

He says the software streamlines the manufacturing service they offer to the aerospace industry, making it faster, smoother and more accurate. "Radan is vital to Swift-Cor, and will be an integral part of our manufacturing process as long as I'm sitting in this chair."

Generally most aerospace components are presented to Swift-Cor as Catia files which can be unfolded in Catia V5.20 before importing into Radan. But there are times when they come as IGES, STEP or DXF files which are imported into Radan for unfolding. "Radan's accuracy in flattening parts is excellent," he says. "I've been regulating flats in this way since 1995."

While many orders are 'one-offs' Swift-Cor does retain dedicated programs for single parts, already nested, which are used for repeat business. "I simply print the set-up sheet and attach it to the work order because it's already been proven. It takes about 40 seconds to attach a program to that part, as opposed to around four minutes if I was doing it from scratch."

Another important time-saver is the software's ability to readily 'tweak' something without having to recreate the wheel every time. He says once he has a proven entity it can easily be amended. "I can pull an individual symbol out of a nest and draw up a new part: I can open a single part nest which I may want to make bigger and change the blank size, and it automatically updates everything. It's so easy to make and track revisions in the drawings and the part symbols."

As Kevin Travis can often spend all day creating nests, the flexibility, accuracy and material optimization provided by Radan's powerful nesting capabilities are particularly valuable. "It's actually invaluable to me, allowing me to add parts, subtract parts, make the skeleton wider or closer, and get the best yield while substantially reducing material wastage. My output is double what it would be without Radan." And he says that it helps Swift-Cor provide a fast turnaround time to customers, giving a positive impact on the company's bottom line.

Most of the parts he works on are programmed by Radpunch for machining on Nisshinbo and Amada turret punches, while some components are laser cut on Bystronics driven by Radprofile. But whichever cutting technology is used, the parts are nested by the powerful Radnest module that analyses their true shape, dramatically increasing sheet utilization and delivering substantial cost savings on the expensive sheet metal.

A number of shop floor operatives have a working knowledge of Radan. "Even though they haven't been trained on it they easily picked it up with a little guidance, and can view parts to query features, check angles and make dimensional queries." Some of the machine operators even undertake simple programming when something needs doing urgently and Kevin Travis is not there. "They may have

picked up a slug in a punch, or they may need to make another part or two to complete an order. They go in, repeat the symbol, and input the blank size.”

So what does he regard as being Radan’s most useful features? “Individual features become more important than others for specific projects, depending what I’m working on.” He spoke of a recent 750-part project for a new aerospace customer. “It comprised a number of sub-assemblies including a simple bracket with a piece of hardware in it, up to 15 pieces riveted together. Whether I was taking a form part and rendering a flat from it, or whether I was taking a generic flat from the customer, I rendered all the drawings into Radan, and gave them all title blocks. I shudder to think what would happen if I didn’t have all the checks and balances that Radan affords me. We would struggle to get the level of confidence that the flat pattern is accurate, but it’s so easy to use the digital entity and scan a part in to check it electronically against itself.”

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## Product News

### ***AspenTech Brings Search and High Performance Trending to Manufacturing Execution Systems with New Release of Aspen InfoPlus.21® Software***

6 March 2012

**Aspen Technology, Inc.** announced it has brought enterprise scale search and high performance trending to Manufacturing Execution Systems (MES) with the new release of **Aspen InfoPlus.21**. Process manufacturers can improve their business performance by finding and analyzing their operational data for fast and easy trouble shooting. By instantly representing what is happening in the plant, engineers and operations personnel are better able to improve manufacturing performance.

The search capabilities and high performance trends within Aspen InfoPlus.21 optimize data discovery and analysis by rapidly contextualizing large volumes of information to help engineers identify relevant information and drawing meaningful conclusions. In addition, these new features simplify finding and evaluating specific production events to improve operations.

Other key enhancements in the new release of Aspen InfoPlus.21’s include online training, integrated aggregation and compliance tools, a new batch data Microsoft Excel add-in, and added support for SharePoint 2010 and Excel services.

**Aspen Online Training** provides on demand access to focused training modules directly within the product to fulfill important performance management requirements, while reducing implementation and maintenance costs.

The new integrated aggregation and compliance tools increase user productivity by providing commonly used functionality such as out-of-the-box statistical computations, excursion and event alerts.

The new batch data Excel add-in simplifies data extraction and expands self service analytics. The more efficient workflow between **Aspen Production Record Manager™** software and Excel helps users spend less time collecting information and more time analyzing to achieve greater business value.

Added support for SharePoint 2010 and Excel Services expands information accessibility and encourages collaboration to increase operational insight. Enhanced visualization and improved navigation provides better “in context” data. Distribution of parameterized reports with automatic

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updates upon recall makes information available instantly for real-time analysis to support faster decision making.

The new release of Aspen InfoPlus.21 is available immediately. For more information, visit <http://www.aspentech.com/v7>.

## Supporting Quotes

*Jeffrey Wachter, Advanced Process Control Engineer, Air Products*

“The new high performance trends are a leap forward in remote data acquisition speeds and will improve access to vital process information enhancing our analysis capabilities. In addition, the new batch data Excel add-ins combined with intelligent Excel Services integration extends our ability to quickly build real-time web based data presentations and reports to better share relevant information.”

*Manolis Kotzabasakis, Executive Vice President, Products, AspenTech*

“The new enhancements to Aspen InfoPlus.21 allow process manufacturers to fine tune business performance by combining search capabilities with functional analysis. Our customers now have the ability to analyze critical data in a timely fashion in order to make improvements and reduce costs. This release is another example of our commitment to deliver innovations in process optimization that help our customers make better and more informed decisions.”

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## **Cadence Accelerates High-Performance, Giga-scale, 20nm Design with Next-generation Encounter RTL-to-GDSII Flow**

5 March 2012

Cadence Design Systems, Inc. introduced the latest release of Cadence® Encounter® RTL-to-GDSII flow for high-performance and giga-scale designs, including those at the latest technology node, 20 nanometers. Developed in close collaboration with leading IP and foundry partners and customers, the new RTL-to-GDSII design, implementation and signoff flow enables more efficient development of SoCs, meeting and exceeding the power, performance and area demands of today’s market requirements.

The new RTL-to-GDSII flow builds on [established Cadence successes](#), further advancing its technology in power, performance, and area for the world’s most advanced high-performance, low-power SoC designs. The flow is enabled by Encounter RTL Compiler, Encounter Test, Encounter ECO Designer, Encounter Digital Implementation System, Clock Concurrent Optimization (CCOpt), Encounter Timing System, Encounter Power System, Cadence QRC Extraction, Cadence Physical Verification System, and design for manufacturing technologies.

“The Cadence Encounter RTL-to-GDSII flow enabled us to achieve the chip performance and feature objectives of our 1 GHz ARM® Cortex™-A5 processor-based smartphone platform on time and with greater development efficiency,” said Dr. Leo Li, president and CEO of Spreadtrum. “The new flow, with features such as physical-aware synthesis and the GigaOpt engine, enables excellent power-performance-area trade-offs that support the development objectives for our complex designs at advanced process nodes. The 3G low-cost smartphone market in China is expected to experience ongoing rapid growth, and our smartphone platform is now well positioned to capture this market opportunity.”

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Technical details on high-performance design, implementation and verification will be discussed in detail at the [CDNLive! Silicon Valley](#) Cadence user conference March 13-14 in San Jose. Registration is open. Additional details about the latest Encounter digital flow also will be discussed in a series of Cadence-sponsored [webinars](#).

The new Encounter 20-nanometer methodology delivers silicon-proven 20-nanometer capabilities with correct-by-construction double-patterning support, covering capabilities from floorplanning, placement and routing to signoff timing, power and physical verification. This approach improves die area efficiency of 20-nanometer double-patterning designs, and enables more efficient engineering change order (ECO) revisions. Enhancements to the Cadence Physical Verification System provide foundry-qualified 20-nanometer in-design checking and final signoff verification to ensure DRC and double patterning color correctness.

This latest release of the Encounter RTL-to-GDSII flow also includes the new GigaOpt engine, which integrates key physical-aware synthesis technology with physical optimization, enabling faster timing closure and better correlated results. It is a highly scalable optimization engine that supports designs featuring leading high-performance processors. By harnessing the power of multiple CPUs, the engine produces results much faster than traditional optimization engines. In addition, the new differentiated CCOpt technology unifies clock tree synthesis with physical optimization, resulting in up to 10 percent improvement in design performance, and up to 30 percent reduction in clock tree power and area.

Another key element of the release is GigaFlex™ technology, a new capability that greatly expands the capacity to handle today's largest designs of 100 million instances or more. Designers can now achieve full-chip design prototyping goals in just 10 percent of the time required previously, enabling them to uncover potential issues earlier to produce the optimal design floorplan sooner. The GigaFlex technology enables concurrent top-and-block hierarchical design and implementation, reducing iterations and total design cycle time by an order of magnitude. In addition, automated functional ECO technologies accelerate pre- and post-mask ECO changes, which are reduced to hours or days through smart hierarchical design handling.

“We continue to collaborate very closely with our IP and foundry partners and customers to advance our technologies to address the challenges of the high-performance, giga-scale chips at the most advanced geometries,” said Dr. Chi-Ping Hsu, senior vice president, research and development, Silicon Realization Group at Cadence. “We are once again demonstrating our commitment to delivering leading technology required to enable the most advanced designs using the most advanced processes.”

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## ***Calibre Flow Developed with Mentor Graphics Consulting Boosts GLOBALFOUNDRIES Silicon Yield***

8 March 2012

Mentor Graphics Corporation announced that a new flow developed for GLOBALFOUNDRIES by the Mentor® Consulting Division (MCD) using the Calibre® suite of tools has demonstrated the ability to improve incoming design yield. A silicon experiment performed by GLOBALFOUNDRIES and Mentor resulted in a significant yield increase on a test chip after the integrated flow made automatic design-for-manufacturing (DFM) improvements using multiple Calibre tools for analysis and direct modification to the GDS layout database. The flow, which is available to GLOBALFOUNDRIES customers for 45/40 and 32/28 nm processes, features rapid turnaround time for full-chip designs, maintains design

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performance specifications, and helps ensure that the results are DRC clean by immediately verifying all changes during the modification process.

“We are extremely pleased with the work that MCD has done to engineer a flow customized for GLOBALFOUNDRIES that helps us easily and quickly make DFM improvements to our customers’ designs, which will boost yield without impacting performance or introducing DRC errors,” said Luigi Capodiecchi, director of DFM/CAD and R&D fellow at GLOBALFOUNDRIES. “We also like that the flow is highly modular and scalable, which allows us to easily move it to new processes and to extend it to address additional DFM issues as we uncover new design-based yield limiters.”

The new GLOBALFOUNDRIES flow is a result of an engagement under MCD’s Yield Enhancement Services (YES) offering. The Mentor engineers worked directly with GLOBALFOUNDRIES engineers to understand their exact requirements and to build a solution that takes maximum advantage of the integrated Calibre tool suite. The flow filters the design database to identify areas that require DFM improvement, to apply needed enhancements, and immediately recheck the modified layout to ensure that the changes do not introduce DRC violations or other issues. The flow employs the Calibre nmDRC, Calibre YieldAnalyzer, and Calibre YieldEnhancer tools to automatically perform metal widening, via doubling, and via enclosure improvements, including support for rectangular vias. These modifications have resulted in significant increases in silicon yield. Because the analysis is done very efficiently and operates directly on the GDS database, turnaround time is fast, even for complex full-chip designs.

Results were validated by direct comparison of test silicon with the Mentor test and yield analysis tools, including Tessent® TestKompress®, Tessent Diagnosis and Tessent YieldInsight®. Test failures were traced back to layout locations and the root cause was determined using physical failure analysis to correlate the failures to specific design-based limiters that could be eliminated using DFM enhancements. The GLOBALFOUNDRIES solution allows their customers to select and deselect specific enhancements through a simple user interface. It is also adaptable to new technologies and process nodes. For example, the flow was ported from 32/28 to 45/40 nm in a matter of a few days.

Mentor and GLOBALFOUNDRIES will present a joint seminar on yield optimization at the upcoming DATE conference on March 14, 2012 in Dresden, Germany. Learn more at <http://go.mentor.com/21aed>.

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## ***CD-adapco Releases STAR-CCM+ v7.02, a Major New Version of its Multidisciplinary Engineering Simulation Solution***

8 March 2012

"When developing STAR-CCM+ v7.02, our goal was threefold; to further shorten the product development schedule of our users, to increase the quality of their products, and to deliver unique insight into their product's behavior and performance," said Senior VP of Product Management, Jean-Claude Ercolanelli.

### **Overset Mesh**

For the past 30 years, the ability of engineers to perform Computational Fluid Dynamics simulations of the interaction between multiple moving objects has been severely curtailed by the need to generate an interconnected mesh between the objects. Not only did this requirement make the creation of "moving mesh" simulations an intensive manual process, it also often rendered it impossible in the case of objects

with extreme ranges of motion or with very close interaction.

The release of STAR-CCM+ v7.02 changes this forever with the introduction of a new Overset Mesh capability. Overset Mesh (sometimes called "overlapping" or "chimera" mesh), allows the user to generate an individual mesh around each moving object which then can be moved at will over a background mesh. The Overset Mesh capability is fully compatible with the full range of unstructured meshing options in STAR-CCM+. With no need to worry about interconnecting meshes or cell distortion, Overset Mesh brings genuine moving object simulation within the grasp of all engineers.

Overset Mesh can also be used for parametric studies, steady or unsteady simulations, providing an easy way to reposition or replace objects in order to study multiple design configurations.

"The term 'paradigm shift' may be overused, but the introduction of Overset Mesh in STAR-CCM+ v7.02 truly offers a new way of carrying out CAE. Overset Mesh revolutionizes the entire analysis workflow while opening a whole new range of application areas to simulation," said Jean-Claude Ercolanelli.

## **Indirect Mapped Interfaces**

STAR-CCM+ v7.02 also revolutionize the simulation workflow for conjugate heat transfer (CHT) simulation (those in which temperatures are solved for both fluid and solid regions). The new Indirect Mapped Interface allows to using non-conformal meshes between solid and fluid domains. Not only does this reduce the time required to set up a CHT simulation, but it also has the potential to greatly increase the accuracy of the simulation results by allowing the user to specify the most appropriate mesh for each region without worrying about making them conformal at the interface.

## **Solution History**

The Solution History is an entirely new feature of STAR-CCM+ v7.02, allowing engineers to review and explore the analysis results space by providing a complete history of a simulation, both in terms of changing results and changing design configuration. For the first time, engineers can record, store, compare, and visualize results from any analysis type. Results from multiple simulations may be recorded in a single simulation history file and easily replayed. Since the user can choose exactly which data is stored for each configuration or time-step, all this can be achieved without a large storage overhead.

The Solution History feature also provides a way of comparing multiple design configurations in a single STAR-CCM+ session.

## **See STAR-CCM+ v7 at the STAR Global Conference**

The STAR Global Conference (March 19-21, 2012, the Netherlands) is the official launch event of STAR-CCM+ v7.02, and will include demonstrations of all the new features and a dedicated training course designed to orient users with the new software.

For more information, please visit: <http://www.cd-adapco.com/engineeringsuccess>

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## ***CSC Releases a Free Design Review Tool, Fastrak Reviewer***

8 March 2012

CSC has released Fastrak Reviewer, a brand new viewer and design review tool. This new and free

software enables structural engineers to share the models they create using CSC's steel building design software, Fastrak, with their entire project team including architects and clients.

In practice structural engineers will often develop their first model in Fastrak, very early in the design process. To aid both internal and external collaboration project managers can now walk through and review the Fastrak model using intuitive controls to rotate, fly through and slice through the model. Fastrak Reviewer allows them to annotate the model with comments and points for clarification, using red-lining mark up tools.

“This new free product adds huge value to senior project managers who do not typically get involved with the detail of the Fastrak model. Using Fastrak Reviewer, they can now visualise, review and discuss the design with stakeholders and make comments without being involved in the in-depth detail of the Fastrak model”, comments Barry Chapman, Regional Director at CSC.

[Fastrak Reviewer is available as a free download here.](#)

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## ***Delcam CRISPIN Adds 3D Module to Engineer Pro Footwear Software***

5 March 2012

Delcam CRISPIN has released the 2012 version of its Engineer Pro manufacturing software for the footwear industry, which features a new module, ShoeStyle, for drawing, sketching and editing 3D style lines. The new release also benefits from further integration between various Delcam CRISPIN products, including links to Delcam PS-Team that assist with data management and provide a path to integrate with PLM systems.

Engineer Pro helps users to produce 2D sample and graded footwear patterns for manufacturing in the fastest possible time, whilst also assisting in the management of tooling costs. Advanced tools like 'Edge Templates' reduce pattern development times dramatically, so improving throughput and reducing time to market.

The new ShoeStyle module, which is also available as a stand-alone program, is based on the ShoeMaker 3D design software. It ensures the aesthetics of the 3D design lines are correctly proportioned before flattening for 2D pattern engineering and manufacture.

ShoeStyle provides functionality to import lasts, in STL or IGES formats, and create style lines directly on the last. This can be done using point-to-point, streamline sketching or by merging of multiple sketch lines using a graphics tablet. Stencils can be wrapped onto the last or Adobe Illustrator curves imported, wrapped onto the last and used in the design process. Real-time editing allows the style lines to be modified instantly in response to feedback from designers or manufacturing teams.

The inclusion of ShoeStyle within Engineer Pro provides a powerful combination of 3D and 2D tools to ensure that any manufacturing issues are detected earlier in the development cycle by improving communication between the design and patternmaking departments. This reduces the number of design iterations and so allows the time to market to be shortened significantly.

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## *ESI Releases the Latest Version of ACE+ Suite*

5 March 2012

ESI Group announces the release of ACE+ Suite's latest version. This multiphysics modeling and simulation software combines tools in advanced Computational Fluid Dynamics (CFD), Electro-Magnetics (EMAG), Gas Dynamics and Finite Elements Structural Analysis, all working in an integrated manner, helping to take decisions based on several physics involved in product manufacturing or performance, speeding up product development processes and increasing final product quality.

ACE+ Suite addresses the increasing need of all industries to look beyond one domain of physics to the important interactions underlying the "cause and effect" relationships that drive the performance of products. The software is delivered in separate but connected modules designed for customers working on fast developing applications such as plasma and semiconductor processes, MEMS, biotechnology, microfluidics, fuel cells and battery as well those of mainstream automotive and aerospace applications.

### **Enhancements for the automotive sector**

The latest version of [ACE+ Suite](#) comes with an advanced automatic meshing tool for creating polyhedral cells. The CFD-VisCART mesher can now process in parallel for Single Domain meshing, including boundary layer generation. The calculation time required to automatically create meshes for large models, with hundreds of millions of cells, can be drastically decreased!

### **Enhancements for the semiconductor industry**

Plasma-based processes such as those used in the semiconductor and photovoltaic industries will benefit from improvements related to coupling electromagnetics (EMAG) with plasma models, essential when simulating for plasma. ACE+ Suite enables the modeling of Electromagnetic Wave Effects in large area high frequency coupled Plasma Reactors.

### **Addressing specific challenges of radiative heat transfer**

Designed to reduce computational costs of radiation heat transfer models, the CAFVM Discrete Ordinate Method for Radiation generates results significantly faster than comparable algorithms, which helps industries such as the semiconductor industry solve problems related to reactive flow analysis and plasma models. ACE+ Suite provides a vast range of optical and thermal conditions including grey and semi-transparent media, Fresnel interfaces and participating media.

### **Enhancements for applications in the aeronautic industry**

Also included in ACE+ Suite, CFD-FASTRAN density-based solver used to investigate supersonic speed flows in the aerospace and defense industries, has gained in accuracy with improved compressibility corrections for Turbulence models.

### **Other enhancements**

CFD-VIEW, the software suite's post-processor, extends support of cell-centered data visualization and supports logarithmic color maps; greatly helping visualization of large data variations. Also, ACE+ Suite offers improved linear and pre-conditioner choices for the multiphysics solver, including additional gradient calculation options. This will greatly help the users of this software in delivering results with desired precision levels and conversion settings.

"The latest release of ACE+ Suite includes a unique combination of specialized solvers incorporating highly accurate physics for specific applications spanning automotive, aeronautics and semiconductor

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industries”, affirms Anshul Gupta, Product Manager for CFD/Multiphysics Solutions at ESI. “Its advanced features give engineers the ability to make the right decisions in the development of innovative products.”

ACE+ Suite meets the Intel® Cluster Ready specifications and has passed the tests of the Intel® Cluster Checker, which means it can run smoothly on any Intel® device.

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## ***Fibersim 2012 Provides Risk-Reducing Solutions for Industries Employing Composites Engineering***

6 March 2012

[Siemens PLM Software](#) announced the release of Fibersim™ software version 2012. Fibersim helps reduce risk throughout the aerospace, automotive and wind energy industries by optimizing the design and manufacture of innovative, durable and lightweight composite structures. It is developed by [Vistagy](#), which was acquired by Siemens on December 7, 2011, and is now a business segment within Siemens PLM Software ([see release](#)).

Fibersim 2012 reduces uncertainty in the performance of composite parts by defining, communicating, and validating desired fiber orientations throughout the product development process, ensuring that they meet specifications. By eliminating design interpretation errors, this new release significantly reduces the risk of producing over-engineered parts that not only behave unpredictably, but are also heavier and more costly than necessary.

Fibersim is a leading software for composites engineering, enabling premier organizations in aerospace, automotive, wind energy, and other industries to successfully address challenges throughout the entire engineering process—from supporting conceptual design, defining detailed laminates, simulating ply layout and generating manufacturing data feeds to verifying quality. Fibersim is fully integrated into industry-leading, 3D commercial CAD systems.

In 2011, industry leaders such as BAE Systems Composite Structures ([see release](#)), Nordex ([see release](#)), and MBDA Missile Systems ([see release](#)), all selected Fibersim for composite design.

“Inaccuracy in fiber orientation, from the design through the manufacturing phases of composite parts, leads to sub-optimal design,” said Guy Lambert, director, Experimental, Design, Material and Process, Bombardier Aerospace, which standardized on Fibersim software for all composites design-to-manufacturing processes in 2009. “It is critical to have confidence in the way manufactured composite parts will perform. Otherwise, engineers will need to account for the fiber orientation variability, which generates parts that end up weighing and costing more. By providing the ability to define, communicate, and validate desired fiber orientations from the beginning to the end of the development process, Fibersim provides engineers with the best opportunity to optimize parts.”

Specific benefits of Fibersim 2012 include:

### **Increasing opportunities for optimizing designs**

Fibersim 2012 increases confidence in the way manufactured composite parts perform by providing a new Spine-Based Rosette, enabling desired fiber orientations to be defined along a path that can then be communicated and validated throughout the development cycle. Maintaining desired fiber orientations in manufactured parts—whether an airframe stringer, an automotive C frame, or a 60-meter wind turbine blade—is critical to optimizing weight and performance.

## **Accurately simulating how composite materials conform to complex shapes**

Fibersim 2010 introduced new advanced material and process simulations for multilayered materials, including non-crimp fabric and ply forming simulations. Fibersim 2012 builds on these capabilities to simulate a greater number of materials and manufacturing processes used with the first-ever Spine-Based Simulation for parts produced using steered fiber methods. Steering fibers along the path of an aerostructure stringer, an automotive B pillar or a scribed line on a wind turbine blade mold will cause localized buckling and deformation. By identifying these issues early in the design cycle, key decisions can be made to ensure expected part strength is achieved in a timely and cost-effective manner.

## **Efficiently communicating a complete part definition between design and analysis**

The new version introduces a breakthrough in the exchange of Multi-axial Material and Core data to allow for efficient communication of two critical design components between analysts and designers throughout the iterative development cycle. Accurate analysis of part stiffness and strength necessitates the inclusion of multi-axial and core materials commonplace in aerospace, automotive, and wind energy designs.

## **Simplifying composite part development and documentation**

Fibersim 2012 simplifies composite development with new, intuitive tools for design and documentation for engineers with different levels of composites experience. The most challenging and time-consuming design task is capturing drop-off specifications for regions of varying thickness. Fibersim 2012 introduces a new Stagger Editor, a visual drag and drop method for easily capturing those specifications. Large aerospace panels, such as wings, stabilizers or empennage, have a significant number of different drop-off profiles. The Stagger Editor makes it easy to develop the profiles and reduce design errors.

Fibersim can be used independently or as a key component of the Aerosuite™ portfolio of software and services, which provides a comprehensive solution spanning preliminary design to quality assurance that enables aircraft designers and manufacturers to engineer optimized parts and assemblies in less time at lower cost. Aerosuite also includes Syncrofit™ software for designing and manufacturing complex assemblies and large aerostructures, Quality Planning Environment™ software for developing plans to assess aerostructure quality and Vistagy professional services for the aerospace industry.

“The innovations in the latest version of Fibersim are born from our conviction that the most effective way to address composite engineering and manufacturing challenges is to develop industry-specific solutions,” said Leigh Hudson, director of product and market strategy for Fibersim. “Fibersim 2012 provides end-to-end solutions for developing and optimizing composite part types that are common to aerospace, automotive, wind energy and other industries, enabling our users to develop robust products on schedule and on budget and, ultimately, to meet their goals.”

The business segment of Siemens PLM Software containing the former Vistagy operation is a leading global provider of industry-specific engineering software and services that creates rich product descriptions for better-informed decision making early in the design cycle and enhances commercial 3D CAD platforms, such as Catia®, Creo Elements/Pro™ and NX™, by applying specialized process knowledge and domain expertise to help solve some of the world's most complex engineering problems. As a result, customers significantly increase their reuse of engineering data and ultimately reduce cost, improve quality, and cut time to market. Today these products are utilized by hundreds of leading manufacturers in the aerospace, automotive, and wind energy industries

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## ***Innovyze Releases InfoWorks ICM Version 2.5 to Drive Business Success***

6 March 2012

Innovyze announced the release of InfoWorks ICM V2.5, a comprehensive urban drainage modeling solution that enables users to work more efficiently and get the reliable information they need to make better design and operational decisions for optimal performance. Since its release, InfoWorks ICM has become the solution for integrated river, sewer and overland flow modeling among utilities, municipalities, local authorities and their consultants around the world. InfoWorks ICM V2.5 incorporates many of the features requested by this growing customer base.

A hallmark of InfoWorks ICM is its dynamic integration of one-dimensional (1D) hydrodynamic simulation of flows in rivers, open channels and pipe networks and two-dimensional (2D) hydrodynamic simulation of surface flooding in the urban environment and river floodplain. The combination provides a solution for simultaneously modeling below-ground and above-ground elements of catchments to accurately represent all flow paths and improve understanding of processes occurring in the holistic environment. The software also takes interactions of natural and man-made environments into account and effectively simulates the impact of polluting runoff and effluent from urban areas on water quality. Such advanced capabilities give water utilities greatly enhanced capabilities for predicting flood risks; supporting cost-effective drainage design and management; developing online urban flooding forecasts; conceiving and evaluating sound and reliable urban catchment strategies such as storm sewer separation, active real-time control and provision of adequate additional storage; and improving drainage system operation.

A key focus of InfoWorks ICM V2.5 is speeding the integrated modeling experience in almost every respect. Innovyze users continue to build larger and more complex models that more accurately depict the exact conditions in a collection system and associated watersheds. These “all pipes” models are critical for more accurate overflow predictions and a precursor to accurate real time operational modeling. Their added complexity demands continuous improvements to both 1D and 2D simulation engines. InfoWorks ICM includes numerous options that allow users to complete their work faster, including advanced 2D meshing, individual multi-threading for each simulation job, and caching to improve drawing performance.

### **Pricing and availability**

InfoWorks ICM V2.5 is now available worldwide by subscription. Upgrade prices are available for existing InfoWorks CS and InfoWorks RS users. Subscription members can immediately download the new version free of charge directly from <http://www.innovyze.com>. The Innovyze Subscription Program is a customer support and software maintenance program that ensures the longevity and usefulness of Innovyze products. It gives subscribers instant access to new functionality as it is developed, along with automatic software updates and upgrades. For the latest information on the Innovyze Subscription Program, visit <http://www.innovyze.com> or contact your local Innovyze Channel Partner.

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## ***Mastercam Blade Expert Provides Specialized Multiaxis Programming for Multi-bladed Configurations***

March 2012

Mastercam’s new Blade Expert add-on greatly simplifies the toolpath creation process for any multi-

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bladed parts, including fans, propellers, impellers, turbines, marine screws, and more. Its aim is to eliminate guesswork and minimize the need for extra geometry creation.

Blade Expert is a custom application, designed to generate efficient, smooth, and gouge-free toolpaths for these complex bladed parts. It minimizes unnecessary motion at the machine, which results in a highly efficient toolpath with superior finish quality.

Multi-blade parts come in many configurations, but Mastercam Blade Expert's operation process turns these machining challenges into routine solutions. With Blade Expert, you can:

- Remove the material from between the blades.
- Finish the blades/splitters.
- Finish the floor and fillets.

Mastercam Blade Expert's interface delivers a clear and easy-to-understand method for programming the complex operations. Some key features of Mastercam Blade Expert include:

- Precise, efficient, and smooth cut pattern.
- Automatic stock model awareness eliminates air-cuts.
- Automatic tool axis control ensures collision-free toolpaths.
- Accurate tool tip control means seamless blending and transformation.

For more information on Mastercam Blade Expert, or to see a video, please visit

<http://www.mastercammill.com/bladeexpert.html>.

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## ***Mentor Graphics Announces PADS Release Targeting Design-for-Manufacturing (DFM) Analysis, High-Speed and Interactive Routing***

6 March 2012

Mentor Graphics Corporation announced the latest release of the PADS® product suite. These additional features in the release add significant value to electronics companies as they strive to deliver the most competitive, high-performance products to market faster.

Key new features include the ability to associate nets necessary for DDRx interconnect design. Multiple nets can now be “grouped” and given unique high-speed constraints including length and differential pair rules. Associated nets adhere to these rules during interactive and automatic routing assuring that tight, high-speed performance specifications are met. Another feature allows a trace to “hug” an existing obstacle like another trace or board outline. This feature will reduce routing time and more effectively use board space. Drafting operations have also been enhanced with new 2D line styles and snap capabilities.

“The new associated nets functionality in PADS 9.4 reduces design time,” stated Johnnie Howman, director at Icarus Design. “I can now easily define the high-speed associated nets, assign constraints, and be assured that they will be routed to those rules.”

The PADS 9.4 software is a significantly enhanced, next-generation PADS release which adds unique DFM analysis functionality to the PCB design space, giving the designer the ability to perform over 100 fabrication and assembly checks in PADS Layout. This analysis is based on the Valor® technology, the

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industry leader in fabrication and assembly DFM analysis. Complimenting ODB++ intelligent data transfer from design into manufacturing, the new ODB++ viewer provides the ability to overlay and compare traditional CAM documents, such as Gerber files for PCB design-through-manufacturing data integrity. Detecting and correcting manufacturing issues early in the design process helps decrease overall time to market by reducing design/manufacturing re-spins. With the scalable PADS 9.4 flow, engineers and designers can cost-effectively design the industry's most complex, highest performance, and densest PCBs.

“The PADS 9.4 release provides our desktop customers with the critical technologies required for today's complex PCB designs,” stated Mike Griesbach, PADS product director at Mentor Graphics. “Our completely integrated and scalable PADS 9.4 flow addresses high-speed, thermal, manufacturing prep, signal and power integrity, FPGA to PCB optimizations, and much more.”

To learn more about PADS, please visit <http://www.mentor.com/pads> or to find your local reseller, visit <http://www.mentor.com/products/pcb-system-design/design-flows/pads/resellers>.

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## ***Nanosoft Makes Professional CAD Application as Affordable as Never Before. nanoCAD now Available Worldwide***

6 March 2012

Nanosoft, CAD vendor based in Moscow, Russia, announced immediate worldwide availability of nanoCAD – a computer aided design application delivering great user experience by providing classic interface and native .dwg support. 2D design tool nanoCAD has been built to deliver design and project documentation regardless of the industry. nanoCAD is free to use and share at home and in business.

“This is a milestone event for nanoCAD as we are now up for an international challenge backed by more than 120 thousands commercial users in Russia” – says Dmitry Popov, Development director, Nanosoft. “We began our nanoCAD journey in 2008 and have come a long a way ever since. What was a pure idea three years ago has now become a full-featured CAD application equally recognized by both home and business users. Today thousands of designs or various sorts and kinds are being created, edited and issued using nanoCAD everyday. nanoCAD has been specifically architected to help enterprises experience a seamless transition to emerging cost effective model of using a CAD application. Any engineer or designer who have previously used popular CAD applications will find it very easy to start using nanoCAD from the very first run.”

### **nanoCAD key features**

nanoCAD is a full featured, fast, lightweight and reliable 2D design tool. nanoCAD has been designed with ease of use in mind. Migration to nanoCAD will not take more than 10 minutes since nanoCAD delivers:

**Classic CAD interface.** Any engineer can master nanoCAD since everything is in their right places: menu, button icons, panels, command line, and the commands themselves are easily recognizable. This makes nanoCAD easy to migrate to since enterprise needs no time to retrain its engineers.

**Native \*.dwg support.** The world's most popular file format for technical documentation - \*.dwg – is the nanoCAD native file format. Project created using nanoCAD and saved as \*.dwg file could be easily opened and edited in any CAD application supporting \*.dwg which in turn makes nanoCAD perfect tool for project collaboration and sharing.

**Ultimate design tool.** nanoCAD includes all necessary tools required for basic design and allows creating and editing 2D and 3D vector primitives, texts, tables, blocks, graphical technical documentation display and print settings using either a model or a sheet.

## **Open API and application development**

nanoCAD has a traditional CAD application programming interface (API) that allows developing independent nanoCAD based applications and additional automation modules. Internal data structure and a high quality of the basic platform make it possible for a developer to build an application of any complexity. Access to the nanoCAD developer club is granted after the registration at the community site.

Utilities and tiny applications could be built using ActiveX Automation scripts (Java-script, VB-script etc.)

## **Availability**

The latest nanoCAD release is readily available at <http://www.nanocad.com>

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## ***NEi Software Announces the Release of NEi Nastran V10.1***

5 March 2012

NEi Software announced the release of NEi Nastran V10.1. With over 70 new product enhancements, this major release enables product development engineers to simulate real-world conditions in a shorter amount of time with greater accuracy and efficiency. It includes improved performance in dynamic analysis (up to 1.4x faster), in nonlinear analysis (up to 2x faster), and Automated Surface Contact Generation, ASCG™ (up to 64x faster). Find out more about [NEi Nastran V10.1](#).

Using new techniques not found in other leading FEA solutions, engineers obtain greater accuracy for solid and bar/beam element stresses. Other NEi Nastran V10.1 features include an enhanced axisymmetric element which now supports all solutions and material types, thermal contact resistance, surface contact weld (bond) damage model, enhanced nonlinear plasticity, shape memory and brittle materials, deformation plasticity for metal forming, special nonlinear material for soil, enhanced hyperelastic materials, 3D micromechanics based composites (MCT), and fully nonlinear 3D composites.

Those interested in learning more about how engineers can increase the accuracy in predicting the delamination of composites, peak stresses, and the impact of temperature phases can find out more about the NEi Nastran V10.1 solution by registering for the [on-demand webinar](#).

NEi Nastran users can take advantage of greater accuracy in:

- Evaluating the delamination initiation and propagation of composites failures
- Modeling ductile and cohesive materials
- Evaluating the impact of the freezing and melting phases of a material
- Modeling heat flow where gaps or other contact resistance are present
- Evaluating creep strain for viscoelastic materials
- Evaluating rubber fatigue

Engineers can save time by:

- Introducing and removing elements during an analysis
- Mixing and matching nonlinearities in an analysis
- Linking between advanced solution types such as implicit with explicit and nonlinear with fatigue
- Streamlining composite modeling through feature interoperability

[NEi Nastran V10.1 features](#) and enhancements to this release are supported by the company's proprietary NEi Editor as well as Femap®, the pre- and post-processor offered by Siemens PLM.

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## ***New Release of Aspen PIMS™ and Aspen Petroleum Scheduler™ Software Improves Collaboration Between Refining Planners and Schedulers***

6 March 2012

**Aspen Technology, Inc.** announced a new release of **Aspen PIMS** and **Aspen Petroleum Scheduler** that improves collaboration between refining planners and schedulers. Through tighter petroleum supply chain integration, refiners can increase their profitability by optimizing the accuracy and productivity of planners and schedulers. In addition, enhanced analytics provide planners and schedulers with better decision support to rapidly respond to changing market conditions, or upsets in their operations.

The new release improves collaboration by sharing operating targets between planning and scheduling functions for closer alignment of plan and actual. This enables sharing of critical data such as production targets, model assays, and blend models to enhance profitability and reduce margin loss.

Other key enhancements in the new release include new powerful analytics such as Spider Charts and Microsoft-based Excel PowerPivots that help refiners visualize alternative feedstock selections. By quickly comparing many simultaneous scenarios easily sharing information across the organization, refiners are better able to pick the optimal crude slate.

**Aspen Online Training** is also now included within Aspen PIMS and Aspen Petroleum Scheduler, making it easier to learn and retain information tailored to specific users. The new online training provides access to a variety of rich training content, making it easier and faster for users to become more proficient and productive.

To learn why three quarters of the world's refining feedstock is planned with aspenONE® software, visit <http://www.aspentech.com/V7/PIMS-APS.aspx> . The new release of Aspen PIMS and Aspen Petroleum Scheduler is available immediately. For more information, visit <http://www.aspentech.com/v7> .

### **Supporting Quotes**

*Srinivas Rachakonda, Senior Vice President of Planning & Economics, Essar*

“Powerful analytics in PIMS have yielded faster and better evaluation of crudes available in the open market. Crude cost is a major expense for all refineries, so the ability to determine crude choices quickly and accurately supports the planning process and enhances profitability. As we continue to deploy the latest developments in technology, Essar is pleased with the advancements in Aspen's innovative planning solution.”

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*Manolis Kotzabasakis, Executive Vice President, Products, AspenTech*

“Refiners must operate competitively under a wide range of market variability, especially fluctuating feedstock prices. The new collaboration capabilities between Aspen PIMS and Aspen Petroleum Scheduler enable refiners to better respond to market volatility and run their schedules closer to plan, which improves their overall profitability. Our aspenONE solutions for refining planning and scheduling solve both the simplest and the most complex optimization challenges with the easiest to use software.”

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## ***New Release of Aspen Plus™ Software Delivers an Innovative New Interface and Opens Process Simulation to a Wider Range of New Users***

6 March 2012

**Aspen Technology, Inc.** announced a new release of Aspen Plus software that significantly improves the user experience for the leading process simulator in the chemicals industry. The completely redesigned user interface and workflow improves engineering productivity and enables the use of process simulation to a wider range of new users. It is the latest example of AspenTech delivering on its strategy to offer common user interface standards across all **aspenONE®** products.

The new Aspen Plus provides an enhanced user experience with a fully integrated simulation environment to access other aspenONE Engineering products that are now used as a standard across the process engineering lifecycle. This enables easy and intuitive access to the **most comprehensive physical properties database**, the industry-leading **capital cost estimating product**, and the most complete **heat exchanger thermal and mechanical design products**

This saves time, capital, and energy costs for project design, revamps, and plant operations. It also makes it easier for new and existing users to collaborate and optimize their process designs by sharing the same data and models and working within the same environment.

In addition, engineers can access **Aspen Online Training** from the ribbon bar – making it easier for new and occasional users to improve their skills and retain knowledge. Process engineers can also jump start projects and optimize operations by efficiently finding and accessing models and data through the **Aspen Search™** tool.

The new release of Aspen Plus is available immediately. For more information, visit <http://www.aspentech.com/v7>.

### **Supporting Quotes**

*Ingrid Lunt-Rieg, Head of Process Simulation & CFD, Evonik Industries AG*

“The new version of Aspen Plus makes it easier for new and occasional users to navigate through the software. The ribbon design is very logical and intuitive. The streamlined design will help all engineers save time building and running simulation models. The new Aspen Plus will help the Evonik engineers get up to speed quickly and efficiently.”

*Dr. Axel Polt, Vice President Conceptual Process Engineering, BASF SE*

“Aspen Plus provides easy access to superior physical properties. The availability of experimental physical property data inside Aspen Plus and its parameter regression tools is highly valuable to us. It speeds up considerably the process of gathering and fitting data. Compared to traditional ways we can

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save significant time and effort using Aspen Plus. Hence, Aspen Plus substantially supports us in focusing more strongly on our core tasks: the conceptual design of BASF's production clusters."

*Elliott Robertson, Associate Chemical Engineer, Burns & McDonnell*

"The new Aspen Plus is a dramatic advance in simulation technology and user experience. Its intuitive interface makes Aspen Plus faster to learn and easier to use for both new and experienced users, with engineering workflow tasks conveniently organized to quickly achieve design objectives."

*Maria Rodriguez, Technical Manager, Process Engineering, Pequiven S.A.*

"Aspen Plus is the mission-critical simulator at Pequiven. It is used to optimize olefin plant operations and perform engineering design studies and revamps. The application of Aspen Plus has helped us achieve millions of dollars of benefits through increased production, improved product recovery, reduced energy consumption and maintenance. Aspen Plus provides accurate and fast simulations through innovations in physical properties and models such as rate-based distillation, which enable us to make better engineering decision quickly and with confidence."

*Godwin Tongo, Process Modeling & Simulation Advisor, BP Chemicals*

"The new version of Aspen Plus has provided us with a big leap in flexibility and ease of use. The new properties environment allows our experts to customize physical properties for use by our simulation users. Additionally, the equation-oriented (EO) ribbon places EO commands conveniently at the fingertips of our engineers for fast modeling of complex processes. Overall, this new version of Aspen Plus offers many new features to enhance and optimize our engineering productivity."

*Manolis Kotzabasakis, Executive Vice President, Products, AspenTech*

"The latest enhancements to Aspen Plus reinforce its status as the gold-standard in process simulation software. In the wake of a changing global workforce, owner operators and engineering companies rely on software that supports a wide range of skill sets to increase their productivity and expand their utilization capacity. The innovations in this latest release of Aspen Plus software make it easier for new and experienced engineers to optimize plant designs and plant operations for greater profitability and operational savings."

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## ***OpenText Tempo and New Tempo Express Edition Deliver Private, Secure Hybrid Cloud Document Sharing, Mobile Syncing***

5 March 2012

OpenText™ announced the general availability of [OpenText Tempo](#) and introduced Tempo Express Edition, a new offering that lets companies set up a private solution for sharing and syncing content in the cloud. Both editions offer all the ease-of-use of consumer-oriented document sharing cloud services coupled with the rigorous records management and security required to meet internal policies and industry regulations.

"Secure publishing, sharing and syncing information across multiple devices is clearly resonating with users, hence the emergence of cloud-based services on the consumer side. For enterprises, however, the consumer cloud is just another way for information to get lost or into the wrong hands," said Eugene Roman, Chief Technology Officer of OpenText. "Tempo combines consumer-level usability with enterprise-level reliability and security. It will fundamentally change the tempo of how information is

used, shared and stored by enterprise users."

With OpenText Tempo and Tempo Express Edition, organizations maintain absolute control over their content. For users, the experience and functionality is similar to popular file sharing services with full desktop integration and easy access to synchronized content from mobile apps on all the most popular devices. But while the user experience doesn't change, all content is actually being stored behind the corporate firewall with a full audit trail, versioning and permission control.

OpenText Tempo Content Server Edition is designed to bring easy file sharing functionality to organizations currently using or investing in the full OpenText ECM Suite, and can work in conjunction with existing content applications and user interfaces.

OpenText Tempo Express Edition provides a self-contained Tempo environment that can be used alone or alongside other content repositories. This gives companies an "out-of-the-box" way to take advantage of simple and fast document sharing while still maintaining full control over where content is stored, and with the benefit of an advanced content management feature set.

Key features of both OpenText Tempo and Tempo Express Edition include:

Transparent integration into user desktops, including sharing with internal and external users

Ability to synchronize content across any number of computers, tablets, and other devices, ensuring that users always have the latest copy of documents

A simple Web interface for managing file information, setting permissions or sharing files

A flexible deployment model that allows organizations to manage OpenText Tempo entirely on-premises or, drawing from patent-pending technology and cloud-based hosting, choose a hybrid model that allows organizations to maintain control of the information but offload the effort of maintaining the service to OpenText

"The Tempo Web interface is very intuitive. Documents are easily and quickly accessible, and sharing is effortless," said Christoph Hammer, Consultant Archiving Services, Voith IT Solutions GmbH & Co KG. "I'm able to access Tempo from my iPhone and the Web client and both ways work like a charm. Congratulations to everybody on the Tempo team. In my opinion Tempo is what Steve Jobs would have referred to as "insanely great!"

Koen Michiels of Delaware Consulting added, "Tempo is instant and convenient. The Windows desktop client is fast and intuitive and the mobile iPhone app is very fast and user friendly."

## **Availability**

OpenText Tempo Content Server Edition is available now. OpenText Tempo Express Edition will be available later this month. For more information go to: [www.opentext.com/tempo](http://www.opentext.com/tempo).

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## ***Reaction Design to Add Advanced Soot Particle-Size Prediction Capability to FORTÉ***

6 March 2012

Reaction Design® announced that new capabilities will be added to FORTÉ™--the most advanced computational fluid dynamics (CFD) package for realistic 3D modeling of fuel effects in internal combustion engines. FORTÉ will offer the ability to accurately simulate soot particle size distributions,

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as well as total particulate-matter emissions.

The new technology in FORTÉ was inspired by the accomplishments of the Model Fuels Consortium (MFC). Founded in 2005 by Reaction Design, the MFC is a highly regarded, industry-led project for the development of cleaner burning, higher-mileage vehicles. The MFC's work focuses on creating software models and tools that enable engine designers to better determine the fuel effects on efficiency and emissions.

“Soot formation occurs when fuels don't fully combust, and recent studies show that soot particles smaller than 100 nanometers can be especially harmful to human health,” explains Ellen Meeks, vice president of product development at Reaction Design. “In the past decade, engine exhaust regulations have been focused on limiting the total amount of soot (and NOx) emissions. Future particulate matter (PM) regulations, such as the European Union's extended Euro 6 standard and the California Air Resources Board's proposed Ambient Air Quality Standards require soot particle size and number limits in addition to total emissions mass limits. Such requirements are particularly challenging for engine designers.”

Earlier this year, the Japanese Ministry of the Environment released the results of a 2010 study of micro particulate matter of less than 2.5 micrometers in diameter (PM2.5) which is known to cause respiratory issues that can range in severity from asthma to lung cancer. The study showed that most of the locations that were measured, particularly those near a main roadway, had average levels of PM2.5 that exceeded the current standard of less than 15 micrograms/cubic meter.

“The MFC and Reaction Design have been working proactively to develop soot modeling approaches that can help reduce these harmful emissions, as we anticipate that more regulations will follow with increasingly strict limits on particle size and number,” said Bernie Rosenthal, chief executive officer of Reaction Design. “The ability to predict soot particle sizes and track their progress from formation through agglomeration and reduction in an engine is of significant benefit for engine developers, who will not only be able to better address air quality regulations, but also shave time from their design cycle.”

When coupled with an accurate soot chemistry mechanism, such as the one developed by the MFC, the FORTÉ soot model provides engine designers with a physics-based approach to the prediction of soot size and mass emissions trends with unprecedented accuracy.

## **Availability**

The new capabilities in FORTÉ will be available later this year. For more information, please visit <http://www.reactiondesign.com>. For pricing information, please contact the Reaction Design sales team at 1-408-550-1920.



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## ***Right Hemisphere Visualization Technologies Are Now SAP Visual Enterprise Applications***

8 March 2012

[SAP AG](#) announced the availability of SAP Visual Enterprise applications, which represent the initial offerings resulting from the acquisition of Right Hemisphere 3-D visualization technologies. The new software combines the inherent strength of [SAP Business Suite](#) with related visual product and plant content, providing existing and new SAP customers access to contextual and reliable visual information in an intuitive visual format.

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Improved time to market, more efficient operational processes, higher productivity and superior product and service quality are just a few of the benefits customers can derive from deploying SAP Visual Enterprise applications. Specifically, the software enables collaborative views of products and assets, guides manufacturing and maintenance processes through animated assembly and repair instructions and facilitates better business directions with integrated business and visual information.

SAP Visual Enterprise software consists of three core products:

**SAP Visual Enterprise Generator application:** a processing engine that translates nearly any 3-D computer-aided design (CAD) file into a lightweight file format used in downstream processes. It can also be configured to support specific work processes in engineering, manufacturing and maintenance.

**SAP Visual Enterprise Author application:** an end-user application that creates animated procedures, 3-D embedded documents and high-definition imagery.

**SAP Visual Enterprise Viewer application:** a lightweight, powerful, easy-to-use, free-of-charge end-user tool to view and interact with the authored and published content.

"SAP is committed to providing advanced technologies that give value to our customers by enhancing their experience with SAP Business Suite," said Hans Thalbauer, senior vice president, Line of Business Solutions for Supply Chain and R&D, SAP. "SAP Visual Enterprise applications integrated with SAP Business Suite bring to the user a complete new 'view' of their data, while combining visual information with business content improves collaboration, enables better decision-making and drives faster time to market for our customers."

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## ***ShipConstructor 2012 R2 Released***

5 March 2012

ShipConstructor Software Inc. (SSI) has released a new version of its AutoCAD based CAD/CAM software.

ShipConstructor 2012 R2 sets a new standard for 3D modeling efficiency and the rapid creation of clear production documentation.

The latest version of the software also contains multiple enhancements to speed up the process of labeling production drawings.

ShipConstructor 2012 R2 Subscription Advantage Pack Customers will have the added benefit of a new feature which allows the ability to automatically label to the edge of a part rather than piecemark. When combined with the other labeling improvements in this release, this feature will dramatically reduce the time and effort required to create clear and concise production documentation.

ShipConstructor 2012 R2 also provides the ability to model Electrical Cable Supports within Space Allocations. These Cable Supports are included in BOMs, interference checking, and production output which results in more accurate center of gravity reporting (by assembly or for the entire vessel), improved material and production planning, and also helps to prevent errors from making their way to production where they are more costly to resolve.

Additionally, ShipConstructor 2012 R2 users will appreciate the troubleshooting and analysis capabilities offered by the voluntary Customer Involvement Program (CIP) which is being fully rolled

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out with this version of the software.

The following new features and enhancements will, along with a host of additional minor improvements to the software, contribute to the ongoing success of those within the ShipConstructor community:

## **ShipConstructor 2012 R2 New Features:**

**Labeling Improvements** – Significantly reduced time and effort required to label production drawings with enhanced options for automatic labeling, label placement and label distribution.

**Performance Enhancements** – Significant improvement in both larger projects and multiple-user concurrent usage scenarios, most notably in updating of production drawings.

**Cable Supports** – A more complete model of the entire vessel and production output with equipment style modeling of inverted tee, trapeze, tray, tray supports, and other types of cable supports within Space Allocations.

**Increased Flexibility for Saddle Connections** – Enhancement for creating a saddle connection via interference with the outer diameter of the header and the inner diameter of the branch.

**Dynamic Marking Blocks** – Reduced effort to communicate a large volume of information to production staff with the ability to specify alignment marks, edge preparation, bevel codes and any other required information on plates in a standardized, centrally controlled and efficiently managed fashion.

**CIP Data Collection** - Help to improve the software by collecting data on the execution, sequence and duration of commands within the ShipConstructor environment.

For more information see the release review document: [What's New-ShipConstructor 2012 R2](#)

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## ***Siemens PLM Software Technology Transforms Model-Based Design Processes for Airframes***

6 March 2012

[Siemens PLM Software](#) announced the release of Syncrofit™ software version 2012 (Syncrofit 2012) and Quality Planning Environment™ (QPE) software version 2012 (QPE 2012). Both products were developed by [Vistagy](#), which was acquired by Siemens on December 7, 2011, and is now a business segment within Siemens PLM Software.

Syncrofit 2012 is the only production-proven, CAD-integrated, commercial off-the-shelf (COTS) solution for managing the complexities of airframe assemblies, and QPE 2012 enables major aerospace original equipment manufacturers (OEMs) and suppliers to automate the process of identifying engineering characteristics and transferring them to quality plans for first article inspection. The new versions continue to deliver key functionality to increase productivity, eliminate error-induced engineering change orders, and facilitate the seamless flow of airframe engineering data throughout the enterprise.

The new version of Syncrofit software, which is used for designing large aerostructures and assemblies, enhances visualization of fastener data in complex assemblies, improves system performance when working on large assemblies, and deploys a fastener management solution that works seamlessly with existing PLM systems and enterprise databases.

Syncrofit 2012 enhances productivity by reducing the time it takes for system updates and eliminating

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the need to hunt through large assemblies for information and then manually enter that data into the CAD model. It is tightly integrated into industry-leading, commercial 3D CAD systems and works in conjunction with premier PLM systems so users spend less time entering data and interacting with multiple systems. Syncrofit also connects to industry standard Oracle and SQL Server databases, thus eliminating the need to support non-standard databases and the associated costs of maintaining and updating them.

The new version of QPE software, which is used to develop plans to assess aerospace quality, enables major OEMs and suppliers to automate the process of identifying engineering characteristics and transferring them to quality plans for first article inspection—providing a faster, easier, and more accurate method than traditional means.

QPE reduces the time it takes to develop inspection plans for metallic detail parts, composite parts, and assemblies by up to 90 percent. It facilitates the extraction of relevant design characteristics automatically from the 3D definition; ensures traceability of characteristics from the 3D definition into quality plans, and creates outputs in a variety of formats, such as Excel and PDF, which conform to AS9102 standards.

“The aerospace world is in the midst of a major transition to model-based design,” said Steve Peck, director of product and market strategy for Syncrofit and QPE. “Syncrofit 2012 and QPE 2012 are enabling firms to unlock the full potential that digital design has to offer. These latest product releases incorporate new functionality to help fill the gaps in airframe assembly and first article inspection that just can’t be addressed by CAD or PLM alone.”

The business segment of Siemens PLM Software containing the former Vistagy operation is a leading global provider of industry-specific engineering software and services that creates rich product descriptions for better-informed decision making early in the design cycle and enhances commercial 3D CAD platforms, such as Catia<sup>®</sup>, Creo Elements/Pro<sup>™</sup> and NX<sup>™</sup>, by applying specialized process knowledge and domain expertise to help solve some of the world's most complex engineering problems. As a result, customers significantly increase their reuse of engineering data and ultimately reduce cost, improve quality, and cut time to market. Today these products are utilized by hundreds of leading manufacturers in the aerospace, automotive, and wind energy industries, including Bombardier Aerospace, General Motors, and Sinomatech Wind Power Blade Co.

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### ***Tata Steel Launches Free RoofDek Analysis Software using Tedds Software as the Platform***

5 March 2012

Tata Steel has just launched a new free-of-charge roof decking software package that enables structural engineers and designers to carry out full deck analysis to achieve optimum design and cost efficiencies. RoofDek Analysis Software has been created in partnership with leading structural software developer, CSC, and uses CSC’s structural calculation software, Tedds, as the platform for the deck analysis. This new software release extends and enhances Tata Steel’s structural decking design software suite, which already includes ComFlor<sup>®</sup> Analysis Software for floor decking applications.

“RoofDek Analysis Software brings software for deck design into the 21<sup>st</sup> Century”, explains Adrian Wallwork, Product Manager Structural at Tata Steel. “Whereas earlier roof decking software has focused on a simple equation-based approach, our new package allows the user to carry out a full analysis and to fine tune decks in the same way as they have been able to do with other components.

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It also completely satisfies the need to comply with Eurocode 3 Design of Steel Structures and Eurocode 9 – Design of Aluminium Structures, soon to be mandatory in the UK and useful throughout Europe and the rest of the world.”

Users are able to input up to four spans, two of which can be cantilevers. Extended end laps can be included as internal supports. Thickness of deck can be varied each side of extended end laps.

Default loads and load combinations are provided, however the user may input virtually any combination. Bending moment, shear, deflection diagrams plus full calculations to comply with Eurocodes 3 and 9 can all be output.

All input parameters and the extent of output are also fully editable.

“The software affords exceptional design refinement, which naturally leads to the most efficient deployment of roof decks,” continues Adrian Wallwork. “This provides a sophisticated approach, devoid of the simplifications, conservatism and inevitable compromises of equation-based design.

We are planning to develop Roofdek Analysis Software on an ongoing, phased release basis. Users can therefore look forward to even more features and functionality in future.”

Download your free RoofDek Analysis Software [here](#). A second version will soon follow with further enhancements. Find out more about [Tedds](#).

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### ***Tutorial Package Has 20 New Models for Antenna Design, Plasmonics, and Benchmarking Electromagnetics Simulations***

7 March 2012

COMSOL, Inc. announced the release of a new edition of its RF Module tutorials for its flagship product, COMSOL Multiphysics. The tutorial package has been enhanced with 20 new models that demonstrate how to leverage the RF extension module when designing and analyzing antennas and plasmonic technologies.

Additionally, the new tutorial package comes with a suite of benchmarking tools, enabling users to assess the accuracy of their engineering simulations developed with the RF Module against established reference points. With the 20 new models, the tutorial library for RF Module now provides more than 50 example models, all of which are available for immediate download at <http://www.comsol.com/showroom/product/rf/>.

“It is great to provide our growing base of RF Module users with a brand new tutorial package,” says Walter Frei, PhD applications manager at COMSOL. “More and more engineers and scientists have made COMSOL Multiphysics their simulation platform for researching and developing emerging technologies such as metamaterial and plasmonics modeling. One reason users cite for the popularity of COMSOL Multiphysics in these applications is the flexibility of the user interface, which allows for anisotropic materials, negative permittivity and permeability. They also cite the software's general and highly automated solver technologies. We're delighted to show our user community how they can better apply the RF Module to RF and Microwave simulations.”

Among the new tutorials now available are microstrip patch antenna, double-layered dielectric lens radome, branch line coupler, evanescent-mode cavity filter, and dielectric resonator antenna. “These examples should really help users get kick-started with COMSOL Multiphysics and the RF Module,”

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says Jiyoun Munn, microwave applications expert at COMSOL. “They show you step-by-step how to quickly create the geometry and set up material properties, ports, and other boundary conditions. There's even an emphasis on production of relevant S-parameter and far-field radiation pattern outputs, which are vital for making informed design decisions.”

“The tutorials also show off COMSOL’s amazing visualization capabilities,” adds Mr. Munn. “COMSOL lets you visualize any type of field quantity anywhere in your model easily. This capability helps users build confidence in their analyses while developing an intuitive feel for their models quickly.”

## **Benchmarks**

A number of classic benchmarks are a standard part of the new RF Module tutorial package. The benchmarks come with step-by-step instructions that make it easy for users set-up their evaluations. Among the areas of interest addressed by new example benchmarks are transmission line theory, Mie scattering, and photonics.

Additionally, the COMSOL user community continuously provides even more benchmarks and experimental verifications for the RF Module. Many of these user submissions have been presented at the annual COMSOL Conference, making them available free of charge on the COMSOL Conference CD. The conference CD can be ordered online at <http://www.comsol.com/conference/cd/>.

## **Multiphysics and Microwave Simulations**

Earlier editions of the RF Module tutorial package came with a number of multiphysics and microwave simulation examples such as microwave heating of food and the mechanical deformation of microstrip filters. In fact, COMSOL has been developing multiphysics technology for electromagnetic wave simulations for more than 15 years.

“Users rely on us to provide the most versatile and integrated solution on the market for these strongly coupled physics phenomena,” says Magnus Olsson, PhD, product manager for electromagnetics with COMSOL. “We bring together microwave, heat, flow, and mechanical simulations.”

“One of the most significant multiphysics capabilities we provide microwave engineers is the ability to combine frequency-domain and time-domain simulations, such as the turning on-and-off of a microwave source, and solve for the transient heating with temperature-dependent material properties simultaneously,” Dr. Olsson adds.

## **A Full List of the 20 New RF Module Tutorials**

Computing the Radar Cross Section of a Perfectly Conducting Sphere

Microstrip Patch Antenna

Radome with Double-layered Dielectric Lens

Branch-Line Coupler

Evanescent Mode Cavity Filter

Biconical Antenna

Cascaded Rectangular Cavity Filter

Dielectric Resonator Antenna (DRA) with Parasitic Array

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Antenna Decoupling Using Electromagnetic Band Gap (EBG) Metamaterial

Coupled Line Filter

Coplanar Waveguide (CPW) Bandpass Filter

Fabry-Perot Cavity

Dielectric Slab Waveguide

Finding the Impedance of a Coaxial Cable

Fresnel Equations

Transient Modeling of a Coaxial Cable

Optical Scattering off of a Gold Nanosphere

RF Module verification example: Q-factor and resonant frequency

Parallel Wire Transmission Line

180 Degree Ring Hybrid, Rat-Race, Coupler

Additional information about the company is available at [www.comsol.com](http://www.comsol.com).



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