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## Top Story

### *Autodesk Launches Cloud-Based Alternative for Product Lifecycle Management*

29 February 2012

Autodesk, Inc. announced the immediate availability of [Autodesk PLM 360](#). The next-generation cloud-based alternative provides a powerful, affordable and easy-to-implement solution at a fraction of the cost of traditional product lifecycle management (PLM) systems.

Autodesk PLM 360 is the latest offering to build upon the company's cloud-based solutions. Unlike traditional PLM systems — which have historically been expensive and complicated — Autodesk PLM 360 is instant-on and easily configurable to meet customer-specific product-lifecycle process needs across the enterprise. It is also the first cloud-based PLM solution focused on business applications beyond engineering and bill of material management. As a result, employees in a range of roles — from planning and product development to quality and compliance to service and more — can better access product and project-related information that helps them continuously improve the products they design and manufacture.

“Our customers deserve modern technology to help solve the needs of their increasingly complex and global businesses,” said Robert “Buzz” Kross, senior vice president, Design, Lifecycle and Simulation at Autodesk. “Autodesk PLM 360's simple, flexible, cloud-based approach will radically improve the ability for companies to gain the full benefits of PLM, helping them to become more competitive and grow their business.”

“We've found Autodesk PLM 360 to be a welcome expansion of our [Digital Prototyping](#) workflow,” said Rob Ferber, CEO at Electron Vault, a clean-tech energy-storage provider. “Given the high costs and expertise associated with traditional PLM, we just didn't want to go there until now. Autodesk's accessibility, rapid deployment and ease of use reduce the complexity of managing PLM processes across our global teams.”

Franke Foodservice Systems Inc., a division of Switzerland-based global manufacturer Franke Artemis Group, which employs around 10,500 staff worldwide and is established in over 40 countries, has adopted Autodesk PLM 360 to improve its product management, enhancing collaboration through product conception, realization, deployment and use. “No two restaurant customers are identical, and we have many staff in the field doing surveys of customer sites to customize equipment for a new menu item or coffee system,” said Duane Brown, manager, Product Data and CAD Operations, Franke Foodservice Systems. “Having a global, cloud-based application to track every step and all our major product milestones with instant sharing of all field and engineering notes in a secure application is incredible.”

### **Modern, No-Programming Approach**

In addition to offering an attractive, modern look and feel for a superior user experience, Autodesk PLM 360 takes a highly configurable no-programming approach to system configuration that eliminates the

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need for expensive programmers and consultants. Dozens of pre-installed apps automate business processes across the lifecycle. With intuitive drag-and-drop functionality, users can easily tailor apps or build their own to meet specific needs and without having to purchase additional modules.

## **True Cloud Application**

Autodesk PLM 360 is a true multi-tenant cloud application. Users and managers will never again have to worry about upgrades and broken customization; the application is always up-to-date and compatible with any customer-specific configuration. IT professionals are freed from non-strategic system management since users access Autodesk PLM 360 from a fully managed data center that provides security, high performance and disaster recovery. Additionally, the cloud-based foundation offers users anytime, anywhere access, from virtually any mobile device or web browser.

Autodesk PLM 360 also features integration and interoperability to on-premise systems including [Autodesk Vault](#) product data management (PDM) software. Vault enables workgroups to organize, manage and track their engineering CAD data, manufacturing bills-of-material and change processes from a centralized location.

## **Pricing and Availability**

In contrast to legacy PLM industry licensing matrices, Autodesk PLM 360's easy and affordable subscription model simplifies purchasing. Full function access for the first three professional users is free, with each additional user priced at US\$75 per month on an annual contract basis. This represents roughly one-tenth the cost of comparable functionality from legacy PLM providers. Availability varies by country. Visit <http://www.autodesklm360.com/> for additional information about how to purchase Autodesk PLM 360.

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## Acquisitions

### ***AspenTech Acquires SolidSim Engineering GmbH; Adds Leading Solids Modeling Technology to aspenONE® Engineering Software***

1 March 2012

Aspen Technology, Inc. announced it has acquired SolidSim Engineering GmbH, a leading provider of solids process modeling software, based in Hamburg, Germany. SolidSim software is used by a number of leading process manufacturing companies to model those parts of their processes that involve solids.

The addition of SolidSim builds on existing solids process modeling capabilities in aspenONE Engineering software. The combination of SolidSim and aspenONE Engineering software will eventually enable end users to model the entire facility as one single model consisting of both solids and non-solids process sections. This will allow both process engineers and particle technology engineers to work within a single modeling environment, increasing collaboration and driving increased value from enhanced process optimization for customers in the chemicals, specialty chemicals, energy and pharmaceutical industries.

Terms of the transaction were not disclosed.

## **Supporting Quotes**

*Mark Fusco, President & CEO, AspenTech*

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“aspenONE Engineering is the most comprehensive, integrated and easy to use environment for process engineering. The addition of SolidSim will give our customers the ability to model solids, enhancing our aspenONE solutions. With SolidSim and aspenONE software from AspenTech, customers will be able to model the entire facility as one single model consisting of both solids and non-solids. This will not only expand the opportunities for process optimization but will also result in improved engineering work processes and higher productivity of engineering teams.”

*Claus Reimers, Co-CEO, SolidSim*

“SolidSim software provides leading capabilities for our customers to model solids. Today, many of our customers use both SolidSim and AspenTech software to model their processes. Becoming part of AspenTech will enable us to provide SolidSim functionality in addition to the aspenONE software portfolio, which will provide our customers with a seamless end-to-end solution capable of modeling their entire process.”

*Matthias Pogodda, Co-CEO, SolidSim*

“Enhancing collaboration between process engineers and particle technology engineers is essential for process companies today. We are excited to join AspenTech and to offer a solution that will allow our customers to drive new levels of optimization across solids and liquids/gas modeling.”

## Supporting Resources

[AspenTech products](#)

[aspenONE Engineering V7.3](#)

[AspenTech YouTube channel - product videos](#)

[SolidSim background](#)



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## ***GRAITEC Extends its European Base by Acquiring B&B srl, a key Italian Software Reseller***

24 February 2012

GRAITEC, an international software developer for CAD and structural analysis solutions for civil engineering acquired Italian-based company B&B srl, a major reseller of CAD and Design solutions for construction. GRAITEC, through this acquisition, will open sales of its GRAITEC Advance solutions in a new European country and will secure Italian customers' investments.

Established in 1994 by Leonardo and Alessandro BETTILOLO, B&B focuses its business on distributing software for Structural Engineers and Detailers. Since 1996, B&B has become a certified authorized Autodesk partner, focusing increasingly on programs and AutoCAD applications. They successfully sold Autodesk solutions, Sofistik, SteelCon and steel detailing software to more than 800 users in Italy.

B&B also offers a complete range of services which include feasibility studies, training courses and after-sales service given to the resolution of any problems the customer encounters. The company also offers multimedia services mainly in the visualization of technical processes.

B&B srl have an experienced staff of 5 people dedicated to customer satisfaction.

Through this acquisition, GRAITEC intends to strengthen its sales network in Europe and makes significant investments in order to serve its customers in Italy. Therefore, B&B goes from a distributor

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status to an editor status. This positive development will secure its users' investments in the long term: B&B Italian customers will be assured of better service and localization and will have access to the power of the R&D of an international Group. B&B will continue to distribute and support Sofistik and SteelCon software in Italy and to develop its range of products and services.

Commenting on the acquisition, Francis GUILLEMARD, CEO and founder of GRAITEC, stated: "With B&B's acknowledged expertise, GRAITEC will develop its leadership position in Europe by opening the Italian market for its solutions. The experience of B&B staff will establish good customer relationships in this country and contribute to keep offering our European users the solution that best meets local market requirements."

Alessandro BETTILOLO, Sales Manager of B&B srl adds: "Joining GRAITEC will enable us to benefit from the experience of a truly international Group and will allow us to expand our offer of services. We will combine our strengths to serve Italian clients with a wider portfolio of BIM solutions and respond to much bigger and more complex challenges they face. Already 200 users have been convinced by Advance Steel software and they are fully satisfied by its features and its performances."

## **About B&B srl**

Set up in 1994, B&B srl provides design, detailing and fabrication solutions for steelwork and concrete construction. B&B srl is a major CAD and Design supplier construction with more than 800 customers in Italy. The company's activities include consulting, training and support for many customers and for all services linked to the use of detailing and structural analysis in the construction field.

For more information, please visit <http://www.graitec.it>



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## ***Rand Worldwide Acquires Inlet Technology***

1 March 2012

Rand Worldwide announced that it has completed the acquisition of certain assets of Virginia Beach based Inlet Technology. Inlet Technology is an Autodesk technology integrator, channel partner and services provider primarily focused in the architecture, engineering and civil industry and as such will be incorporated into the IMAGINiT Technologies division of Rand Worldwide.

"With the completion of this acquisition IMAGINiT has increased our pool of talented sales and technical resources in the Mid-Atlantic region," stated Marc Dulude, chief executive officer at Rand Worldwide. "We remain committed to organic growth further enhanced with acquisitions using our strong balance sheet and this was an ideal candidate in an attractive region."

"I am very pleased to have completed this transaction and to leave my customers and employees in the hands of the good people at Rand," said Frank Willson, chief executive officer at Inlet. "This acquisition provides greater benefits to our customers in terms of the scope and breadth of experience that Rand brings as well as enhanced opportunities for our employees who will be joining a larger organization with a global footprint."

In the coming weeks, IMAGINiT Technologies will be consolidating the former Inlet Technology office into IMAGINiT's existing Virginia Beach office. Clients who previously dealt with Inlet Technology for their sales, technical and support needs can continue to contact their representatives as they have always done. Once the integration of the companies is complete, customers will receive additional



communication from IMAGINiT Technologies providing clarification on how to work with the combined company going forward.

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## CIMdata News

### *CIMdata Announces Manufacturing Consulting Practice*

1 March 2012

CIMdata, the leading global PLM management consulting and research firm, announces the formation of its newest business practice, enhancing CIMdata's long-time focus on the importance of manufacturing as part of the complete product lifecycle.

Peter Bilello, President of CIMdata, announced that Mr. Jeanne Naysmith will lead the creation and delivery of CIMdata's offerings for end users and solution providers as its Manufacturing Practice Manager. CIMdata is known for its Numerical Control (NC) Market Analysis Report (MAR), now in its twenty first year documenting the market results and industry practices in computer-aided manufacturing. "We at CIMdata are very happy to add Jeanne to our team to expand our work in this vital domain," stated Alan Christman, CIMdata's Chairman and long-time manager of the NC MAR research. Stan Przybylinski, CIMdata's Director of Research, continued, "Mr. Naysmith's domain expertise and recent experience in market assessment and technology development will help us extend and enhance our coverage of the NC market and other related manufacturing domains, such as digital manufacturing, and the Manufacturing Execution System (MES) space."

Mr. Naysmith is a senior executive with extensive domestic and international P&L experience in software and services companies in the mechanical computer-aided design (CAD) and computer-aided manufacturing (CAM) industries, including management positions at the Ford Motor Company, CIMLINC, Applicon, and Computervision. Mr. Naysmith attended David Lipscomb College and the University of Michigan.

With this new manufacturing practice, CIMdata will now offer a complete portfolio of products and services for both users and developers of NC and other manufacturing applications, including management consulting, market research and analysis, webinars, solution assessment, and best practices education.

### **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 more than 28 years ago, 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

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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)23 568-9385. Fax: +31 (0)23 568-9111. Follow PLM news at <https://twitter.com/#!/CIMdataPLMNews>.

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## ***CIMdata Publishes “The Democratization of Simulation with Intelligent Templates: Realizing the Full Benefits of Simulation”***

28 February 2012

- Research explains how intelligent templates can be a huge enabler for product development systems

CIMdata, the leading global product lifecycle management (PLM) consulting and research firm announces the publication of a new paper on the potential for “intelligent templates” to become a huge enabler for product development systems, allowing the delivery of higher quality products in much less time.

Intelligent templates present an innovative concept in product development that focuses on a reusable framework for managing product information and simulations of product performance. Simulation is made available to a wider audience of product developers, in a reliable way that does not require them to be experts in specific simulation applications. The templates define best-practice workflows that can be executed using information contained in the abstract model and its associated product and process data. Experts must create the templates, but non-experts can use them reliably.

The concept of intelligent templates is not simply an evolutionary improvement in the way most companies approach product design and simulation; it represents an entirely different paradigm. It is a systems engineering approach to model-driven design that both demands and fosters systems thinking and collaboration.

This paper is derived from a keynote presentation made by Malcolm Panthaki, VP Customer Success, CTO, and Founder of Comet Solutions, Inc. at CIMdata’s PLM Road Map conference in the fall of 2011. It provides insight on how Comet’s technology enables the effective implementation of intelligent templates.

“The Democratization of Simulation with Intelligent Templates: Realizing the Full Benefits of Simulation” is available for download at

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

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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

### *Autodesk Supports TED in Creating Foundation for City 2.0*

1 March 2012

Autodesk, Inc., a sponsor of the 2012 TED Conference, is supporting the 2012 TED Prize "The City 2.0." The City 2.0 seeks to nurture the development of a new city concept, dedicated to reducing the carbon footprint created by occupants and easing the environmental pressures on the world's rural areas.

Autodesk is supporting City 2.0 through content development and by providing free\* software and other resources on the [city2.org website](http://city2.org), all of which will help citizens more easily visualize and simulate the environmental transformation of their cities. Autodesk will also create a new exhibit for the [Autodesk Gallery](#) at One Market in San Francisco, introducing visitors to technology that can help realize the vision of City 2.0.

"The software used by the world's architects, engineers and urban planners to sustainably design, build and manage cities will play a central role in realizing the vision of City 2.0," said Carl Bass, Autodesk president and chief executive officer. "Our vision is to help people imagine, design and create a better world, and we are proud to contribute this spirit of innovation to the TED community, which we are sponsoring for the third consecutive year, and by fully supporting the TED Prize."

The TED Prize is traditionally awarded to an individual, but for the first time in seven years, the winner of the prize is an idea. The City 2.0 was selected because cities promote innovation, education, culture and economic opportunity. Living sustainably is also a critical component of the City 2.0. The wish for the TED Prize was unveiled on February 29, 2012, at the TED Conference in Long Beach, California.

"Autodesk is a company closely aligned with sustainability and innovation – critical components of the City 2.0," said Chris Anderson, curator of the TED conference. "Autodesk continues to be a great supporter of TED and the TED Prize. We are thrilled to have them as a sponsor and welcome their support of the City 2.0"

\*Software use is subject to the user's acceptance of the terms and conditions of the accompanying license agreement.

### **About TED**

TED is a nonprofit organization devoted to Ideas Worth Spreading. Started as a four-day conference in California 25 years ago, TED has grown to support those world-changing ideas with multiple initiatives. The annual TED Conference invites the world's leading thinkers and doers to speak for 18 minutes. Their talks are then made available, free, at [TED.com](http://TED.com). TED speakers have included Bill Gates, Al Gore, Jane Goodall, Elizabeth Gilbert, Sir Richard Branson, Nandan Nilekani, Philippe Starck, Ngozi Okonjo-Iweala, Isabel Allende and former UK Prime Minister Gordon Brown. The annual TED Conference

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takes place each spring in Long Beach, Calif., along with the TEDActive simulcast in Palm Springs; the annual TEDGlobal conference is held each summer in Edinburgh, Scotland.

TED's media initiatives include [TED.com](http://ted.com), where new [TEDTalks](http://ted.com/talks) are posted daily, the [Open Translation Project](http://open.ted.com), which provides subtitles and interactive transcripts as well as the ability for any TEDTalk to be translated by volunteers worldwide, and [TEDBooks](http://ted.com/books), short e-books by speakers that elaborate on a single idea originally presented on TED's stage. TED has established the annual [TED Prize](http://ted.com/prize), where exceptional individuals with a wish to change the world are given the opportunity to put their wishes into action; [TEDx](http://ted.com/edx), which offers individuals or groups a way to host local, self-organized events around the world, and the [TED Fellows](http://ted.com/fellows) program, helping world-changing innovators from around the globe to become part of the TED community and, with its help, amplify the impact of their remarkable projects and activities.

Follow TED on Twitter at <http://twitter.com/TEDTalks>, or on Facebook at <http://www.facebook.com/TED>.

## About The TED Prize

The first TED Prize was awarded in 2005, born out of the TED Conference and a vision by the world's leading entrepreneurs, innovators, and entertainers to change the world – one Wish at a time.

The reward: \$100,000, the TED Community's array of talent and expertise, and the leadership of a TED Prize team led by Amy Novogratz. What began as an unparalleled experiment to leverage the resources of the TED Community to spur global change has evolved into one of the most prestigious prizes.

From Bono's the ONE Campaign ('05 recipient) to Jamie Oliver's Food Revolution ('10 recipient) and JR's Inside Out Project ('11 recipient), the TED Prize is helping to combat poverty, take on religious intolerance, improve global health, tackle child obesity, advance education, and inspire art around the world.

For more information on the TED Prize, visit <http://www.tedprize.org/>.

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## ***AVEVA Boosts Focus on Nuclear with New Office in Charlotte, NC***

28 February 2012

AVEVA announced it has opened a new office in Charlotte, North Carolina to support the growing global nuclear energy market. The office, based on the prestigious Ballantyne Corporate Business Park, will focus on sales and support for clients engaged in engineering, design-build, handover/commissioning and on-going operations for the nuclear industry.

“This strategic location positions AVEVA to add even greater value to our growing client base in the nuclear sector across the entire lifecycle of their assets”, commented Nick Revelas, VP Global Business Development, AVEVA, who will head up the Charlotte operation. “Our Operations Integrity Management strategy helps companies reduce risk, costs and maintain safe and compliant operations”.

Derek Middlemas, COO and Head of Enterprise Solutions added, “AVEVA has a well-established presence in this important market, providing Engineering and Information Management Solutions for over four decades. The new Charlotte office is another example of our continued investment to deliver products and services that enable both Nuclear Operators and their Contractors to achieve maximum value throughout their business”. Over the past 5 years Charlotte has become a strategic location to

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many businesses that serve the global nuclear market. Companies already in residence include Shaw, AREVA, URS, Mitsubishi, Duke Power and Babcock & Wilcox.

To download a recent point of view paper by AVEVA regarding the nuclear market click on <http://www.aveva.com/nmbf>.

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## ***BWIR Announces Strategic Alliance with PTC***

27 February 2012

Barry-Wehmiller International Resources ([BWIR](#)) has announced the signing of a nationwide partnership agreement with PTC of Needham, Mass., to become an Enterprise Solutions Provider offering PTC Windchill® PLM product, maintenance, E-learning training products and integration services. The Windchill software suite enables collaborative content and process management -- from design to supplier sourcing and production -- over the internet. BWIR and its parent, Barry-Wehmiller Companies, Inc., have a distinguished record with a wide range of Product Lifecycle Management (PLM) solutions. This milestone serves to cement BWIR's relationship with PTC through a formal agreement.

“In today's challenging economic environment, more and more companies are looking to streamline their engineering processes to increase productivity and decrease lead time,” stated Jim Webb, BWIR Senior Partner and Vice President of Global Engineering and PLM Solutions - Americas. “Our expertise in the implementation of enterprise solutions and Windchill PLM systems worldwide, combined with the robust products and services from PTC, provides a formidable value proposition to the marketplace.”

BWIR has more than a decade of experience offering tool-agnostic product lifecycle management (PLM) implementation. The addition of products and services from PTC complements this offering by improving BWIR's ability to meet the needs of customers that demand higher-end PLM functionality due to an increased need for engineering design collaboration, or multi-site and global operations.

“We look forward to working closely with BWIR to expand our ability to offer PTC products and services to manufacturers around the globe,” commented John Condon, Vice President, Americas Channel Sales, PTC. “Our aim is to offer customers a broader range of resources. BWIR specializes in the integration of the industry's most advanced IT and enterprise solutions; this alliance supports the diverse technology and process optimization needs of our engineering and manufacturing customers.”

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## ***CD-adapco Announces UH Student as its 2012 Academic Paper Contest Winner***

29 February 2012

For a long time, CD-adapco has been providing the academic engineering community with industrial strength engineering simulation software. Its simulation tools are used by thousands of users at hundreds of academic institutions.

Students and researchers, who were enrolled in CD-adapco's Academic Program and had completed a CFD simulation project between 2009 and 2012, were invited to submit a paper describing their simulation work for that project. The author of the winning paper, Leonardo Chica, was chosen from a variety of papers received from the academic community in the US, Italy, India, Spain, and the UK. As

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the winner, Leonardo has been awarded an all-expense paid trip to the CD-adapco STAR Global Conference 2012 where he will present his paper to an audience of simulation experts from around the world.

Leonardo's paper is entitled, "Fluid Structure Interaction Analysis of Two-Phase Flow in an M-shaped Jumper." A native of Bogota, Colombia, Leonardo received his BS in Mechanical Engineering Technology from the University of Houston (UH) in December 2011. He was awarded the Outstanding Undergraduate Student Award for his excellent academic standing and for innovative research pursued as part of his Honors Thesis. He is currently pursuing his MS in Mechanical Engineering Technology with a December 2013 graduation date.

In the last semester of his undergraduate studies at UH, Leonardo conducted a research study, in the area of multiphase flow induced vibration. Mentored by MCS Kenny, the project focused on modeling and analyzing the effects of the flow in subsea jumpers using STAR-CCM+ and Abaqus, specifically two-way coupling simulation. The work has been accepted for publishing in two of the most prominent offshore conferences: OMAE and ISOPE.

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## ***CD-adapco Announces the Opening of its new Glasgow Office***

28 February 2012

CD-adapco has a new office location in the UK.

The CD-adapco office which has been housing the SPEED team at the University of Glasgow, has moved to a new address today. As well as supporting the full range of CD-adapco products, the new office will be home to the SPEED team, who are relocating from the University of Glasgow.

CD-adapco - Glasgow

1st Floor, 185 St. Vincent Street

Glasgow G2 5QD

Tel: +44 (0)141 225 5120

Fax: +44 (0)141 225 5129

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## ***CD-adapco Opens Shin Osaka, Japan Office***

1 March 2012

Due to its sizable growth in the Japanese market, CD-adapco opened a new office in Shin Osaka this month. The new CD-adapco Shin Osaka office is 2-3 minutes from the SW Shin Osaka and JR Shin Osaka train stations. The office space is just over 3,200 square feet (90 tsubo) allowing for expansion. Built in 2008, the office building provides many modern features and a contemporary design. This location contains state-of-the-art computing facilities and dedicated customer areas for training and consultancy technology transfer.

Cyndi Taylor, CD-adapco's Worldwide Facilities VP commented on the move, "The CD-adapco team in Shin Osaka is excited to have the new space." Taylor continued, we have unrivaled fiber optic

# CIMdata PLM Industry Summary

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bandwidth to support large projects and increase our customer satisfaction of our sales and support teams. We have always worked hard to make visitors to our offices feel welcome. The new office space allows us to do that. We are all looking forward to welcoming new and current customers and associates to join us in the Shin Osaka CD-adapco office.”

We are excited to expand our office locations in Japan and show our continued commitment to our customers in two prominent locations of Japan. Our first office in Yokohama, Japan is now complimented by our second location in Shin Osaka, Japan.

## **CD-adapco Shin Osaka**

Shin Osaka Brick building 9F  
1-6-1 Miyahara Yodogawa-ku  
Osaka City, Osaka, Japan 532-0003

Tel: 06-4807-7840

Fax: 06-4807-7845

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



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## ***China Software Industry Association Awards 2011 Excellent Software for Chinese Version of IRONCAD***

28 February 2012

[IronCAD, LLC](#) announced its strategic alliance partner in China, CAXA, has received the 2011 Excellent Software Award from the China Software Industry Association for the Chinese version of IronCAD’s 3D Innovative Design Solution, IRONCAD. The China Software Industry Association (CSIA) is a nation-wide organization led by Ministry of Industry and Information of the PRC. CSIA publishes the China Software Industry Annual Report every year and it has long been regarded as the most authoritative, valuable and comprehensive report.

China Software Industry Association (CSIA) was founded on September 6, 1984. It was voluntarily formed by enterprises and individuals engaged in software research and development, publication, sales and training, in research and development of information systems and information service providing, and in the consultancy, market survey, investing, financing and other related agent services for software industry. Registered in the Ministry of Industry and Information, CSIA is the unique representative of China software industry.

Selections of outstanding products are based on software used across China which has widespread implementation in government procurement, public bulk procurement, and large scale key projects. Thousands of software companies compete each year with a select few receiving the excellent software award.



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## ***Infor Expands Global Reach in Key Industries through Partnership with Tata Consultancy Services***

27 February 2012

[Infor](#) announced a strategic partnership with [Tata Consultancy Services](#) (TCS). The agreement, which marks one of the first global systems integrator alliances for Infor, will expand the company's

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geographic reach in key industries by enabling TCS to market, implement and provide services for certain products of Infor and its affiliate, [Lawson Software](#), in the [fashion](#), [food and beverage](#), and [healthcare](#) industries.

## News Points

The partnership between Infor and TCS will support the company's industry specialization and increase market share in key growth-oriented geographies, including North America and Asia-Pacific, with a focus on India and China.

[TCS](#) will market, implement and service leading business applications from Infor and Lawson through TCS' Global Network Delivery Model™, which leverages diverse technical and domain-specific capabilities to enable rapid delivery of custom solutions in compliance with local regulatory requirements and cultural preferences.

TCS will expand its regional presence through its Center of Excellence to support the deployment and service of certain Infor and Lawson products across the globe.

The strong customer endorsement of Infor's strategy to deliver applications that are specialized by industry, credited in part for the company's [strong growth in 2011](#), and the relevancy of Infor and Lawson products to critical growth regions, were key factors in TCS' decision to formalize the partnership.

## Tata Consultancy Services Quote

"This new strategic partnership will enable us to service Infor and Lawson customers through TCS' Global Network Delivery Model™. Additionally, we will leverage TCS Centers of Excellence for Infor and Lawson," said Krishnan Ramanujam, vice president & global head for Enterprise Solutions and Technology Excellence, Tata Consultancy Services.

## Infor Quote

"Strategic partnerships play an essential role in Infor's global growth strategy," said Sam Levy, senior vice president, Global Alliances and Channels, Infor. "TCS is an ideal partner because of the company's strong presence in our target regions and expertise in the focus industries of fashion, food and beverage, and healthcare. This partnership is especially good for customers of Infor and Lawson, who will benefit from the unified effort of global leaders in business technology to deliver the products that meet the specific needs of companies in their industries."

## Additional Resources

Infor Fashion - [www.infor.com/industries/fashion/](http://www.infor.com/industries/fashion/)

Infor Food & Beverage - [www.infor.com/industries/food-beverage/](http://www.infor.com/industries/food-beverage/)

Infor Healthcare - [www.infor.com/industries/healthcare/](http://www.infor.com/industries/healthcare/)

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***100 Percent of Knovel's US Academic Customers Renew in 2011; 2011 Highlights Include International Expansion, Continued Double-Digit Sales Growth and the Introduction of Knovel Databases***

27 February 2012



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Knovel announced that 100 percent of its US academic customers renewed subscriptions in 2011, and the annual renewal rate for all markets continues to exceed 90 percent. Knovel again achieved double digit sales growth in 2011. The company attributes these successes to its strong commitment to customer service, exclusive focus on engineers and the expansion of its high quality content offerings.

Business growth fueled hiring that expanded Knovel's employee base by 28 percent across the board including the addition of a new CFO, Senior VP of Global Sales and Vice President of Product Management. In 2011, Knovel established sales and business development teams in the UK; new business secured by this team includes Arup, Queen Mary, University of London, The University of Southampton and The University of the West of England.

In 2011, Knovel was listed among the EContent 100 for the 6th time and saw record participation in the Knovel University Challenge with more than 12,000 student entries from more than 600 universities worldwide.

Knovel expanded its content offering by 15 percent in 2011. It also added 10 publishing partners and new Editorial Advisory Board members, reinforcing its ability to deliver the most relevant and trusted content in the industry.

The company introduced two new databases exclusively available via Knovel's Critical Content line: The Magnesium Alloy Database and The Optical and Filter Glass Database. Both include highly interactive tables, graphs and data compiled from authoritative sources. Knovel aims to deliver content that allows engineers to find answers faster than they would otherwise. Dedicated resources are in place to expand Knovel's Critical Content offering in 2012. Knovel also added several specialized subject areas, including mining engineering and metallurgy, computer hardware engineering, welding engineering and materials joining.

"Over the past year, we've expanded our content offering, our management team and business internationally," said Chris Forbes, CEO and president of Knovel. "Our annual renewals continue to exceed 90 percent overall and demand remains strong despite flat and reduced budgets that many had in 2011. This a testament to the value customers find in Knovel. Engineers need fast access to credible information, and they have come to rely on Knovel for answers to technical questions."

Knovel users include thousands of engineers and applied scientists worldwide. Knovel has more than 700 customers worldwide including 74 of the Fortune 500 companies and more than 300 leading universities. Founded in 2000, Knovel is a private company headquartered in New York City. For more information, visit <http://www.knovel.com> or call (866) 240-8174.

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## ***3DVision Technologies Partners With TransMagic Expert***

28 February 2012

[3DVision Technologies Corp.](#), a value-added reseller (VAR) of mainstream CAD, CAE, and PDM software serving Ohio, Kentucky and Indiana announced the addition of TransMagic Expert to its broad selection of CAD products and solutions.

TransMagic Expert is designed for companies who have CAD conversion problems. TransMagic is packed with new technology for the reuse of 3D CAD data. With the ability to convert CAD files into any format, streamlining the flow of data throughout your organization or supply chain. Companies can now leverage their CAD data investment over and over for any purpose.

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At TransMagic, the primary focus is developing high quality, multi-CAD interoperability solutions. TransMagic products are highly efficient and enable seamless reuse of 3D engineering and manufacturing data in multiple software environments.

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## ***Video Available: Autodesk Showcases Sustainable Design at Second Annual Sustainability Summit***

27 February 2012

Autodesk, Inc. President and CEO Carl Bass joined Fortune Magazine Sr. Writer and Editor Marc Gunther to discuss sustainable design at the company's recent Sustainability Summit in San Francisco. Also presenting were a panel of customers discussing their use of Autodesk software to design greener buildings, better manufacturing processes, water turbines and an eco-refrigerator. Lynelle Cameron, the company's director of sustainability, opened the event with details about the company's recent green datacenter project, a new version of Autodesk Green Building Studio, and other news.

Multimedia Gallery Available: <http://www.youtube.com/playlist?list=PLE19734877B570BB2>

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## Events News

### ***AspenTech's EVP Antonio Pietri and SVP Blair Wheeler to Discuss Energy and Petrochemical Issues at CERAWeek 2012***

28 February 2012

Aspen Technology, Inc. announced it will sponsor and speak at the global energy industry conference [CERAWeek 2012](#) — March 5-9 in Houston. AspenTech Executive Vice President Antonio Pietri and Senior Vice President Blair Wheeler are among the leading industry executives speaking at the conference. Other speaker highlights include the Chairman & CEO of ExxonMobil, Rex Tillerson; President & CEO of the Federal Reserve Bank of Dallas, Richard Fisher; and CEO of Royal Dutch Shell, Peter Voser.

AspenTech is sponsoring CERAWeek for the fifth consecutive year. Other sponsors of CERAWeek 2012 include Chevron, Ecopetrol, ENI, ExxonMobil, Oracle, Saudi Aramco, Shell, Statoil, TNK-BP and Total. With the theme, "Energy and the Economy: Quest for Growth," this premiere global conference will focus on how the energy industry plays a critical role in solving global economic issues.

On Tuesday, March 6<sup>th</sup>, AspenTech Executive VP, Antonio Pietri, will be a featured panelist on the topic of "Fuels vs. Feedstocks: Petrochemicals and Energy" along with executives from Celanese, and Westlake Chemical Corporation.

AspenTech Senior VP, Blair Wheeler, will also participate on Tuesday, March 6<sup>th</sup> as a panelist discussing, "Energy and the Economy - The Impact of Energy Investment on Employment" with executives from The Institute for 21<sup>st</sup> Century Energy and the National Association of Manufacturing.

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## ***AVEVA Hosts Open House in Houston***

29 February 2012

AVEVA will hold an Open House on March 7, 2012, where it will demonstrate a 'Breakthrough in Engineering Productivity'. The program for the Open House will showcase a new level of Integrated Engineering & Design efficiency that promises significant savings over competitor's solutions. In addition there will be an update on laser scanning software solutions following AVEVA's recent acquisition of LFM Software.

"This is going to be a value-driven event," said William Muldoon, AVEVA's Executive Vice President, North America. "Attendees will have the opportunity to see how data from engineering and 3D design applications can be fully integrated within an environment that enables concurrent project development. Our software is helping engineers and designers work together on plant design projects to deliver savings of up to 30% compared to alternative solutions. This is a major productivity "breakthrough" for our customers and we want to share the compelling benefits with the industry".

AVEVA's Open House incorporates part of the 'Breakthrough in Engineering Productivity' Road Show series that recently visited a number of U.S. and Canadian cities. The Houston attendees will now see for themselves the ground-breaking software technology that takes AVEVA customers to a new level of Integrated Engineering & Design efficiency.

AVEVA representatives will present:

- AVEVA Engineering for managing Engineering data throughout the project lifecycle
- AVEVA Electrical an electrical engineering and design solution that also integrates with PDMS for cable layout optimization

AVEVA & LFM - AVEVA's recent acquisition of LFM Software and how laser scanning technology is delivering value to the plant industry.

The Open House takes place at AVEVA's North America headquarters, 10350 Richmond Ave., in Houston from 5:00 pm to 7:30 pm, and the agenda caters to engineers who are working on major capital facilities.

To RSVP for the Houston Open House, please email: [specialguest@aveva.com](mailto:specialguest@aveva.com)

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## ***CD-adapco's STAR Global Conference 2012 to Host Over 50 Commercial Engineering Specialists and Expert Panel***

1 March 2012

On March 19-21, CD-adapco will host its STAR Global Conference 2012 in Noordwijk aan Zee, The Netherlands at the Grand Hotel Huis ter Duin.

With three weeks left for registrations, this year's event has already attracted a record breaking attendance, attracted by an agenda that includes over 50 presentations from industrial leaders in engineering simulation, each of whom will reveal the secrets of their engineering successes. The conference will include an open discussion with a specially selected panel of experts including analysts, media and innovative industrial users.

The keynote speakers for this year's conference will be Phil White, co-founder of Cervélo. "I am

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delighted that Phil has agreed to deliver our keynote this year. Cervélo's journey from the university lab to the front of the professional peleton was fueled largely by engineering simulation; their story is the perfect embodiment of our "[a World of Engineering Success](#)" conference theme," said Bill Clark, Senior VP of Operations, CD-adapco. "With a presentation titled, 'The Importance of Innovation in a Competitive World,' Phil will share the company's comprehensive approach to design, simulation, and analysis and how it can put you in front of the competition."

Participating companies at this year's event include, but are not limited to, Airbus Military, Lockheed Martin, BMW, Mercedes-Benz, Ford, Nissan, Atkins, MSi Kenny, Tetra Pak, Wärtsilä, Behr, Ford, Magna Powertrain. Also in attendance will be over 20 industrial technology partners and sponsors. CD-adapco's engineering simulation specialists, developers and management will also be on hand to meet and network with attendees.

The full agenda can be viewed on the conference website: <http://www.cd-adapco.com/downloads/newsletters/2012/conference/index2.html>.

In addition to the conference, attendees may choose from a selection of training events and workshops, including STAR-CCM+ v7 Orientation Training, Best Practices in Turbulence and Heat Transfer Modeling, and Meshing and Surface Preparation. There will also be dedicated workshops for ICE (Internal Combustion Engines), Chemical, Battery Design, and Electric Motors.

Attendees will learn the secret of how to use CAE more effectively in their organization, perform more simulations for less effort, and begin exploring the whole design space rather than a few points. They will leave the event with a complete understanding of the business benefits of simulation and realistic implementation strategies for their organization.

To register or learn more about the STAR Global Conference 2012, please visit <http://www.cd-adapco.com/minisites/global12>

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## ***Cimatron Germany to Show Latest GibbsCAM & CimatronE Features at METAV***

27 February 2012

[Cimatron Limited](#) has announced that its machining software solutions, GibbsCAM and CimatronE, will be showcased at the METAV trade fair in Duesseldorf, Germany, February 28 - March 3, 2012.

GibbsCAM (distributed in Germany as Virtual Gibbs) offers European manufacturers solutions for a diverse range of machining needs, including 2- to 5-Axis milling, turning, mill/turn, rotary milling, high speed machining (HSM), Swiss, wire EDM, tombstone machining and multi-task machining.

Key functionalities of the latest GibbsCAM version that will be showcased at the event include automatic color and hole feature recognition, 5-Axis drill cycle options, and support for 5-Axis tilting live tooling (B-axis) on lathes and multi-task machines. Also featured will be GibbsCAM's various HSM capabilities, such as plunge roughing and VoluMill, which yield the lowest bulk material removal costs for most geometry.

CimatronE is an integrated CAD/CAM solution for both toolmakers and manufacturers of discrete parts. The latest version offers powerful capabilities that include 5-Axis milling for any job type, a rich machining strategies library, advanced collision detection and machining simulations, background toolpath calculations, and post-processors for any machine and controller.

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The **GibbsCAM** and **CimatronE** display at **METAV** will be in hall 13, booth C113.

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## ***Delcam India to Show Advanced Manufacturing, Healthcare & Metrology at DieMould***

29 February 2012

Delcam India will display a host of new CAD/CAM/CAI solutions intended for quick and efficient design, manufacture and inspection of dies and moulds on **Stand B-53 in Hall 1** of the DieMould India 2012 exhibition in Mumbai from the 19<sup>th</sup> to 22<sup>nd</sup> April.

There has been innovation in the Advanced Manufacturing Solutions from Delcam for the design and manufacture of moulds, dies, jigs and fixtures. From automated design of moulds and dies with the PowerSHAPE CAD software, to high-speed and high-efficiency machining of these parts programmed with the PowerMILL and FeatureCAM CAM systems; all the way thru to inspecting these complex shapes with a range of hardware using PowerINSPECT, the Delcam AMS range improves the quality of the end product as well as reducing the time-to-market.

Both PowerMILL and FeatureCAM have made the most of the increases in computer power by introducing multi-threading and parallel processing for the latest hardware available in the market. CAM programmers can now save over 40% in their toolpath processing times.

Commenting on the event, Mr. Vineet Seth, Managing Director – India & Middle East at Delcam, said, “In addition to the above, we are keen to help die-mould professionals explore new avenues, especially in the area of Electronic Fixturing and Adaptive Manufacturing, which will help them locate large dies or moulds on the machine tool in far less time than before. It will also help them quickly repair defective areas in large dies or moulds with a few quick steps, saving time on the repair in the regions of 40 – 60%, when compared to traditional methods.”

He also added “Delcam, while predominantly being known as world leaders in CAD/CAM for the tool and die industry, is also a trendsetter in enabling its customers to look at other niche regions for expansions. With their flair for precision and their grasp of technology, die-mould professionals are far better equipped to diversify into associated verticals. With the breadth of the CAD/CAM/CAI and automation solutions that are available from Delcam as a single technology provider, plus the level of technical support available from our company’s experts, we can support any move into areas such as medical and dental component manufacture, aerospace machining, artistic components and robot machining.”

In line with Mr. Seth’s statement, Delcam India will display the 2012 series of its Advanced Manufacturing Solutions, Healthcare Solutions and Metrology Solutions product ranges.

To register as a visitor for the Diemould India 2012 Exhibition, [click here](#).

For more information on Delcam in India, [click here](#).

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## ***Delcam to Make the Most of Turn-Mill Machines at EMEC***

27 February 2012

Delcam is to hold a workshop at EMEC Machine Tools in Mississauga, Ontario, on 23rd March

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showing how companies can use its FeatureCAM feature-based CAM software to maximise the productivity of their turn-mill machine tools. Further information and a booking form are available at <http://www.delcam.com/EMEC>.

The workshop will include programming demonstrations to illustrate the speed and flexibility of the feature-based approach, plus live machining demonstrations on a Okuma/Genos 300m. The event will also see the launch of the latest FeatureCAM release, 2012 R2, in Canada.

The key benefit of turn-mill machines is that they can produce, on a single piece of equipment, parts that would previously have required a number of separate turning and milling machines. This offers the potential for huge increases in productivity as many parts can be machined in a single set-up, reduced costs because fewer fixtures need to be made, and greater accuracy because parts do not need to be transferred between different machines.

Furthermore, multi-tasking machines make it practical for companies to take on more complex parts that would be too difficult or too expensive to produce on conventional milling and turning equipment.

However, many companies buying these machines are unable to achieve the expected benefits in productivity and quality because of limitations in their CAM systems. Software that has been perfectly capable of programming simple milling or turning operations proves to be unable to handle the added complexity, both of the new equipment and of the parts that need to be made.

Similarly, many users who may have relied on manual programming at the machine control find it more challenging and more time-consuming to create programs for multi-tasking equipment. To obtain the full benefit of their investment, these companies may need to invest in a CAM system for the first time. As well as offering easier and faster programming, Delcam software offers the ability to check the program on the computer before it is sent to the machine, so eliminating the need for prove-out trials on the machine.

Feature-based CAM systems offer programming speeds that are impossible with the more usual operations-based approach because they incorporate predefined machining rules controlling how and where material should be removed. FeatureCAM uses this knowledge to evaluate the part geometry and material, select the most appropriate tools and operations, recommend machining strategies, calculate feeds and speeds, and then to automatically generate the NC code. This unrivalled speed of toolpath generation means that machining of one-off parts or initial samples can be commenced within minutes of the receipt of the part model. As a result, delivery times can be reduced dramatically.

Alongside this high level of automation, FeatureCAM offers complete flexibility. Users can edit the predefined machining rules with their own customizations to tailor the results for their own range of equipment. Once this editing has been done, every job on the particular machine is cut in a predictable manner regardless of who did the programming.

In addition, a wide range of editing tools is available to optimize the initial toolpaths for series production, when the cycle time on the machine becomes more important than the programming time on the computer. This is particularly important for multi-turret and multi-spindle equipment, where the most efficient allocation of operations between turrets and spindles can have a significant impact on the overall cycle time.

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## *Delcam to Show Data Repair and Modeling for Manufacture at Amerimold*

28 February 2012

Delcam will highlight the strengths of its PowerSHAPE CAD software in data repair and modeling for manufacture at the Amerimold exhibition to be held in Novi, Michigan on June 13-14. PowerSHAPE is unique among CAD systems in offering Tribrid Modeling; the ability to work with solids, surfaces and triangle models in a single environment.

PowerSHAPE's strength in data repair is centered on its Solid Doctor options. These enable users to tackle all the common problems that can be found when translating low precision and incomplete data, including gaps and overlaps between surfaces, or duplicated and missing surfaces, and generate a valid, high-precision model.

The Solid Doctor uses a combination of automatic data repair tools and surface creation and editing options available within PowerSHAPE. This combination means that simple repairs can be carried out quickly and easily, while more complex problems can be overcome by deleting and replacing the existing surfaces within the model.

Once the model has been repaired, PowerSHAPE offers a range of direct modeling options to optimize the design for manufacture, in particular for the development of molds and other types of tooling.

Many product designers still produce designs with insufficient draft, making it impossible to remove the as-designed part from its tooling, so the ability to add draft to CAD models is one of the most commonly-used options within PowerSHAPE. This can be done either by using a specific value or by modifying the model interactively. The change can be applied to a single surface or to a group of surfaces, such as the sides of a pocket. In the latter case, the software is intelligent enough to maintain the radii of any fillets linking the sides.

Another common problem for the toolmaker is the use of impractical fillet sizes by designers. Small fillets require extra machining time so they extend delivery times and increase costs. In addition, they can restrict the flow of material in molds or dies, so increasing processing times and pressures. PowerSHAPE can use direct modeling to identify fillets within imported geometry, even when the modeling history has been lost. They can then be replaced with new fillets having more suitable radii.

Once the design is complete for manufacturing, it can easily be transferred to any CAM product. Delcam's CAM software comprises of FeatureCAM for feature-based programming, PowerMILL for high-speed and five-axis machining, PartMaker for the programming of turn-mill equipment and Swiss-type lathes, and Delcam for SolidWorks, the integrated CAM system for SolidWorks.

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## *IMAGINiT Technologies and ADA CADPartners Host Australian Autodesk University Extension Summit Events*

28 February 2012

Rand Worldwide announced its [IMAGINiT Technologies](#) division is hosting a series of Autodesk University Extension Summit events throughout Australia. IMAGINiT will partner with [ADA CADPartners Pty Ltd.](#) to bring this technical event for manufacturing, architecture and building professionals to four Australian cities.

“We have the fortunate ability to extend the capabilities of our local technical team beyond our borders

# CIMdata PLM Industry Summary

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with the support and backing of more than 85 IMAGINiT experts throughout the rest of the world,” said Michael Lachs, managing director of IMAGINiT Technologies in Australia. “We are again thrilled to have two of our technical experts from North America joining us to share their deep industry expertise and extensive Autodesk product knowledge with Summit attendees.”

The two IMAGINiT speakers who will be presenting at the Summit from the United States are Carl Smith and Alex McCarthy. Carl Smith, an Autodesk certified instructor, sought after speaker and blogger, will deliver the manufacturing focused sessions. Alex McCarthy, a Revit platform, sustainability and BIM expert, will deliver the Autodesk Revit and BIM related sessions. Some of the topics that they will cover include collaboration, design automation, green design, Revit MEP simulation and visualization.

“The Summit is a great series of events held throughout Australia that bring together local industry professionals and technology experts in an interactive environment where they can exchange ideas and learn from one another,” says Mike Jarvis, managing director at ADA CADPartners. “Many in Australia are unable to attend Autodesk University in Las Vegas, so we thought we would bring some of the great content, along with the sense of fun and excitement, to Australia via our Summit event series.”

The Summit starts in Sydney on March 13, will be in Adelaide and Melbourne on March 16 and March 21 respectively, before concluding in Brisbane on March 23. The full-day program offers elective options throughout so that attendees can focus on topics specific to their job. To wrap-up the day, the Las Vegas themed event will include a professional networking opportunity with a cocktail party and Las Vegas casino table games. For more information, please visit [ausummit.com.au](http://ausummit.com.au).

## Registration

Advanced registration is required for each of the four cities. There is no charge for these events. Register now by visiting [ausummit.com.au/registration.html](http://ausummit.com.au/registration.html).



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## *Infor and Lawson to Recognize Customer Achievement at Inforum 2012*

28 February 2012

Infor announced that nominations are open for the 2012 Inforum Excellence in Action Awards. These awards recognize Infor and Lawson customers who are creatively using applications to drive innovation, performance and profitability. Winners will be recognized at the Inforum user conference being held from April 22-25 in Denver.

The Inforum Excellence in Action Awards will recognize customers in the categories of operational, customer, financial, employee, and innovation excellence, and one customer will be named the overall Customer of the Year. Winners will be evaluated on their ability to demonstrate new processes and tactics that were deployed in the last year using Infor and/or Lawson applications to improve speed, reduce costs and fuel growth and globalization.

To be considered, companies must be current Infor or Lawson customers and show benchmarks reached and tasks completed in 2011. Nominations must include details on the project and demonstrate scope, as well as depth of performance improvement, quantifiable business benefits, customer focus and satisfaction, and technology innovation. Submissions are due no later than March 16, 2012, and winners will receive a complimentary registration to Inforum 2012.

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To enter or for more information, visit <http://www.inforum2012.com/agenda/excellenceawards/> To register for Inforum, visit <http://www.inforum2012.com/>.

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## ***Infor Announces Details of Upcoming Inforum Event***

1 March 2012

[Infor](#) announced the details of Inforum, the upcoming global user conference hosted by Infor and Lawson. Infor CEO, Charles Phillips, will be joined by salesforce.com chairman and CEO, Marc Benioff, on Tuesday, April 24, at [Inforum 2012](#).

Inforum is the shared event for Infor and Lawson customers taking place April 22-25 at the Colorado Convention Center in Denver. More than 700 educational sessions are planned 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.

During the Tuesday general session, Benioff and Phillips will talk about Inforce, the partnership between Infor and salesforce.com announced in August, 2011. Inforce will deliver three Infor applications built on the Force.com platform, including Inforce Everywhere, Inforce Ordering and Inforce Marketing.

The Monday general session will feature Phillips and Infor President, Duncan Angove, addressing the conference theme of "Specialized by Industry, Engineered for Speed." Phillips will share the company vision and direction, and Angove will showcase key product innovations and direction.

"If there is one event Infor and Lawson customers should invest in and attend, this is it," said Phillips. "Infor is investing in innovation. We are deepening our industry-specific product suites. We are removing the obstacles and complexity that have hindered enterprise software. We are focusing on speed. We welcome our customers to come and see and better understand how they can benefit from and take advantage of the innovations that are changing the way work is done."

### **Additional Resources**

*Note: registration may be required to access online content.*

Inforum 2012 Website - [www.inforum2012.com](http://www.inforum2012.com)

Registration - <https://secure.jackmorton.com/Inforum2012/>

Call for Presentations - <https://inforum.activeevents.com/portal/cfp/cfpLogin.w>

"Like" Inforum on [www.facebook.com/infor](http://www.facebook.com/infor)

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## ***MAA Aerospace Manufacturing Strategy Meeting at Delcam***

1 March 2012

The Midlands Aerospace Alliance is to hold a free-to-attend meeting showing suppliers how to align their manufacturing strategies with their aerospace customers at Delcam's Birmingham headquarters on Wednesday 21st March. The event will explain to delegates the manufacturing strategies aerospace companies expect their suppliers to have in place and show how other supply-chain companies are

meeting that challenge.

The day will include keynote presentations from supply-chain executives at major aerospace companies, such as Aero Engine Controls, Meggitt, Moog and Rolls-Royce, plus presentations on manufacturing strategy from leading Midlands companies in the aerospace supply chain. There will also be an introduction to the MAA's new tool for capability road-mapping, which helps suppliers to present their manufacturing strategies to their customers.

By participating in this event, delegates will be able to understand what their customers expect from them now and in the future; to benchmark their manufacturing strategies with other supply-chain companies; to align their manufacturing capabilities with their customers' needs; and to learn to talk the same "language" as their customers. Attendees will also have the opportunity to network with senior representatives of their customers and with like-minded peers within the supply chain.

For further details and to register, please go to

<http://www.midlandsaerospace.org.uk/events/manufacturing-strategy-Mar-2012>



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## ***TDT Celebrates One Year as ADT Distributor and Provider of Turbomachinery Design Software and Engineering Services ....Hosts Free Webinar***

29 February 2012

[TURBOdesign Technology, Inc.](#) (TDT), an aerodynamic and hydrodynamic turbomachinery design software and engineering services company, will soon mark its first full year as exclusive U.S. distributor of [Advanced Design Technology's](#) (ADT) TURBOdesign Suite. The timing of TDT's anniversary coincides with its newest free webinar, "[Key Advantages of 3D Inverse Design in Turbomachinery Design Process](#)," which will be presented on March 7 at 1:00 p.m. Eastern time.

TDT opened for business March 1, 2011, to sell the TURBOdesign Suite as well as engineering services, using the 3D Inverse Design approach. Since then, TDT has opened a second location in Austin, Texas, and has worked with original equipment manufacturers and engineering design firms in aerospace, automotive, electronic cooling, industrial pumps, industrial turbomachinery, power generation, refrigeration & air conditioning, and ventilation industries.

According to TDT customer, Dr. Guy Phuong, senior development engineer, of McQuay International, "McQuay International delivers engineered, flexible solutions for commercial, industrial and institutional HVAC requirements with reliable products, knowledgeable applications expertise and responsive support. Working with TDT and using the 3D Inverse Design capabilities of the TURBOdesign Suite has saved us significant time. We are working on a project with TDT to improve the performance of one product with promising results. We hope this improvement can be made across the product line."

The 3D Inverse Design approach enables users to describe loading criteria then output a blade design based on those criteria, which is essentially the reverse of how most other computer-aided design software systems for turbomachinery work.

According to Dr. Judy Busby, author of [numerous turbomachinery design papers](#) and vice president of technology and operations for TDT, "The TURBOdesign Suite provides a more systematic approach to the aerodynamic design problem. Furthermore, once an optimum input specification for a given design criteria (such as minimum loss, cavitation suppression, secondary flow suppression, etc.) has been

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obtained, it can be used to develop new prototypes very rapidly, thereby reducing development time for new designs.” Interest in the 3D Inverse Design approach has increased as word of user successes has spread. In response, TDT is now offering the free webinar, “Key Advantages of 3D Inverse Design in Turbomachinery Design Process,” on March 7 at 1:00 p.m. ET. To register for this free webinar, go to <http://www.turbodesign-tech.com/webinar070312/>.

The webinar will be presented by Mehrdad Zangeneh, professor of thermofluids at University College London and founding director of ADT. For 26 years, Zangeneh has developed advanced turbomachinery design codes based on the 3D Inverse Design approach and automatic optimization to turbomachinery design. His research has resulted in important breakthroughs in turbomachinery and marine propulsor design, and he has been granted six international patents. In 2000, Zangeneh was awarded the Japan’s Turbomachinery Society’s Gold Medal, and in 2003 he was awarded the Donald Julius Grone Prize by the Institution of Mechanical Engineers in UK.

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### ***VCollab Webinar: Reduce Your CAE Files from Monstrous to Manageable***

March 2012

Details:

#### **VCollab Webinar: Reduce Your CAE Files from Monstrous to Manageable**

**Date:** Wed., March 7, 2012

**Place:** <https://www1.gotomeeting.com/register/131709049>.

**Time:** 11:00 a.m., Eastern Standard Time (GMT-5, New York)

See how global teams simplify collaboration around complex CAE data. Prasad Mandava, CEO & CTO, [Visual Collaboration Technologies, Inc.](#) will demonstrate a simple solution to shrink, share, store, and interact with 3D CAE.

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### ***WorkNC CAD/CAM Technical Sessions across the USA***

27 February 2012

Sescoi ran ten sessions across America to celebrate 20 years in the US market and to roll out its latest [WorkNC V21 automatic CAD/CAM software](#) which uses multi-threading technology to make CNC programming up to 10 times faster.

In total over 200 delegates attended the technical sessions covering the Akron, Cincinnati, Grand Rapids, Chicago and Detroit areas enabling a large proportion of SESCOI’s customers to find a session within easy traveling distance. Major companies in attendance included Motorola, Alcoa, Honda Transmission Manufacturing, Johnson Controls, GKN Aerospace, Anderson Global, Prospect Mold, Reuther Mold, Decatur Mold, Commercial Tool and H.S. Die.

As well as a great opportunity for networking and comparing manufacturing techniques the events focused on the success SESCOI has achieved in the US market and the advances delivered in WorkNC V21.

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In particular, delegates heard about the new parallel processing and multi-threading which splits calculation tasks between multiple processor cores taking advantage of the advances in the latest computer hardware. SESCOI explained the principles behind the new calculation methods and how to take full advantage of them, as well as giving tips on choosing the most suitable hardware, backed by test results from actual trials on different computer configurations.

WorkNC users were also brought up to date with the [new toolpaths and new functionality built into the latest version](#). The new Continuous Finishing toolpath enables smooth finishing operations, ideal for high speed mills, to be completed automatically across the whole part, while the Multiple Flat Surface Finishing strategy provides new options to optimize and shorten programming and machining times. For roughing, new spiral trajectories will reduce the number of retract movements required, reducing the chance of damage to the tool while at the same time shorten cycle times. Extra toolpath editing options make WorkNC's already powerful capabilities in this area even more comprehensive. Additionally, maximum holder profile interrogation helps users to choose the best tool and holder combination for each specific machining scenario.

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## ***World-wide Partners Witnessed Amazing at ZWSOFT's GPC 2012***

1 March 2012

[ZWSOFT](#) invited its partners from all over the world to attend its third annual Global Partner Conference in Guangzhou, China from February 27th-29th. Over 110 partners from 36 different countries and regions attended making the conference a great success. During this time, ZWSOFT partners not only learned about upcoming products, but also had the chance to participate and discuss key issues including sales, marketing and technical features.

### **Major Events at the Conference**

Two major events took place at this year's Global Partner Conference, concerning both ZWSOFT products, ZWCAD and ZW3D. It was announced that a new version of ZWCAD will be released in July and will contain significant improvements. "I do believe that with the new version of ZWCAD, we can reach more and more customers," said Gabriela Ciszynska Matuszek, CEO of SZANSA, ZWSOFT's partner in Poland," and thanks to a powerful API and high stability, we can have more applications adjusted to this new version. " Moreover, the CEO of ZWSOFT, Truman Du stated in the keynote speech at the conference, "I am confident that the next version of ZWCAD is a game-changing product and our customers will love it."

The second event was the official release of ZW3D 2012 on February 27th. ZW3D 2012 is the best version yet with remarkable improvements including, an interactive, easy-to-use ribbon interface, faster design and easier machining. Bastian Weimer, ZWSOFT's partner from Germany stated "I definitely think that ZW3D 2012 has made a big step forward, and it is the best release that we have ever had. The new user interface is quite amazing; I especially like the ability to export 3D pdf's. The biggest benefit to users is productivity. With the new version, you use less mouse clicks, making it easier to operate, use and learn."

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## Financial News

### *ANSYS, Inc. to Webcast 2012 Investor Day*

27 February 2012

ANSYS, Inc. will be webcasting the ANSYS 2012 Investor Day — A Renaissance in Engineering, being held at the NASDAQ in Times Square, New York City on March 1, 2012.

The morning webcast will begin at 10:00 a.m. ET and end at 12:00 p.m. ET, resuming in the afternoon at 1:00 p.m. ET and ending at 3:00 p.m. ET. To access the webcast please go to

<http://investors.ansys.com/eventdetail.cfm?eventid=108312>

### **LIVE WEBCAST AGENDA**

#### **Presentations:**

10:00 a.m. — 12:00 p.m. ET

- Jim Cashman, President and Chief Executive Officer
- Josh Fredberg, VP Marketing
- Joe Fairbanks, VP Global Sales and Service

1:00 p.m. — 3:00 p.m. ET

- Dr. Andrew Yang, President & General Manager Apache Design, Inc.
- Maria Shields, VP and Chief Financial Officer
- Question and Answer Session

3:00 p.m. Adjourn

The archived webcast will also be available on the investor relations section of the company's website <http://www.ansys.com> through March 30, 2012.

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### *Cimatron Reports Record Revenues of \$12.2M and Record Non-GAAP Operating Profit of \$2.2M in Q4/11*

29 February 2012

Cimatron Limited announced financial results for the fourth quarter and full year of 2011.

Highlights of Cimatron's results for these periods include the following:

- Record quarterly revenues and non-GAAP operating profit of \$12.2M and \$2.2M, respectively
- Record Non-GAAP operating and net profit in full 2011 - \$5.1M and \$4.5M, respectively
- \$0.48 non-GAAP earnings per share in full year 2011
- 54% year-over-year non-GAAP net profit increase in 2011
- 20% year-over-year new license revenue growth in 2011, on a constant currency basis

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Commenting on the results, Danny Haran, President and Chief Executive Officer of Cimatron, noted "We are delighted with the Q4 and full year results. Strong license sales of both product lines, CimatronE and GibbsCAM, continue to push Cimatron to record results as the global manufacturing markets continue to stabilize. We remain committed to our long-term strategy of bringing best-in-class solutions for tool makers and discrete part manufacturers. We believe that our uncompromising commitment to end-user value and productivity is well rewarded by customer loyalty, resulting in all-time record maintenance revenues in 2011. There is still much to be done, and we look forward for another exciting year of innovation in 2012," concluded Mr. Haran.

The following provides details on Cimatron's GAAP and non-GAAP results for the fourth quarter and full year 2011:

### **GAAP:**

Revenues for the fourth quarter of 2011 increased by 11% to \$12.2 million, from \$11 million recorded in the fourth quarter of 2010. In the full year ended December 31, 2011, revenues increased by 13% to \$40.7 million, from \$36.1 million in 2010.

Gross Profit for the fourth quarter of 2011 was \$10.7 million as compared to \$9.4 million in the same quarter of 2010. Gross margin in the fourth quarter of 2011 constituted 88% of revenues, compared to 85% in the same quarter of 2010. In 2011 as a whole, gross profit was \$35.3 million, compared to \$30.2 million in 2010, and gross margin constituted 87% of revenues, compared to 84% in 2010.

Operating profit increased by 37% in the fourth quarter of 2011, to \$1.9 million, from \$1.4 million in the fourth quarter of 2010. In 2011 as a whole, operating profit increased by 94% to \$4.1 million, from \$2.1 million in 2010.

Net Profit for the fourth quarter of 2011 was \$1.4 million, or \$0.15 per diluted share, compared to a net profit of \$1.1 million, or \$0.12 per diluted share, recorded in the same quarter of 2010. In 2011 as a whole, net profit was \$2.7 million, or \$0.29 per diluted share, compared to \$1.6 million, or \$0.18 per diluted share, in 2010.

### **Non-GAAP:**

Revenues for the fourth quarter of 2011 increased by 11% to \$12.2 million, from \$11 million recorded in the fourth quarter of 2010. In the full year ended December 31, 2011, revenues increased by 13% to \$40.7 million, from \$36.1 million in 2010.

Gross Profit for the fourth quarter of 2011 was \$10.9 million, as compared to \$9.5 million in the corresponding quarter of 2010. Gross margin in the fourth quarter of 2011 constituted 89% of revenues, compared to 86% in the same quarter of 2010. In 2011 as a whole, gross profit was \$35.9 million, compared to \$30.8 million in 2010, and gross margin constituted 88% of revenues, compared to 85% in 2010.

Operating Profit increased by 31% in the fourth quarter of 2011 to \$2.2 million, from \$1.7 million in the fourth quarter of 2010. In 2011 as a whole, the operating profit increased by 65% to \$5.1 million, from \$3.1 million in 2010.

Net profit for the fourth quarter of 2011 was \$1.6 million, or \$0.18 per diluted share, compared to a net profit of \$1.6 million, or \$0.17 per diluted share, recorded in the same quarter of 2010. In 2011 as a whole, net profit increased by 54% to \$4.5 million, or \$0.48 per diluted share, compared to \$2.9 million, or \$0.32 per diluted share, in 2010.

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## Conference Call

Cimatron's management will host a conference call today, February 29th, 2012 at 9:00 EST, 16:00 Israel time. On the call, management will review and discuss the results, and will answer questions by investors.

For those unable to listen to the live call, a replay of the call will be available from the day after the call at the investor relations section of Cimatron's website, at: <http://www.cimatron.com>

**[Click here to open the full release with the financial tables.](#)**

Reconciliation between results on a GAAP and Non-GAAP basis is provided in a table immediately following the Consolidated Statements of Income included herein. Non-GAAP financial measures consist of GAAP financial measures adjusted to include recognition of deferred revenues of acquired companies and to exclude amortization of acquired intangible assets and deferred income tax, as well as certain business combination and other accounting entries. The purpose of such adjustments is to give an indication of our performance exclusive of non-cash charges and other items that are considered by management to be outside of our core operating results. Our non-GAAP financial measures are not meant to be considered in isolation or as a substitute for comparable GAAP measures, and should be read in conjunction with our consolidated financial statements prepared in accordance with GAAP.

Our management regularly uses our supplemental non-GAAP financial measures internally to understand, manage and evaluate our business and make operating decisions. We believe that these non-GAAP measures help investors to understand our current and future operating performance, especially as our two most recent acquisitions have resulted in amortization and non-cash items that have had a material impact on our GAAP results. These non-GAAP financial measures may differ materially from the non-GAAP financial measures used by other companies.

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## ***Comet Solutions® Closes \$4 Million Series C Capital Round***

1 March 2012

[Comet Solutions, Inc.](#) announced the closing of a \$4 million Series C equity capital round. The company's last round of Series B financing closed in December 2009. This round of investment is being led by current investor Athenian Venture Partners and comprises a syndicate including new investor Sun Mountain Capital, current investor Tri-State Growth Capital Fund and several other new individual co-investors. The capital will be used primarily to expand resources and activities in sales, marketing, and customer support.

High sales growth, new international distribution partnerships in key markets and an increase of its customer base have enabled the company to attract capital from an expanded set of investors. Commented François Hérou, Senior Partner with Athenian Venture Partners, "We observed Comet Solutions make tremendous progress since the time of our initial investment two years ago, as exemplified by the 150% increase in sales in 2011 over 2010. With its success in advancing Computer Aided Engineering, Comet Solutions aligns with Athenian's strategy to seek out companies with a sustainable vision, substantial intellectual property, deep management bench and unique products that provide effective solutions to acute business problems."

Lee Rand, General Partner with new investor Sun Mountain Capital, added "The company's success

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delivering value to customers in high growth sectors, such as optics, and high growth geographies, such as China, convinces us that their software can be a game changer in the Product Lifecycle Management market. We are excited to invest in Comet Solutions and believe the company is poised for breakout growth."

With this capital investment, Comet Solutions plans on expanding resources and activities in several areas.

**Sales and Customer Support Teams** are being increased to serve the demand from customers wanting to implement a simulation-driven design environment.

**International Distribution** is being expanded into numerous global markets, including offices in China and distribution partners in Japan.

In **Product Development**, the company is expanding its product line, which will bring the benefits of Comet to more simulation domains and improve the user experience for all customers.

By adding **new jobs** to the offices in Albuquerque, NM, Cincinnati, OH, and Southfield, MI, the company plans to double overall staff size over the next eighteen months to support business growth.

"Closing this round of financing is testimony to the strength of our customer and partner relationships, employees, and software solutions," commented Dan Meyer, President and CEO of Comet Solutions. "This new capital ensures the company has the ongoing financial strength required to serve our customers for the long-term and continue to invest in innovative solutions which accelerate our growth as a key innovator and supplier in the PLM market."

## About the Investors

For more information on Athenian Venture Partners visit their website at [www.athenianvp.com](http://www.athenianvp.com). For more information on Sun Mountain Capital visit their website [www.sunmountaincapital.com](http://www.sunmountaincapital.com). For more information on Tri-State Growth Capital Fund visit their website at [www.fortwashington.com](http://www.fortwashington.com).

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## ***Comet Solutions® Increases Sales by 150% over Previous Year***

1 March 2012

[Comet Solutions, Inc.](#) announced that its sales increased by more than 150% in 2011, with half of its business coming from Asia. New customer orders accounted for 70% of the company's global revenue, with revenue in China alone exceeding 220% growth. In addition, the company announced new customers and the opening of an office in Southfield, Michigan.

"We see two strong market needs driving our dramatic sales growth," commented Dan Meyer, President and CEO of Comet Solutions. "Established users of CAE tools want to increase the business impact of computer-based simulation by running more complex system-level performance simulations early and often throughout the new product design process. And, in those developing markets, such as China, where companies may have less simulation expertise and domain knowledge but still need to make more use of advanced CAE tools, simulation itself must be much easier to perform. Comet addresses both of these needs via Intelligent Templates which are based on industry best practices as well as a customer's unique engineering know-how."

In addition to its many new customer wins in 2011, such as 3DIcon Inc., The Air Force Research

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Laboratory and the China Academy of Space Technology, existing customers, including The Aerospace Corporation, NASA and the TangShan Railway Vehicle Co., have renewed and expanded their use of Comet, which has contributed to the company's continued growth.

Anticipating another year of record growth, the company opened a new office in Southfield, Michigan. As Meyer noted, "We want to support our growing customer base in that region, best position our company to serve the fast recovering automotive industry, and take advantage of the local engineering software talent pool. With our recent successes and growth rate, we are now among the fastest growing companies in the PLM market. And the addition of this new office shows our commitment to growing our business and maintaining and expanding our customer support."

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### ***Mentor Graphics Reports Fiscal Fourth Quarter Results and Announces Board Has Increased Share Buyback Authorization***

28 February 2012

Mentor Graphics Corporation announced financial results for the company's fiscal fourth quarter and year ended January 31, 2012. The company reported revenues of \$320.4 million, non-GAAP earnings per share of \$.58, and GAAP earnings per share of \$.52. For the full fiscal year, revenues were \$1,014.6 million, non-GAAP earnings per share were \$1.13, and GAAP earnings per share were \$.74.

"It was a quarter and a year of records for the company, including the significant milestone of crossing one billion dollars in revenues," said Walden C. Rhines, chairman and CEO of Mentor Graphics. "We exited the year with very strong momentum as our strategy of diversification has driven growth in non-traditional EDA applications like manufacturing, thermal analysis and embedded software, all of which grew bookings faster than the overall company. Additionally, the growing complexity of chips and the challenges of the 28nm and 20nm process nodes have generated substantial demand for both our functional verification and our design-to-silicon products."

For the full fiscal year, the company grew staffing 1.4%, including acquisitions, while growing revenues 10.9%. Non-GAAP operating margins for the year reached 16.5% and 11.1% on a GAAP basis. For the fourth quarter, operating expense was flat year-on-year on a non-GAAP basis, and up 2.3% on a GAAP basis. For the full fiscal year, non-GAAP operating expense was up 3.0%, and 3.3% on a GAAP basis.

During the quarter, the company announced the Hyperlynx® 8.2 product which now offers three-dimensional full-wave field solving and thermal/power co-simulation capability. The company also announced a partnership with Freescale Semiconductor to deliver high-speed simulation and virtual prototyping environments for next-generation Freescale multi-core embedded processors. In December, Mentor acquired Flowmaster, a world leader in one-dimensional computational fluid dynamics simulation software used to analyze complex fluid flow network systems. Also in the quarter, the company announced a new version of its three-dimensional computational fluid dynamics simulation software that offers new analytic capabilities for radiation, combustion and hypersonic flows. The company introduced the first solution that addresses the challenges of light emitting diode (LED) and semiconductor packaging thermal characterization, combining the FloTHERM® and T3ster® products. In manufacturing, the company announced Capital Harness MPM, a product that helps wire harness manufacturers cut production costs.

"The company has delivered significant improvements in our SG&A to revenues ratio over the year, driven by both strong cost controls and improvements in the business," said Gregory K. Hinckley,

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president of Mentor Graphics. “We made great strides this year toward the company’s goal of achieving 20% operating margins, and with incremental improvements, expect to achieve that target in FY2014. With continued discipline in the business, we expect to grow earnings per share at twice the rate of revenue growth in the coming fiscal year. Our past investments in a multi-tiered sales channel allow us to address the universe of tens of thousands of systems companies versus the hundreds of semiconductor companies which gives us, uniquely among our competitors, the reach to penetrate traditionally under-served adjacent design markets.”

## **Outlook**

For the full fiscal year 2013, the company expects revenues of about \$1.1 billion, non-GAAP earnings per share of about \$1.32, and GAAP earnings per share of approximately \$1.13. For the first quarter of fiscal 2013, the company expects revenues of about \$255 million, non-GAAP earnings per share of about \$.25, and GAAP earnings per share of approximately \$.19.

## **Share Repurchase Authorization**

The company’s board has increased the share repurchase authorization to \$200 million from the original \$150 million. During fiscal year 2012 the company repurchased 6.8 million shares for \$90 million at an average cost of \$13.22 per share. Under this increased authorization, \$110 million is available for share repurchase over the next two years.

## **Fiscal Year Definition**

Mentor Graphics’ fiscal year runs from February 1 to January 31. The fiscal year is dated by the calendar year in which the fiscal year ends. As a result, the first three fiscal quarters of any fiscal year will be dated with the next calendar year, rather than the current calendar year.

## **Discussion of Non-GAAP Financial Measures**

Mentor Graphics’ management evaluates and makes operating decisions using various performance measures. In addition to our GAAP results, we also consider adjusted gross margin, operating margin, net income (loss), and earnings (loss) per share which we refer to as non-GAAP gross margin, operating margin, net income (loss), and earnings (loss) per share, respectively. These non-GAAP measures are derived from the revenues of our product, maintenance, and services business operations and the costs directly related to the generation of those revenues, such as cost of revenue, research and development, sales and marketing, and general and administrative expenses, that management considers in evaluating our ongoing core operating performance. These non-GAAP measures exclude amortization of intangible assets, special charges, equity plan-related compensation expenses, interest expense attributable to net retirement premiums or discounts on the early retirement of debt and associated debt issuance costs, interest expense associated with the amortization of debt discount and premium on convertible debt, and the equity in income (loss) of unconsolidated entities (except Frontline PCB Solutions Limited Partnership (Frontline)), which management does not consider reflective of our core operating business.

Management excludes from our non-GAAP measures certain recurring items to facilitate its review of the comparability of our core operating performance on a period-to-period basis because such items are not related to our ongoing core operating performance as viewed by management. Management considers our core operating performance to be that which can be affected by our managers in any particular period through their management of the resources that affect our underlying revenue and profit generating operations during that period. Management uses this view of our operating performance for purposes of comparison with our business plan and individual operating budgets and



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allocation of resources. Additionally, when evaluating potential acquisitions, management excludes the items described above from its consideration of target performance and valuation. More specifically, management adjusts for the excluded items for the following reasons:

- Identified intangible assets consist primarily of purchased technology, backlog, trade names, and customer relationships. Amortization charges for our intangible assets can vary in frequency and amount due to the timing and magnitude of acquisition transactions. We consider our operating results without these charges when evaluating our core performance due to the variability. Generally, the most significant impact to inter-period comparability of our net income (loss) is in the first twelve months following an acquisition.
- Special charges primarily consist of restructuring costs incurred for employee terminations, including severance and benefits, driven by modifications of business strategy or business emphasis. Special charges may also include expenses incurred related to potential acquisitions, excess facility costs, and asset-related charges. Special charges are incurred based on the particular facts and circumstances of acquisition and restructuring decisions and can vary in size and frequency. These charges are excluded as they are not ordinarily included in our annual operating plan and related budget due to the unpredictability of economic trends and the rapidly changing technology and competitive environment in our industry. We therefore exclude them when evaluating our managers' performance internally.
- Equity plan-related compensation expenses represent the fair value of all share-based payments to employees, including grants of employee stock options and restricted stock units. We do not consider equity plan-related compensation expense in evaluating our manager's performance internally or our core operations in any given period.
- Interest expense attributable to net retirement premiums or discounts on the early retirement of debt, the write-off of associated debt issuance costs and the amortization of the debt discount and premium on convertible debt are excluded. Management does not consider these charges as a part of our core operating performance. The early retirement of debt and the associated debt issuance costs are not included in our annual operating plan and related budget due to unpredictability of market conditions which could facilitate an early retirement of debt. We do not consider the amortization of the debt discount and premium on convertible debt to be a direct cost of operations.
- In connection with the Company's acquisition of Valor on March 18, 2010, we also acquired Valor's 50% interest in Frontline, a joint venture. We report our equity in the earnings or losses of Frontline within operating income. We actively participate in regular and periodic activities such as budgeting, business planning, marketing and direction of research and development projects. Accordingly, we do not exclude our share of Frontline's earnings or losses from our non-GAAP results as management considers the joint venture to be core to our operating performance.
- Equity in earnings or losses of unconsolidated entities, with the exception of our investment in Frontline, represents our equity in the net income (loss) of a common stock investment accounted for under the equity method. The carrying amount of our investment is adjusted for our share of earnings or losses of the investee. The amounts are excluded from our non-GAAP results as we do not control the results of operations for this investment and we do not participate in regular and periodic operating activities; therefore, management does not consider these businesses a part of our core operating performance.
- Income tax expense (benefit) is adjusted by the amount of additional tax expense or benefit that we would accrue if we used non-GAAP results instead of GAAP results in the calculation of our tax

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liability, taking into consideration our long-term tax structure. We use a normalized effective tax rate of 17%, which reflects the weighted average tax rate applicable under the various jurisdictions in which we operate. This non-GAAP tax rate eliminates the effects of non-recurring and period specific items which are often attributable to acquisition decisions and can vary in size and frequency and considers our U.S. loss carryforwards that have not been previously benefited. This rate is subject to change over time for various reasons, including changes in the geographic business mix and changes in statutory tax rates. Our GAAP tax rate for the year ended January 31, 2012 is a benefit of (1)%. The GAAP tax rate considers certain mandatory and other non-scalable tax costs which may adversely or beneficially affect our tax rate depending upon our level of profitability in various jurisdictions.

In certain instances our GAAP results of operations may not be profitable when our corresponding non-GAAP results are profitable or vice versa. The number of shares on which our non-GAAP earnings per share is calculated may therefore differ from the GAAP presentation due to the anti-dilutive effect of stock options and restricted stock units in a loss situation.

Non-GAAP gross margin, operating margin, and net income (loss) are supplemental measures of our performance that are not required by, or presented in accordance with, GAAP. Moreover, they should not be considered as an alternative to any performance measure derived in accordance with GAAP, or as an alternative to cash flow from operating activities as a measure of our liquidity. We present non-GAAP gross margin, operating margin, and net income (loss) because we consider them to be important supplemental measures of our operating performance and profitability trends, and because we believe they give investors useful information on period-to-period performance as evaluated by management. Non-GAAP net income (loss) also facilitates comparison with other companies in our industry, which use similar financial measures to supplement their GAAP results. Non-GAAP net income (loss) has limitations as an analytical tool, and therefore should not be considered in isolation or as a substitute for analysis of our results as reported under GAAP. In the future we expect to continue to incur expenses similar to the non-GAAP adjustments described above and exclusion of these items in our non-GAAP presentation should not be construed as an inference that these costs are unusual, infrequent or non-recurring. Some of the limitations in relying on non-GAAP net income (loss) are:

- Amortization of intangibles represents the loss in value as the technology in our industry evolves, is advanced, or is replaced over time. The expense associated with this loss in value is not included in the non-GAAP net income (loss) presentation and therefore does not reflect the full economic effect of the ongoing cost of maintaining our current technological position in our competitive industry, which is addressed through our research and development program.
- We regularly engage in acquisition and assimilation activities as part of our ongoing business and regularly evaluate our business to determine whether any operations should be eliminated or curtailed. We therefore will continue to experience special charges on a regular basis. These costs also directly impact our available funds.
- Our stock incentive and stock purchase plans are important components of our incentive compensation arrangements and will be reflected as expenses in our GAAP results.
- Our income tax expense (benefit) will be ultimately based on our GAAP taxable income and actual tax rates in effect, which often differ significantly from the 17% rate assumed in our non-GAAP presentation. In addition, if we have a GAAP loss and non-GAAP net income, our non-GAAP results will not reflect any projected GAAP tax benefits. Similarly, in the event we were to have GAAP net income and a non-GAAP loss, our GAAP tax expense would be replaced by a credit in our non-GAAP presentation.

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•Other companies, including other companies in our industry, calculate non-GAAP net income (loss) differently than we do, limiting its usefulness as a comparative measure.

For **FINANCIAL TABLES** in the unabridged press release click [HERE](#)

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## *Oracle Sets the Date for Its Third Quarter Fiscal Year 2012 Earnings Announcement*

2 March 2012

Oracle Corporation announced that its third quarter fiscal year 2012 results will be released on Tuesday, March 20th, after the close of the market. Oracle will host a conference call and live webcast at 2:00 p.m. Pacific Time to discuss the financial results. The live webcast will be available on the Oracle Investor Relations website at <http://www.oracle.com/investor>.

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## Implementation Investments

### *A Winning Team: GTM Sportswear Selects NGC for PLM and Supply Chain Management*

28 February 2012

[NGC](#)® Software announced that [GTM Sportswear](#), a growing manufacturer of custom and embellished team sportswear, has selected NGC's Extended PLM software for PLM and Supply Chain Management/Global Sourcing.

Headquartered in Manhattan, Kansas, GTM is an innovator in team sportswear, offering a high degree of customization and embellishments, including sequins, screen printing, sublimation printing, and other advanced techniques. The company sought new software to help manage its continued pace of growth, improve the company's forecasting and materials planning capabilities, and streamline its design, production and quality control processes. GTM also wanted to eliminate out-of-stocks and ensure rapid turnaround of customer orders – key requirements for a company that backs its products with a 100 percent commitment to customer satisfaction.

After a rigorous selection process, GTM Sportswear selected NGC's [Extended PLM](#) and material resource planning software, along with forecast management software from Demand Management, NGC's sister company. NGC offered the most appropriate, apparel-specific product to meet GTM's needs, as well as a deep understanding of apparel industry best practices.

NGC's software will be essential to helping GTM realize benefits in a number of important areas:

**More accurate forecasting and inventory management.** With the new solutions, GTM Sportswear will be able to more accurately forecast demand and replenish its inventory, while managing the raw materials allocation for its team apparel products. GTM's business depends on having the right blank merchandise in stock and available when customers need it, since GTM is committed to processing and delivering orders in less than 14 days, complete with embellishment and customization.

**Improved raw materials management.** NGC's Extended PLM includes robust capabilities for raw materials purchasing and inventory management. Based on the forecast for finished goods, NGC's system will determine the raw materials requirements and issue purchase orders to fulfill those requirements; the system then tracks the POs and ensures that the materials are received at multiple

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locations for production.

**Better customer service.** By aligning demand and inventory, GTM can reduce stockouts and further enhance the company's reputation for customer service. GTM has built its business on customer satisfaction, and NGC's software will help the company continue to deliver a high level of service as it grows.

**Streamlined quality management and [CPSIA compliance](#).** NGC's Extended PLM software includes a Quality module that will help GTM more efficiently manage its quality control program, by streamlining the processes for supplier audits and analyzing quality trends for each of GTM's suppliers. NGC's software will also help GTM manage the process of requesting, tracking, approving and sending the General Certificate of Conformity (GCC) and Certificate of Compliance (COC) documents that are mandated by the CPSIA.

**Scalable for Future Growth.** GTM has maintained a track record of sustained, double-digit growth since the company was founded in 1989. With new systems and processes in place, GTM Sportswear can more easily manage its rapid growth, and the software will scale to accommodate future expansion.

"GTM has chosen to work with NGC in order to improve our supply chain execution," said John Windham, vice president of sourcing for GTM Sportswear. "We think this collaboration will help us to progress in the areas of forecasting, demand planning, materials resource planning, PLM, and supply chain visibility. GTM continues to experience dynamic growth, and our mission to deliver world-class customer service is dependent on our ability to position our inventory to meet our customers' needs. This software solution will allow us to continue that growth and provide scalable supply chain execution to service both an increase in volume and uninterrupted improvement in our customer service."

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## ***Agilent Technologies' SystemVue Software Selected by Télécom ParisTech for 3G/4G Transmitter Research***

28 February 2012

Agilent Technologies Inc. announced that Télécom ParisTech, one of France's leading graduate engineering schools, has selected the company's SystemVue software for use in analog and mixed integrated systems research. The electronic system-level software will play a critical role in the university's ongoing investigations and enable a much more predictive system-level design methodology.

Télécom ParisTech's integrated systems research is being led by the Communication & Circuit System group and focuses on the optimization of a base-station transmitter. The objective of the study is to correctly define the specifications of the transmitter's analog-to-digital converter, a key component of the amplifier predistortion loop. Agilent's SystemVue aides in this research by accurately modeling the A/D converter together with the baseband and RF parts of the base-station transmitter to reproduce the component's actual operating conditions.

Because the SystemVue software is specifically designed to reduce the design and verification time of communication systems, it will allow the Communication & Circuit System group to develop its system architectures more accurately and quickly. The software provides complete physical-layer libraries for the most advanced communication standards such as 3GPP LTE and the recent versions of 3GPP WCDMA, among others. System designers can use library models to verify the performance of one or

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more of their design's functional blocks with standards-compliant waveforms.

"SystemVue allows us to use multiband 3GPP WCDMA signals to evaluate the specification of our A/D converter," said Germain Pham, system architect with Télécom ParisTech. "Thanks to its built-in digital predistortion algorithms, SystemVue also lets us emulate the performance of the entire power amplifier predistortion loop. As a result, we are now able to accurately dimension our A/D converter so that it meets system-level specifications."

For more information on SystemVue, go to <http://www.agilent.com/find/eesof-systemvue>, or contact a local Agilent representative. A free evaluation of the software is available at <http://www.agilent.com/find/eesof-systemvue-evaluation>.

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## ***BiTMICRO Selects Synopsys for Chip Design Automation***

28 February 2012

Synopsys, Inc. announced that BiTMICRO Networks, a manufacturer of high-end enterprise Solid State Drive (SSD) technologies, has chosen Synopsys as its electronic design automation (EDA) provider for system-on-chip (SoC) design. BiTMICRO recently announced the successful tapeout of two third-generation SSD controllers, which are the foundation of its next-generation products, using Synopsys' Galaxy™ Implementation and Discovery™ Verification Platforms to speed SSD controller development.

BiTMICRO's pioneering TALINO-DE (Translation and Linking of I/O Nodes—Device Edition) SSD controller works with its second-stage ISIP-DE (Intelligent Storage Interconnect Platform—Device Edition) controller to achieve the required performance in mission-critical applications. These ASIC controllers were designed and developed using Synopsys' Galaxy implementation and Discovery verification platforms, which include Design Compiler® RTL synthesis, PrimeTime® signoff, HSPICE® circuit simulation and VCS® functional verification tools. Using foundry-certified models and an advanced verification methodology to eliminate bugs, Synopsys' integrated tool suites helped make it possible for BiTMICRO engineers to achieve high-quality output without any delay.

"We are proud of the significant innovations our engineering team in the Philippines has achieved with the cutting-edge TALINO-DE and ISIP-DE controller designs," said Rey Bruce, CEO of BiTMICRO Networks. "Synopsys' robust portfolio of implementation and verification solutions and superior technical support were instrumental in helping us bring our next-generation SSD products to market in a timely manner. We look forward to working with Synopsys as we continue to innovate to meet our customers' needs."

"BiTMICRO adopted Synopsys' implementation and verification solutions to address their design challenges because their engineers require silicon-proven, high-quality tools for their SoC designs," said Jian-Yue Pan, vice president of Asia-Pacific sales at Synopsys. "Synopsys is also partnering with BiTMICRO's academic arm, the Bruce Institute of Technology, to support the first microchip design center in the Philippines whose aim is to help train local engineers in advanced microchip design and engineering. Synopsys is dedicated to supporting the global IC engineering community and contributing to our customers' growth as technology leaders."

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## ***Boeing Signs 10-Year Agreement Extending Deployment of Siemens PLM Software Technology***

27 February 2012

Siemens PLM Software announced that Boeing has signed a new 10-year agreement to extend the use of Siemens PLM Software technology at both Boeing Commercial Airplanes and Defense Space and Security. Proven performance of NX™ software and Teamcenter® software, innovation, scalability and open architecture were cited as key requirements for extension.

“Boeing and Siemens PLM Software have enjoyed a long working relationship, and we are pleased to extend our contract to take advantage of new innovations to enhance our global capabilities,” said Nancy Bailey, Boeing vice president of IT Product Systems. “We are partnering with Siemens PLM Software to enhance Boeing's PLM capabilities. The openness of the Siemens PLM Software will continue to support, and help us improve, the solutions we use throughout Boeing, creating additional business value for our company.”

“We are proud of our proven relationship with Boeing and are thrilled that the aerospace and defense industry leader has decided to extend the use of Siemens PLM Software technology,” said Chuck Grindstaff, CEO, Siemens PLM Software. “Boeing’s commitment to leverage the integrated Siemens PLM suite of solutions is a testament to our continued ability to bring the most innovative products to market to help our customers succeed.”

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## ***Cadac Organice Issues Updated Case Study about CAD Drawing Management***

29 February 2012

Cadac Organice, Microsoft Gold ISV Partner and developer of the Cadac Organice Solution Suite (SharePoint-based Engineering Document Management and Control), has issued an updated case study about CAD Drawing Management in SharePoint.

CAD drawings are created by CAD Engineers, but are typically being used by others, like planners, construction workers, production employees, project managers, and partners. It is therefore important that internal disciplines and external partners are able to easily access and view CAD drawings. But how do you provide access to CAD drawings? How can users open and view CAD drawings without the original CAD application? How can you ensure that users can only view released CAD drawings? And how do you prevent users from making unauthorized changes to CAD drawings?

CAD drawings not only need to be managed within the Engineering Department, but a management system should also allow easy access for the entire organization and also for external partners and suppliers.

Cadac Organice has issued an updated case study about CAD Drawing Management, addressing the challenges that companies are phasing when they try to unlock CAD drawings to the internal and external (project) organization. The case study describes how a solution based on Microsoft SharePoint helps project-driven engineering industries to manage and share CAD drawings. It describes how companies with basic CAD needs can manage CAD drawings entirely in SharePoint, and how companies with PDM solutions can publish released CAD drawings to SharePoint for sharing and collaboration.

The Case Study about CAD Drawing Management is available for download from



<http://www.organice.com>.

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## ***Diane von Furstenberg Selects Computer Generated Solutions' Product Lifecycle Management System***

28 February 2012

[Computer Generated Solutions](#) (CGS) announced that premier fashion-leader Diane von Furstenberg (DVF) has selected CGS's BlueCherry Infinity PLM solution as its platform for global apparel development and sourcing. The new system will replace the company's existing aging PLM system. Once implemented, DVF expects the BlueCherry solution to improve their overall business processes, enhance productivity by reducing manual effort, gain visibility, and accelerate speed to market.

DVF needed a solution that would centralize all information to provide easy access and collaboration for their design, product development, and merchandising teams.

"After careful evaluation of other PLM solutions, including the latest offering from the current PLM vendor, we felt that BlueCherry offered the best-in-breed functionality we needed in order to centralize our product development and link all departments in the development process," said Jeannie Lau, Executive Vice President, Production and Product Development for Diane von Furstenberg.

"Considering we already use BlueCherry ERP, their PLM solution is totally seamless and they are interchangeable. This creates a centralized hub of information that will promote synergy across all of our divisions."

The [BlueCherry](#) PLM implementation will allow Diane von Furstenberg's teams to view vital information at a much earlier stage in the process, allowing for multiple strategic business improvements.

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## ***Global Manufacturers Choose Autodesk***

29 February 2012

Manufacturers worldwide have selected Autodesk, Inc. solutions for [Digital Prototyping](#) in recent months, with Autodesk [Product Design Suite](#) and [Autodesk Factory Design Suite](#) software leading the charge.

Autodesk customers selecting new or upgraded software span a wide variety of industries, ranging from industrial machinery to transportation to food products, from all regions of the world. For example, Czech Republic-based SKODA ELECTRIC, a global leading supplier of traction electric drives, trolleybuses and traction engines, chose [Autodesk Inventor](#) software to shorten delivery times in the engine design for its next generation suburban trains.

"In the Autodesk Inventor solution, we appreciate the quality implementation. As compared with our previous system CATIA, we feel we benefit from better functionality, generally lower operating costs and Inventor's substantial popularity in institutions of higher learning in the Czech Republic," said Martin Vlček, Head of Technical Department, Division Traction Motors, ŠKODA ELECTRIC a.s.

Other recent Autodesk manufacturing customer wins over competitors include:

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U.S.-based microPEP, a unit of PEP specializing in the precision injection molding and insert molding of micro-sized plastic components for medical, energy management and automotive industries, selected Autodesk Product Design Suite over SolidWorks as its sole engineering design software.

TOYO BODY Co., Ltd., a Japan-based auto supply manufacturer of truck rear-body shells for leading global truck brands, selected Autodesk Product Design Suite software over Edraw to design its truck products for construction, vending and other uses.

Janome Sewing Machine Co., a Japan-based maker of sewing machines renowned for their ease-of-use and unsurpassed stitch quality with operations worldwide, chose Autodesk Product Design Suite over Edraw to design its industry-leading sewing machines.

Autodesk customers apply Digital Prototyping solutions by using Autodesk's Product Design Suite, Factory Design Suite, Vault and Simulation tools for workflows including product design, design optimization, manufacturing engineering, marketing and sales. Autodesk tools for design, visualization and simulation provide these customers with the power and flexibility they need to help solve their most pressing business challenges.

For more information on Autodesk industrial machinery customers, visit <http://usa.autodesk.com/manufacturing/industrial-machinery/#tab1>.

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## ***Meyn Food Process Technology uses Tacton Configurator***

28 February 2012

Meyn Food Process Technology uses Tacton Configurator CPQ, a solution recently introduced on the Salesforce AppExchange. They enjoy an average timesaving of more than 60% on each quotation.

Meyn's implementation of Tacton Configurator integrated with the online CRM system Salesforce.com enables Meyn to generate quotations and BOMs that are instantly available in Salesforce CRM leading to large reductions in the quote generation lead time and large increases in quote quality.

"When evaluating other sales configurator solutions, Tacton clearly stood out as the best solution for our company. We felt that they supported and understood the complexity of our products", says Jan Ras, Manager Sales Support, Meyn.

Today, Tacton Configurator CPQ is used worldwide by more than 40 Meyn sales representatives. The results attained are even better than anticipated. The lead time to create a quote decreased by more than 60% and the number of questions needed for the complete quote decreased by more than 85%.

"We could never imagine that the time saving for each detailed quotation would be as tremendous as it is. Since we started using Tacton's solution we have also seen that the accuracy of our quotes has increased considerably", says Sicco Saft, Business Analyst, Meyn.

The next phase for this project is to improve price management in Tacton Configurator CPQ and also add more details to the product models. This is something that will make the quotes and configurations even more accurate.

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## *National Park Service Records American Engineering History with Autodesk Software*

27 February 2012

The National Park Service uses AutoCAD software from Autodesk, Inc. to help document American engineering and industrial achievements as part of an historical program started more than 40 years ago.

The Historic American Engineering Record (HAER) was established in 1969 by the National Park Service, the American Society of Civil Engineers and the Library of Congress to document historic sites and structures related to engineering and industry.

Everything from bridges and boats to factories and gold mines has been documented by HAER for historical purposes. Using laser scanning technology from Leica Geosystems and software from kubit, an Autodesk developer partner, HAER is able to capture “point clouds” of data that create a 3D image of these sites. Using the AutoCAD® point-cloud rendering engine and kubit's enhanced functionality, HAER staff works with this point cloud data to create detailed 3D models and [2D drawings](#), which are then housed in the Library of Congress for access by the general public, ensuring America’s industrial achievements are documented and preserved for future generations.

“We’re creating a collection of documentation that tells a story about the built environment in America,” said Tom Behrens, an architect with HAER. “Quite simply, AutoCAD lets us work more efficiently, enabling us to document more historic sites and structures than we could have in the past.”

### **Answering the Call to Record History**

Not everybody knows how many support cables are required to support the Golden Gate Bridge, or what a steam-powered lumber mill looks like. But they could easily find out — thanks to HAER’s efforts. Fortunately, HAER has embraced technology to help its employees document sites more effectively. They start by laser scanning the site to capture millions of data points, creating a “point cloud” that provides a digital image of the site. This data is supplemented by hand measurements and digital photography.

HAER takes this data and works with it in AutoCAD, [CAD software](#), which features a built-in point cloud engine capable of handling up to two billion data points. Additionally, software from kubit expands their ability to analyze the point cloud data and create accurate 3D models from within the native AutoCAD environment.

Using AutoCAD, [HAER](#) creates 2D technical drawings from these [3D models](#). By making AutoCAD a key component in its workflow, HAER is able to complete drawings more quickly and undertake more projects.

### **About kubit**

Since 1999, German based firm kubit has developed software for capturing existing conditions into the AutoCAD environment. kubit provides “reality capture” solutions and workflows for traditional surveying, photogrammetry and laser scanning technologies. Anyone with AutoCAD experience can master kubit software. Engineers, architects, forensic specialists, preservationists, archeologists and more utilize kubit software daily to solve their surveying needs. Whether a client is looking to manipulate huge point clouds or create simple plans the kubit team educates clients on the various measurement technologies and how to efficiently integrate them into the design workflow. kubit’s US based headquarters is located in Houston, Texas.

## *New Zealand Company Speeds Up Architectural Projects with Autodesk Software*

29 February 2012

Autodesk, Inc. has named 4th Dimensional Facade Solutions, the New Zealand-based design and build company, as the [Autodesk Inventor of the Month](#) for February 2012. The company was recognized for its use of [Autodesk Inventor software](#) to create stunning facades for a series of projects with unique physical and environmental challenges, as well as highly complex design and build procedures.

The company's assignments include a café that sits on the edge of a mountain, 6,000 feet above sea level; a Moroccan-style restaurant with an elaborate operable window system; and a stunning vacation home called Jagged Edge, where each facade on the structure is rhombus-shaped, and contains no 90-degree angles.

"The [Digital Prototyping](#) capabilities of Autodesk's products enabled us to develop and plan original and unique designs that are financially viable and award-winning," said Jason Dent, founder of 4th Dimensional Facade Solutions. "This is a key reason why we are winning these amazing design projects from clients."

Using Autodesk Inventor enabled 4th Dimensional Facade Solutions to streamline its design workflow and, in the company's estimation, effectively eliminate 10,000 hours of designing and physical labor, an approximate savings of NZD\$775,000 (US\$830,000) across the three particularly challenging projects mentioned above.

### **Digital Prototyping Ensures Accuracy, Reduces Costs**

4th Dimensional Facade Solutions worked closely with its reseller—Autodesk Gold Partner CADPRO Systems—to capitalize on the benefits of Autodesk software throughout the design and build process. To fully capitalize on the power of Autodesk Inventor software, 4<sup>th</sup> Dimensional Facade Solutions uses high-performance Dell computers and NVIDIA graphic cards.

In the design phase, 4th Dimensional Facade Solutions used Autodesk Inventor to create 3D Digital Prototypes of the facades. By simulating and validating the accuracy of its designs, the company was able to more confidently order the exact amount of premeasured materials from overseas manufacturers required to construct the facades.

The interoperability of Autodesk's products ensured that the company was able to work smoothly across [AutoCAD](#), [Autodesk Revit](#) and Autodesk Inventor software and effectively collaborate with architects, engineers and other partners during the build phase—helping to minimize on-site errors.

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

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 Autodesk Inventor of the Month, contact [IOM@autodesk.com](mailto:IOM@autodesk.com).

### **About 4<sup>th</sup> Dimensional Facade Solutions Ltd.**

Operating since 2004, 4<sup>th</sup> Dimensional Facade Solutions is a New Zealand-based design and build consultancy specializing in glass facades, and also dealing in timber and steel works.

### **About CADPRO Systems Ltd.**

CADPRO Systems is New Zealand's leading supplier of professional Computer Aided Design

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technology, specializing in Digital Prototyping solutions for Manufacturers and Building Information Modeling (BIM) technology for architects, engineers, contractors, and owner/operators. For more information, visit <http://www.cadpro.co.nz>.

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## ***Seiko Epson Corporation Selects Aras as Enterprise PLM Backbone***

28 February 2012

Aras® announced that [Seiko Epson Corporation](#), a leading global developer of crystal devices, headquartered in Nagano, Japan, has selected the Aras Innovator® suite as its enterprise PLM backbone. Epson will leverage Aras for comprehensive, closed-loop product configuration management and quality manufacturing bill of materials management integrated with MES, as well as regulatory compliance for REACH and RoHS.

With 23% of the global crystal device market, Epson devices serve as the heart and pulse for a wide range of electronic products for consumers and industry. Utilizing its innovative hybrid quartz microfabrication technology, QMEMS, Epson offers technological expertise in timing, sensing and optical devices. Aras PLM supports Epson's mission of enriching society through the development of high quality, progressively smaller devices that are more precise and accurate.

“We are very pleased that Epson has selected Aras for enterprise-wide PLM,” said Peter Schroer, President of Aras. “We look forward to working with Epson as they develop next-generation devices that fuel innovation in consumer and commercial electronics.”

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## ***WorkNC's Automated and Efficient Toolpaths Boost Productivity for Fuji Heavy Industries***

28 February 2012

By implementing the automated toolpath creation functions in [WorkNC CAD/CAM](#), Fuji Heavy Industries has been able to reduce both programming and machining times and has greatly simplified its 3 and 5-axis CNC programming.

Fuji Heavy Industries is one of Japan's leading industrial manufacturers and during 2011 celebrated the manufacture of the 300 millionth EX Series Subaru car engine. Other innovative products include symmetrical AWD systems, driver assist safety technology and Boeing 787 center wing boxes. Its five year management plan is highly customer focused with the aim of realizing growth through global expansion while maintaining positive social contributions to local communities.

WorkNC was first introduced into Fuji Heavy Industries in 2001 after extensive evaluation showed that it reduced programming times for roughing toolpaths by half and significantly reduced overall machining times through the quality of its rough milling and 3D contour machining paths. Yoshimi Chiba, Manager of the Machine and Tool Control Section at the Subaru Manufacturing Division's Gunma Plant, says, “We expanded the system into the design and manufacture of injection molds in 2003, die cast molds in 2004 and we introduced WorkNC's Auto 5 simultaneous 5-axis machining module in 2008. Year on year we have been developing automated processes in WorkNC in a project which is ongoing and continues to provide one improvement after another.” He continues, “Right after installation WorkNC halved roughing program preparation times and automatically produced our

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documentation which has saved us a significant amount of effort. The savings in administration, programming and machining times have produced many benefits and cost savings.”

Fuji Heavy Industries decided it needed to implement 5-axis machining to cope with the deep and complex cavities found in die cast molds. Yoshimi Chiba says, “We decided to implement WorkNC Auto 5 as we were familiar with its ease of use and its capabilities in the manufacture of our stamping tools and injection molds. Additionally, we were attracted by its ability to automatically convert 3-axis toolpaths into simultaneous 5-axis toolpaths.”

Assistant Manager Ichiro Kono elaborates, “WorkNC Auto 5 has enabled us to cut more of the part on the machining center, reducing our reliance on EDM and producing an overall time saving. 5-axis machining is complex so the ability to automatically convert 3-axis into 5-axis toolpaths is a major benefit. When you consider the immense difficulties of accurately setting all the angles for 3+2-axis machining, WorkNC Auto 5 has made our life much easier, resulting in reduced programming times. Additionally, it has enabled us to increase the volume of work completed in-house on the molds for the next generation Subaru boxer engine.”

Fuji Heavy Industries benefits from the ease of use and short learning curve of WorkNC. Assistant Manager, Atsushi Takahashi says, “I have personally experienced how easy and trouble free CNC program preparation is with WorkNC when producing our stamping tools and injection molds. We use other CAM systems in our factory, but our employees tell me that WorkNC is the best and that it can be learnt in less than half a day.”

Assistant Manager Mr. Hitoshi Sakai is impressed with the automated programming possible in WorkNC. “We used the customization capabilities of WorkNC to automatically create Workzones for new parts so that even personnel unfamiliar with the software can prepare a CNC program. Furthermore, we have built an almost completely automatic system that allows CNC programs for parts such as small part flange lifters and scrap cutters to be produced with one or two mouse clicks. Thanks to WorkNC’s flexibility, the principles can be applied to other component groups and advances are constantly being made towards full automation.”

For the future, Atsushi Takahashi believes that increased automation is the way forward. “WorkNC is proving itself to be an effective tool for developing automated systems. I expect to see even greater levels of automation in the future, with automatic program creation on the shop floor, automated geometry recognition, and viewing and analysis of NC data with Sescoi’s WorkXPlore 3D viewer.” Ichiro Kono adds, “The next step for WorkNC Auto 5 will be standardizing 5-axis machining to bring even more automation to this complex area of CNC programming.”

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## Product News

### ***Agilent Technologies Announces Shipment of the IC-CAP 2012 Platform for Device Characterization and Modeling***

2 March 2012

Agilent Technologies Inc. announced shipment of the latest release of its device modeling software platform, the Integrated Circuit Characterization and Analysis Program (IC-CAP).

The new IC-CAP release radically changes the way data is stored, analyzed and selected for modeling



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tasks, greatly increasing workflow efficiency and ensuring continued data integrity and traceability. IC-CAP's automated measurement solution, Wafer Professional (or WaferPro), can now access a new SQL database called IC-CAP Database. Destined to become the backbone of the device modeling flow, the new database can simplify the way device modeling teams operate.

A new tool called DataPro is also integrated with IC-CAP Database. DataPro enables rapid analysis and selection of data for the final model parameter-extraction process.

An accurate description of process variations when modeling today's advanced semiconductor processes has become a core requirement for circuit design teams. At the beginning of the modeling flow, IC-CAP WaferPro enables engineers to execute complex measurement tasks and collect high volume data for analyzing statistical trends. Writing data directly to a database simplifies data storage, improves security and maintainability, and enables complex queries to be completed extremely fast. DataPro helps identify and eliminate outlier devices/dies that show unphysical behavior or a large statistical deviation from the mean. It then performs statistical analysis on selected targets and identifies the golden and corner dies to be used for model extraction.

“As the leading provider of semiconductor device modeling solutions, we continue to innovate to improve flow efficiency and model accuracy,” said Chris Morton, device modeling business manager with Agilent EEsof EDA. “Breakthrough capabilities like IC-CAP Database and DataPro enable our customers to focus their modeling resources on the core modeling task, knowing that their data is organized and secure.”

## **Rapid Data Analysis and Selection**

Agilent's new W8503 IC-CAP DataPro connects to database or file repositories. A convenient user interface let users select target data for statistical analysis. Selected targets can be either I-V curves, such as Id versus Vd or spot data, such as Vth or Idmax. The program runs statistical analysis on the target data and calculates mean values and variances. Statistical graphics such as histograms are available to allow users to inspect data and its distribution, and identify and eliminate outliers. The software then pinpoints the golden die to be used for typical device model extraction and the corner dies to be used for corner modeling.

## **New IC-CAP 2012.01 Features**

In addition to the SQL database support and DataPro, IC-CAP 2012.01 provides new features and enhancements, such as a reduced memory print (up to 5x) to allow loading of very large data files and a driver for the new Agilent B2900A Series source/measurement unit. Existing DC analyzer instrument drivers have also been enhanced to support time-domain measurements and higher resolution. In addition, IC-CAP 2012.01 introduces a new simplified licensing and product structure. Major changes include introduction of a new bundle, the W8500, to replace the former Modeling Suite; a new W8520 Instrument Connectivity product that includes all drivers; and the inclusion of target and corner modeling packages into all CMOS extraction packages. More information on the new product structure is available at <http://www.agilent.com/find/eesof-iccap>.

Agilent IC-CAP software is a device-modeling program that delivers powerful characterization and analysis capabilities for today's semiconductor modeling processes. Providing efficient and accurate extraction of active device and circuit model parameters, IC-CAP performs numerous modeling tasks, including instrument control, data acquisition, graphical analysis, simulation and optimization. It is used by semiconductor foundries and design houses to characterize foundry processes.

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For more information about IC-CAP, WaferPro or DataPro, visit <http://www.agilent.com/find/eesof-iccap>, <http://www.agilent.com/find/eesof-waferpro> and <http://www.agilent.com/find/eesof-datapro>, respectively.

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## ***Arena Launches New Products to Help Engineers Go From Prototype to Production***

29 February 2012

Arena Solutions announced the launch of two new applications that make it easy for manufacturers of all sizes to capture, communicate and share product data as they move from prototype to production—[Arena PartsList](#), and [Arena PDXViewer](#).

PartsList and PDXViewer are flexible applications that require no set up, are simple to use and give engineers more control over their prototyping projects.

PartsList is a lightweight BOM management app, and PDXViewer is an easy-to-use build package viewer. Using PartsList and PDXViewer together, engineers can import designs from ECAD, automatically complete documentation, then share completed BOMs or PDX build packages with anyone.

With the addition of PartsList and PDXViewer, Arena now fully supports teams and organizations of any size—and with any budget—as they go from prototype to production and back again. According to Steve Chalgren, vice president of product management and strategy for Arena, “We already offer a scalable product that whole organizations and their supply chains can use to centralize BOMs, manage product changes and revisions and securely share up-to-date product information. We are just extending the benefits of the cloud to a wider audience by creating products that can help OEMs document and share their designs with CMs earlier in the process. With PartsList and PDXViewer, startups and small tech companies finally have a way to get up and running with no set up costs, and no hassle.”

Ken Bozzini, chief financial officer for Arena, added, “Whether you’re a large business, or two guys in a garage, the success of your product depends on your ability to manage it from prototype to production. By launching this new solution at a lower price point, we hope to encourage small manufacturers to adopt the tools they need to get their products to market on time, and at cost.”

PartsList and PDXViewer enable engineers and manufacturers to capture and share designs at a low cost. For organizations that also need to manage product changes or collaborate with a more robust supplier ecosystem, the economical yet fully scalable Arena solution offers additional functionality and increased control.

### **About PartsList**

PartsList is a BOM documentation application that makes it easy to quickly create and share simple BOMs. Engineers can use PartsList to complete documentation for an ECAD or spreadsheet BOM or collect datasheets for a list of parts in one click. PartsList can also be used to comparison shop for critical components or create a new bill of materials from reference designs. PartsList exports BOMs to CSV or PDX—a navigable, easy-to-read file format for build packages.

Try PartsList for free at <http://www.arenasolutions.com/partslist>.

### **About PDXViewer**

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PDXViewer is a free cloud application that displays and filters PDX build packages in an easy-to-read, navigable format. PDXViewer can also be used to break build packages up into supplier specific part bundles, or remove unwanted or private files, items, contract manufacturers and contacts from the build package for clear, unambiguous communication.

Try PDXViewer at <http://www.arenasolutions.com/pdxviewer>.

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## ***CGTech Announces “VERICUT Composite Paths for Engineering***

2 March 2012

CGTech, the developer of VERICUT Composite Programming (VCP) & VERICUT Composite Simulation (VCS), has added a new product to its suite of software named VERICUT Composite Paths for Engineering (VCPe). VCPe gives a composite part designer, mechanical engineer, or process engineer access to the same software tools NC programmers use to create NC program paths that are subsequently used in the workshop to lay-up a composite part.

“By using VCPe, the part designer or engineer can easily create and experiment with various Automated Fiber Placement (AFP) path options and evaluate the effects AFP manufacturing has on a composite part’s design intent,” said CGTech Product Marketing Manager Bill Hasenjaeger. “Experiments to determine producibility can be performed long before the design has been sent to manufacturing, and even before it is known what type of AFP equipment will be used.”

VCPe reads CATIA V5, NX, STEP, or ACIS surface models. It also reads FiberSim, CATIA V5, NX, or other external ply geometry and information. VCPe then adds material to fill the plies according to user-specified manufacturing standards and requirements. Layup paths are linked together to form specific layup sequences.

By producing actual AFP tape courses that could be used to program AFP fabrication equipment in the workshop, the user can measure and evaluate the effects of AFP path trajectory, material steering, surface curvature, course convergence and other process constraints as they would be applied in manufacturing. The software also provides producibility analysis of the fiber angle based on the curvature of the part, and overlap and gaps needed for structural analysis. Tape course geometry can be written to various CAD formats for further evaluation by the user’s existing analysis methods and tools.

For more information, please visit <http://cgtech.com/usa/composites>

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## ***Design Simulation Technologies Licenses Siemens PLM Software’s D-Cubed 3D DCM for New SimWise 4D Solution***

28 February 2012

Siemens PLM Software announced that [Design Simulation Technologies, Inc.](#), a developer of software for the teaching, learning and application of physics principles, has licensed its D-Cubed™ software and integrated it into the recently released SimWise 4D product.

SimWise 4D is an analysis tool for design and engineering professionals which combines rigid body dynamics simulation and FEA analysis into a single, integrated environment. It can help determine the

# CIMdata PLM Industry Summary

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functional performance of a design by calculating collision response, dynamic reaction forces, motion induced stresses and strains and by producing physics based animations. Design Simulation Technologies is using the D-Cubed 3D Dimensional Constraint Manager (3D DCM) component in SimWise 4D to help position parts in a scene prior to analysis.

"Even though our requirements are somewhat unique, the D-Cubed 3D DCM met them in full, and on a highly demanding schedule," said Alan Wegienka, President of Design Simulation Technologies. "As a result of its continuous development for more than 20 years, the 3D DCM has a wide-range of very robust capabilities, and we feel it makes great business and technical sense to use the market leading 3D geometric constraint solver from an established and trusted supplier of open component technologies such as Siemens PLM Software."

"We are proud of our ability to address the challenging requirements established by Design Simulation Technologies," said Paul Sicking, CTO, Siemens PLM Software. "Our commitment to openness and to our customers' success is what enables us to power innovative applications like SimWise 4D and what has helped us establish the large number of long-term relationships we have, and the new relationships we continue to create. Our customers appreciate our dedication and long term commitment, as this gives them the stability needed to develop innovative and profitable software products."

## About PLM Components

PLM Components include Parasolid® software, and the D-Cubed family of software products, which constitute widely used technologies providing 3D part and assembly modeling, editing and interoperability, 2D/3D parametric sketching, motion simulation, collision detection, clearance measurement and visualization functionality. Applications that incorporate these components cover a wide variety of categories including mechanical CAD, CAM, CAE, mold design, sheet metal, AEC, GIS, structural, plant and ship design, CMM, reverse engineering and sales configuration. For more information please visit <http://www.siemens.com/plm/open>.



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## *CAD Integrated with CAM is Easier Than Ever in New ZW3D 2012*

27 February 2012

ZWSOFT at its 2012 global partner conference officially released the English version of its ZW3D 2012 design software for computer-aided design and computer-aided machining.

At the same time, the company also announced its free ZW3D Student Edition and education community site for students and educators.

## **New Features & Improvements**

Enhanced User Interface offers all-new ribbon interface, right-click menus, customizable UI, faster display, and more. Simplified design processes provide customers with a way to customize the interface and so suit ZW3D to the way they work.

Refined Modeling builds on upgraded direct editing, enhanced extrusions and revolves, smart ribs, and adds new functions for sheet metal design. Intuitive direct editing allows customers to select edges and surfaces directly, and then drag them to edit.

New Start-to-Part Process for Mold Design offers parting lines and faces, cores and cavities, mold bases, electrodes, and more. The brand-new mold design module gives customers the ability to semi-automate

the design of molds directly from ZW3D models.

Better Machining provides new 2-axis turning, 2-axis milling topface cut operations, new undercut operation for 3-axis milling, and more. Improved machining options let customers generate efficient CNC code more quickly.

## **About the ZW3D Student Edition**

Beginning today, students will be able to create, model, and edit great 3D design projects with ZW3D for free. The new ZW3D Student Edition provides all the CAD/CAM features from the Premium Edition, including advanced 3D modeling, mold design, and CNC machining.

To obtain free licenses of ZW3D Student Edition, students can go to the ZWSOFT Student Community website at <http://www.zwsoft.com/en/student>, and then register with a valid .edu email address.

## **Price and Availability of ZW3D 2012**

Starting at a price of just US\$1,500, ZW3D 2012 is available in five editions to satisfy the differing needs of commercial users. For basic users, ZW3D Standard is meant for product design; ZW3D Professional adds mold design; ZW3D 2X Machining is for basic CAD and two-axis machine; ZW3D 3X Machining for three-axis machining, as well as for basic CAD; and ZW3D Premium is for all-in-one CAD/CAM modeling with 2-3X machining.

Users are welcome to download their own free 30-day trial of ZW3D 2012 English version from <http://www.zwsoft.com/en/products/zw3d.html>. Other language versions of ZW3D 2012 will be released in the coming weeks.

To purchase licenses for the new release, customers should contact their local ZW3D reseller through [channel locator](#) or else contact ZWSOFT at [sales@zwsoft.com](mailto:sales@zwsoft.com).

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## ***Cadence Announces Production Release of Virtual Platform for Xilinx Zynq-7000 Extensible Processing Platform***

27 February 2012

Cadence Design Systems, Inc. announced that the company's [virtual platform](#) for the [Xilinx Zynq™-7000 Extensible Processing Platform \(EPP\)](#) is available as a production release. Designed to streamline the embedded software development process, the virtual platform enables simultaneous development of hardware and software before hardware availability, providing significant savings in development costs and time-to-market. The Zynq-7000 EPP virtual platform, built on the [Cadence® Virtual System Platform](#), was already used by [Missing Link Electronics](#), a Cadence customer and Xilinx Certified Alliance Program Member to design an application development platform for automotive infotainment and medical systems. Demonstrations of Missing Link Electronics' platform are available this week at Xilinx's booth (1.205 in Hall 1) at Embedded World in Nuremberg, Germany.

"Time-to-market is extremely important for our customers' new smart products, and the challenge lies in the software complexity," said Endric Schubert, founder and CTO of Missing Link Electronics, Inc. "The Cadence virtual platform enables us to regularly pre-validate our rich open source software stack, even when decoupled from our FPGA hardware development environment."

"Stable, high-performance software applications are critical to the success of any sophisticated



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embedded system,” said Michał Siwiński, group director of product marketing, System & Software Realization Group, Cadence. “Software engineers need access to pre-verified virtual platforms to build applications in confidence, knowing that the code they write on the virtual platform will quickly and cleanly converge with hardware.”

A fast, pre-verified, feature-rich model of a Xilinx Zynq-7000 EPP, the virtual platform is based on the Cadence Virtual System Platform technology. A component of the [Cadence System Development Suite](#), the Cadence Virtual System Platform features tightly integrated hardware and software debugging (including multi-core debug support), mixed domain simulation and acceleration and the ability to automatically build new model TLM 2.0 register interfaces with error-checking, test generation, and documentation from an IP-XACT description. In addition to mirroring the EPP hardware, the virtual platform can be extended using transaction-level modeling (TLM) to support custom devices that will ultimately be instantiated within the Zynq-7000 device’s programmable logic.

“Our Zynq-7000 EPP combines a complete dual-core ARM processor system with our 28nm programmable logic, giving customers the ability to build differentiated products yet still use an industry-standard processing solution that they are familiar with,” said Mark Jensen, director, processing platforms marketing at Xilinx. “We’ve worked closely with Cadence to develop a virtual platform for our hardware to reduce customers’ design times and enable early software development.”

## Availability

The Cadence virtual platform for the Zynq-7000 EPP is available now to customers who are in the Xilinx early access program. Pricing is available upon request.

## About the Zynq-7000 EPP

The Zynq-7000 family is Xilinx's first Extensible Processing Platform (EPP). This new class of product combines an industry-standard ARM dual-core Cortex™-A9 MPCore™ processing system with Xilinx 28nm unified programmable logic architecture. This processor-centric architecture offers the flexibility and scalability of an FPGA combined with ASIC-like performance and power and the ease of use of an ASSP. The extensible Virtual Platform Early Access program has begun and will open to a broader customer base by the end of this year.

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## ***C&R Technologies and SpaceClaim Announce New Mesh Generation Module***

29 February 2012

[C&R Technologies](#), SpaceClaim OEM partner and provider of comprehensive software for heat transfer analysis and fluid flow analysis, and [SpaceClaim](#) announced a major new model for CRTech SpaceClaim, Mesh Generation for SpaceClaim. CRTech SpaceClaim is an extension of SpaceClaim Engineer specifically for designers needing part- or system-level simulations of heat transfer and fluid flow, including thermal radiation, convection, and contact resistance.

The new Mesh Generation module represents the first-ever advanced FEA mesher built into SpaceClaim, taking advantage of SpaceClaim's features for importing, healing, and de-featuring third-party CAD drawings. More than just an advanced mesh generator for parts and assemblies, Mesh Generation for SpaceClaim allows analysts to define materials and optical properties, initial and boundary conditions, insulation, convection, contact, and so forth in preparation for active linking with CRTech's Thermal Desktop suite. Updates to geometry and meshes are shared, such that Thermal



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Desktop users can update their thermal models with a single button click.

"Dealing with defective and inappropriately detailed CAD geometry used to be the bane of the thermal engineer," explains Doug Bell, a CRTech thermal analyst. "When a design change came in, the engineer had to start all over, which could take days if not weeks. With these new tools, we have an easy to use and inexpensive to deploy CAD system of our own. We can build parts with little training and no concerns about retention for infrequent use. More importantly, we can accept any file type, clean it up, add thermal information, mesh it, and get results -- all within a few hours! Updated predictions are now minutes away when the design changes. All traditional bottlenecks in the process have been removed, so the productivity improvements are nothing short of astonishing."

"We are thrilled that CRTech has created this cutting-edge new meshing capability," said Rich Moore, Vice President of Business Development, "because it ensures that through this OEM relationship SpaceClaim can continue to expand aggressively into the industries targeted by C&RTech, such as aerospace, aircraft manufacturing, petrochemical, electronics, automotive, energy, and others such as defense and educational markets."

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## ***Equalis Introduces Sophisticated Control and Power Systems Module***

28 February 2012

Equalis announced the availability of its Control and Power Systems module. These sophisticated new capabilities are included as part of the Equalis Pro Plus solution.

Equalis Control and Power Systems module enables users to leverage out of the box algorithms to build, test, and tune complex control systems and power electronic systems. Visualization and analysis functions are available to boost understanding of the system's behavior. Additionally, comprehensive control system models are available for time domain, frequency domain, discrete and continuous systems. For specialists looking to design complex power electronic systems, Equalis provides models of critical system components, so the focus can be on system level decisions and optimization.

Equalis, through its unique partnership with Scilab, provides a complete industrial grade solution consisting of the Scilab open source numerical computation platform, exclusive Equalis premier modules, as well as complete Equalis support programs for every type of user; be it educational users, professional users, or companies deploying globally. Scilab, downloaded more than 3,500,000 times, is the de facto open source standard for numerical analysis and simulation.

In addition to this new module, Equalis Pro Plus subscriptions include a wide variety of Equalis premier modules, including; Connectivity, Communications, Fixed Point, Advanced Signal Processing, Instrument Control and much more. The Equalis Pro Plus solution also provides comprehensive user support featuring the Equalis SOS portal, e-mail access to the Equalis expert support team, real-time global support capabilities in numerous time zones and languages, accelerated bug fixes and input into the product development roadmap.

Equalis Pro Plus solution is available with prices starting at just \$995 per user. This is typically 90% less than purchasing equivalent software. Additionally Equalis provides Enterprise Pricing for teams resulting in savings of 50% compared to existing solutions. Existing Equalis Pro Plus subscribers can download these new capabilities from the company's customer SOS portal.

For more information, please visit <http://www.equalis.com>.

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## ***Flow Science Releases New Version of Casting Simulation Software***

1 March 2012

Flow Science announced that it has released a new version of FLOW-3D Cast, its simulation software developed especially for foundrymen, tool makers, and casting designers. [Version 3.5 of FLOW-3D Cast features new capabilities](#) to model iron solidification and shrinkage, cavitation potential, prediction of core gas generation, and sand core blowing and core and mold drying. A new permeable mold model is available to model air escape during filling. In addition, users can make use of temperature-dependent material properties to more-accurately predict solidification-related defects. An updated graphical user interface, increased speed and an integrated CAD translation tool are also part of the new release.

According to David Souders, Flow Science's Vice President of Sales, Marketing & Support, "FLOW-3D Cast was originally developed by foundry-oriented partners of ours. After realizing the usefulness of the industry-focused interface, with its more-intuitive design for model setup, we acquired the rights to the product and made a number of valuable changes. Among other things, we've streamlined the product development cycle to more-quickly sync the release of FLOW-3D Cast with the latest version of FLOW-3D's solver. The addition of the fluid structure interaction and thermal stress evolution models later this year will be the final step in this process."

FLOW-3D Cast is offered in three ascending levels of utility: [Basic, Extended and Advanced](#). The Basic version is positioned as an affordable entry-level product for the foundry market, while Extended offers additional capabilities necessary for HPDC shops. The Advanced version is aimed at larger operations interested in making use of the most sophisticated physical models such as the sand core and mold suite. The Advanced version allows access to the **FLOW-3D** interface to enable the user to run non-casting simulations, such as auto manufacturers modeling sloshing, tank filling, and more. Because all versions use the same core **FLOW-3D** solver, the accuracy of filling and solidification results is equivalent across all versions.

All versions of [FLOW-3D Cast](#) empower the user to take advantage of parallel processing on multiple cores. The new release is now available for download by **FLOW-3D** Cast users who are under maintenance service contracts. To find out how you can obtain **FLOW-3D Cast**, see a list of [FLOW-3D Cast distributors world-wide](#).

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## ***Innovyze Releases IWLIVE Generation V2.5; Raises the Bar in Real-Time Smart Water Network Modeling, Operation and Security***

28 February 2012

Innovyze announced the worldwide release of the V2.5 generation of IWLIVE for real-time water distribution hydraulic and water quality modeling, monitoring, forecasting and SCADA integration. The release, incorporating features requested by utilities on three continents using IWLIVE, gives water utilities more power in real-time business analytics and optimization and moves their hydraulic modeling and simulation applications from planning and design to operation and control. It also underscores Innovyze vanguard position in the water industry for delivering pioneering smart water network management technology to enhance the safety, efficiency and reliability of the world's water

supply.

IWLIVE equips the control room with tools that are both predictive and reactive. It issues regularly updated warnings to alert the operator to problems that may arise in the coming minutes, hours, or days, showing the predicted severity of problems and the time of onset in one easy-to-use interface. IWLIVE can also enable the operator to evaluate problem-solving approaches by simulating closures of valves or a change in a pump's operating schedule. It then produces a second simulation that can be compared with the first to determine the level of improvement, the problems that remain, and the costs of the change.

The fully optimized IWLIVE interface allows operators to see a map of all water infrastructures, including background maps. Highlighted color coding shows predicted problem areas; a single click produces a detailed map showing pipes, valves, pumps, reservoirs and other water assets. Animation of the map shows the development of the problem, while graphs show simulated pressures and reservoir levels. IWLIVE can be accessed remotely over a VPN, and can be configured to send critical warning messages via SMS or email.

New features in Version 2.5 include hydraulic model verification (or hindcasting), water quality simulations, and PI System telemetry database support. Model verification enables users to view the root mean square and percentage difference values calculated by comparing simulation results against live data for all model objects linked to the IWLIVE system. This allows utilities to constantly verify the accuracy of their models and monitor the system for operational failures or anomalies. With the addition of dynamic water quality modeling, operational staff can now track water quality constituents and perform trace analyses from the operator interface. The PI System from OSIsoft (San Leandro, CA) gives users an efficient way to leverage telemetry data across the water utility enterprise by collecting, storing and managing data from a large variety of sources and organizes it in a historic database that allows sophisticated cross referencing.

For a complete listing of new features and capabilities in IWLIVE V2.5, visit the "What's New" section in the online help.

## **Pricing and availability**

IWLIVE V2.5 is now available worldwide by subscription. Subscription members can immediately download the new extension free of charge directly from [www.innovyze.com](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 [www.innovyze.com](http://www.innovyze.com) or contact your local Innovyze Channel Partner.

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## ***ISD Group Selects PDF3D® for HiCAD®***

28 February 2012

Engineering organizations can now benefit from direct 3D PDF publishing from HiCAD design software, achieving more versatile and immediately communication to extended supply chain teams with the announcement of the ISD Group's collaboration with Visual Technology Services to integrate PDF3D. ISD Group's innovative new Version 2012 of the CAD-Software, HiCAD provides state-of-

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the-art technologies and numerous new functions and enhancements, guaranteeing smooth and flexible production and business processes, including the benefits of cutting edge PDF3D® visuals.

HiCAD is the only CAD solution that offers, besides full 2-D/3-D associativity, all industry-specific functions and product data management tools in one system. ISD Group prides itself on the software's Hybrid Technology which provides the flexibility and universality required for a successful product development. Furthermore 3D model assemblies can now be effectively presented in interactive 3D PDF format, enabling a thorough design evaluation by third parties without CAD experience, along with an extensive solution portfolio and comprehensive support services, now offers an unprecedented platform for a rapid and flexible product collaboration and communication of complex 3D designs.

Dr. Jörg Ruhwedel, managing director of ISD Group is delighted by the results of the collaboration. "The modelling export options made possible using PDF3D® has taken the industry potential of HiCAD to a new level and it is a real breakthrough for a single system to be so versatile and universally applicable. I am proud to offer a product of such simplicity and power to our industry clients. The high quality 3D PDF generation of HiCAD 2012 will definitely leave its mark in our market sector."

Ian Curington, CEO of Visual Technology Services is equally aware of the potential success. "Our partnership with ISD Group has further strengthened our relations with the industrial PLM solutions sector and I am very pleased with how our technology has been seamlessly integrated into a product with a formidable track record."

To find out more about the work of ISD Group and HiCAD, visit <http://www.isdgroup.eu> or for more information about Visual Technology Services and to see how PDF3D visuals can redefine your product's potential, go to <http://www.pdf3d.com>.

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## ***Luxology Ships Parasolid-based CAD Loaders for modo 601***

29 February 2012

With the release of the new CAD Loaders for the recently announced modo® 601 software, CAD designers working with XT, IGES, and STEP files will now be able to use Luxology's 3D software to create photorealistic images and animations.

CAD Loaders for modo are based on Parasolid® technology, a geometry kernel whose data files, according to Siemens, account for over 40% of all 3D model data stored worldwide. As models are loaded into modo, the CAD surfaces can be dynamically tessellated for optimum use in modo's modeling and rendering operations. Real-time rendering previews and dynamic editing tools in modo can then be used to turn base designs into immersive, photorealistic graphics.

"Exchange of CAD data is absolutely business-critical to our customers," says Brad Peebler, president and co-founder, Luxology. "CAD Loaders for modo offer users a flexible set of controls for optimizing incoming CAD data that goes beyond simple file importing. This opens up a world of CAD data for designers and other 3D artists who want to tap the power of modo for concept design and advanced visualization."

### **Key benefits of CAD Loaders**

**Industry Standard Parasolid Technology:** Support for Parasolid XT, IGES and STEP files allows CAD designers and other modo users to access design and engineering files produced in leading CAD

systems worldwide.

**Expanded Flexibility for Surfaces:** Incoming surfaces are maintained as parametric surfaces in modo which allows for alternate tessellation parameters to be applied dynamically under user control. Resulting meshes can be saved as convex polygons or a combination of quads and n-gons.

**Efficiency:** Many CAD files are characterized by large amounts of repeated data elements. With the Instance Handling feature of the CAD Loaders, modo users get the choice of loading instance-laden files as copies, instances, or modo replicators, which can greatly reduce memory use and boost interactivity.

“The CAD Loaders are an awesome addition to my workflow,” says Paul McCrorey, a modo user and president of McCrorey Digital. “By eliminating triangles from my imported geometry, I get quad-based results and moldable assets that are easier to use and require a lot less memory. This allows me to take my work to the next level no matter what program I start in. I love that.”

## Pricing and Availability

CAD Loaders for modo are available immediately from authorized Luxology resellers and on Luxology’s website. The Advanced CAD Loader for modo 601 includes XT, IGES, and STEP file loaders priced at \$695.00, while the Basic CAD Loader is a Parasolid XT standalone file loader priced at \$495.00. CAD Loaders for modo are compatible with Microsoft Windows and Mac OS X.

## About modo

modo is a 3D modeling, painting and rendering software designed to accelerate the creation of designs and ultra high-quality renderings. modo’s modern workflow and advanced toolset deliver enhanced productivity for professionals working in design visualization, conceptual modeling, package design, and graphic arts. A favorite tool among designers and artists, modo’s flexible feature set is ideal for modeling and visualization on the PC and Mac.

## About Luxology

Based in Mountain View, Calif., Luxology® LLC is an independent technology company developing next-generation 3D content creation software that enhances productivity via designer-friendly tools powered by a modern underlying architecture called Nexus®. Founded in 2002 by Allen Hastings, Stuart Ferguson and Brad Peebler, Luxology is home to some of the top 3D engineering expertise in the industry. More information on the company, its licensable Nexus technology, its flagship product modo® and a gallery of images from the active modo community are available online at <http://www.luxology.com>.



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## *MathWorks Announces Release 2012a of the MATLAB and Simulink*

2 March 2012

[MathWorks](#) announced Release 2012a (R2012a) of its [MATLAB](#) and [Simulink](#) product families. New in this release are the introduction of [HDL Coder](#), which generates HDL code from either MATLAB or Simulink for prototyping and implementation on FPGAs or ASICs, and the launch of [HDL Verifier](#), which replaces EDA Simulator Link and adds Altera FPGA hardware-in-the-loop support. R2012a also updates 77 other products, including [Polyspace](#) embedded software verification products.

For MATLAB, R2012a highlights include:

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**MATLAB:** Unified functions for 1-D, 2-D, and 3-D numerical integration and improved performance of basic math and interpolation functions

[MATLAB Compiler:](#) MATLAB Compiler Runtime (MCR) available for download, simplifying distribution of compiled applications and components

[Image Processing Toolbox:](#) Automatic image registration using intensity metric optimization

[Statistics Toolbox:](#) Enhanced interface for fitting, prediction, and plotting with linear, generalized linear, and nonlinear regression

[System Identification Toolbox:](#) Identification of continuous-time transfer functions

[MATLAB Coder:](#) Code generation from user-defined System objects and automated generation of dynamic shared libraries

[Computer Vision System Toolbox:](#) Viola-Jones object detection, MSER feature detection, and CAMShift tracking

[Communications System Toolbox:](#) USRP radio support, LTE MIMO channel models, and GPU support for LDPC, turbo decoder, and other algorithms

R2012a highlights for Simulink include:

Simulink: Ability to run models directly from Simulink on target hardware including LEGO MINDSTORMS NXT and BeagleBoard

[Embedded Coder:](#) AUTOSAR 4.0 compatibility, reduced data copies, and linking of code generation reports with Simulink Web views

[SimMechanics:](#) Second-generation multibody modeling and simulation technology with new 3-D visualization

[Real-Time Windows Target:](#) Real-time execution of models in Windows using Simulink Normal mode

Release 2012a is available immediately and is being provided to users worldwide with current subscriptions to MathWorks Software Maintenance Service for immediate installation. Additional information on R2012a product updates is available at

[http://www.mathworks.com/products/new\\_products/latest\\_features.html](http://www.mathworks.com/products/new_products/latest_features.html)

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## ***MathWorks Introduces HDL Code Generation for MATLAB***

2 March 2012

[MathWorks](#) announced [HDL Coder](#), which automatically generates HDL code from MATLAB, allowing engineers to implement FPGA and ASIC designs from the widely used MATLAB language. MathWorks also announced [HDL Verifier](#), which includes FPGA hardware-in-the-loop capabilities for testing FPGA and ASIC designs. With these two products, MathWorks now provides HDL code generation and verification across MATLAB and Simulink.

“Engineers everywhere use MATLAB and Simulink to design systems and algorithms,” said Tom Erkkinen, embedded applications and certification manager, MathWorks. “Now, with HDL Coder and HDL Verifier, they no longer have to manually write HDL code or test benches to develop FPGA and ASIC designs.”



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HDL Coder generates portable, synthesizable VHDL and Verilog code from MATLAB functions and Simulink models that can be used for FPGA programming or ASIC prototyping and design. As a result, engineering teams can now immediately identify the best algorithm for hardware implementation. Traceability between Simulink models and generated HDL code also supports the development of high-integrity applications that adhere to DO-254 and other standards.

“HDL Coder offers integration with Xilinx ISE design suite, creating a pushbutton workflow that makes it easy for algorithm developers who use MathWorks products to target Xilinx FPGAs,” said Vin Ratford, Sr. Vice President Worldwide Marketing and Business Development, Xilinx. “This integration also provides our mutual customers access to a broad portfolio of Xilinx optimized IP from within HDL Coder that further accelerates their productivity.”

HDL Verifier now supports FPGA hardware-in-the-loop verification for Altera and Xilinx FPGA boards. HDL Verifier provides co-simulation interfaces that link MATLAB and Simulink with Cadence Incisive, Mentor Graphics ModelSim, and Questa HDL simulators. With these capabilities, engineers can rapidly verify that their HDL implementation matches their MATLAB algorithms and Simulink system specifications.

“As adoption of FPGAs continues to grow across industries, designers need a way to bridge the verification gap from system models to FPGA design,” said Vince Hu, vice president of product and corporate marketing at Altera. “HDL Verifier links system models to FPGA designs and enables engineers to perform FPGA hardware-in-the-loop verification with Altera FPGAs and Simulink. This workflow shortens verification cycles and helps engineers gain greater confidence in their silicon implementations.”

## **Pricing and Availability**

HDL Coder and HDL Verifier are available immediately.

U.S. list prices for HDL Coder start at \$10,000, with more information available on the product Web site: [www.mathworks.com/products/hdl-coder](http://www.mathworks.com/products/hdl-coder).

U.S. list prices for HDL Verifier start at \$3,250, with more information available on the product Web site: [www.mathworks.com/products/hdl-verifier](http://www.mathworks.com/products/hdl-verifier).



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## ***Oracle Introduces Mobile PPM with Oracle’s Primavera P6 Team Member for iPhone and Oracle’s Primavera P6 Team Member Web Interface***

28 February 2012

### **News Facts**

To enable effective communication and collaboration between project participants, Oracle announced Oracle’s Primavera P6 Team Member for iPhone and Oracle’s Primavera P6 Team Member Web Interface.

With the introduction of P6 Team Member for iPhone and P6 Team Member Web Interface, Oracle is delivering a new project portfolio management (PPM) app for iPhone and Web application that streamline communications between project team members in the field and in the office.

The new mobile PPM solutions enable project managers, project controls professionals, PMO’s, and

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members of the project team in the field to accurately capture and share information on project status and tasks from their iPhones and tablet computers.

By providing the most accurate and recent information directly into project plans, these two new mobile PPM offerings help project managers and investors to make informed decisions so that projects can be completed on time and within budget.

## **Oracle's Primavera Mobile PPM Features and Details**

By optimizing project communications, P6 Team Member for iPhone and P6 Team Member Web Interface help organizations focus on managing the project delivery and eliminating the time typically required to track down project status updates.

Available as part of Oracle's Primavera P6 Enterprise Portfolio Project Management (EPPM) 8.2, the P6 Team Member Web Interface is optimized to run on most tablet computers or browsers.

Both P6 Team Member for iPhone and P6 Team Member Web Interface enable users to update their status directly into Oracle's Primavera P6 EPPM or changes can be staged and approved by the project manager.

The new releases include an intuitive user interface that improves communication between all project participants and supports informed decision making by providing access to real-time project data.

Free to current Primavera P6 EPPM users, the new app is available at the App Store while the new Web interface is available as part of standard maintenance.

Oracle's Primavera P6 Team Member for iPhone and Oracle's Primavera P6 Team Member Web Interface are part of Oracle's comprehensive portfolio of enterprise project portfolio management solutions that help customers manage their entire portfolio lifecycle, from inception to execution and control for investments and projects of all sizes.

## **Supporting Quote**

"An accurate view of project status is critical to the success of any project as it helps mitigate project risks and delays," said Mike Sicilia, senior vice president and general manager, Oracle's Primavera Global Business Unit. "By enabling project participants to quickly, easily and conveniently share updates at any time and from anyplace, Oracle's Primavera P6 Team Member for iPhone and Oracle's Primavera P6 Team Member Web Interface fundamentally change the way project participants can share information. The new releases are a significant milestone in our commitment to delivering more useful and appealing solutions for wider group of project participants and an important extension to Oracle's comprehensive portfolio of enterprise project portfolio management solutions."

## *Supporting Resources*

Oracle's Primavera

Oracle's Primavera P6 Enterprise Portfolio Project Management

Oracle's Primavera P6 Enterprise Project Portfolio Management Data Sheet

Primavera P6 EPPM Team Member Interface Data Sheet

Webcast: What's New in Oracle's Primavera P6 EPPM 8.2

Download the Oracle's Primavera P6 Team Member for iPhone from the App Store

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## ***PTC Adds Powerful New Capabilities to Mathcad***

29 February 2012

PTC announced the general availability of [Mathcad Prime<sup>®</sup> 2.0](#) -- the latest release of PTC's engineering calculation software. Mathcad Prime 2.0 adds new calculation features and advanced capabilities to an easy-to-learn, easy-to-use interface. Additionally, Mathcad Prime 2.0 integrates with other PTC products like Creo<sup>®</sup> and Windchill<sup>®</sup> to enable increased productivity, improved process efficiency and better collaboration between individuals and teams.

Mathcad Prime 2.0 delivers the following enhancements that improve the personal and engineering process productivity benefits currently offered by the Mathcad<sup>®</sup> product family:

### **Excel Component**

Meaningful integration of Mathcad and Excel enables users to access and utilize data from existing spreadsheets and eliminates need to convert data when introducing Mathcad.

### **Symbolic Algebra**

Automates the process of explicit derivation to manipulate complex equations reducing errors and improves efficiency.

### **3-dimensional (3-D) Plots**

Enables engineers to manipulate, analyze and visualize complex data for more complete insight and better documentation.

### **Collapsible Areas**

Allow users to manage content better and have more control over their workspace, by collapsing (placing out of view) details that are not essential at the moment, improving productivity and collaboration.

Computational Improvements including faster performance, 64 bit support, optimization solver and multi-threading

Reduce computation time, remove limitations of data-set size, and enable more exploration to be done in the concept phase. More design approaches can be evaluated with higher confidence, reducing errors and problems that occur later in detailed design.

### **Additional Resources**

[Mathcad Product Page](#) (web site)

[Mathcad Prime 2.0](#) (datasheet)

[Mathcad Prime 2.0 FAQs](#)

[Mathcad Prime 2.0 Version Comparison Sheet](#)

[Introducing Mathcad Prime 2.0](#) (video)

[What's New in Mathcad Prime 2.0](#) (video)

### **Availability**

Mathcad Prime 2.0 is available now.

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## ***Red Cedar Technology and MSC Software Form Strategic Partnership***

17 February 2012

Red Cedar Technology announced a strategic partnership with the California-based MSC Software Corporation. MSC Software's engineering simulation technology is used by leading manufacturers for linear and nonlinear finite element analysis (FEA), acoustics, CFD, multi-physics, optimization, fatigue and durability, multi-body dynamics, and control systems simulation. The company's products accurately and reliably predict how products will behave in the real world to help engineers design more innovative products.

Red Cedar Technology's HEEDS MDO design optimization software integrates with many of MSC's tools, including Adams, Actran, Easy5, Marc, XFlow and Nastran.

Angelo Flemings, Vice President of Global Business Development for Red Cedar Technology, was enthusiastic about the new partnership: "We are pleased to be recognized as a strategic partner to the revitalized MSC Software Corporation. As we continue our journey as the global commercial choice for process automation and product design optimization, it is important that we have meaningful relationships with proven industry leaders such as MSC Software."

Throughout 2012, Red Cedar Technology will work directly with MSC Software and its agents to educate their installed base on the value of using HEEDS MDO to optimize models created with MSC software tools, meet challenging performance targets, and introduce robust, innovative products and parts.

### **About Red Cedar Technology**

Red Cedar Technology improves and accelerates design processes for companies facing complex product design challenges. Our design optimization software and services provide engineers with the expertise and technology to reduce product development time and achieve significant productivity gains during the design process. Product development teams worldwide use our expertise to design safer cars, engineer life-saving biomedical devices, and develop innovative structures for air travel and space exploration, among many other groundbreaking applications. For more information, visit <http://www.redcedartech.com>.

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## ***RuleDesigner®FUSION Improves Integration Across Corporate Processes***

2 March 2012

[RuleDesigner](#) announced that Fusion the new web-based PLM release of RuleDesigner, improves product development time, quality and integration across the extended enterprise.

RuleDesigner Fusion is the result of an innovative approach aiming at assisting in a integrated, structured and homogeneous way all those corporate activities implying the collaboration among people, both in and out the company. As a modular solution, RuleDesigner's highly advanced tools can be used to serve the needs of numerous corporate functions including document management, workflow, CRM

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for marketing, sales and after-sales, sharing the agenda, project management and PDM/PLM tools. Everything is designed to offer an integrated working environment.

With RuleDesigner Fusion relationship management becomes an integral part of business processes and it interconnects with the company's processes of product development from marketing to after sales service.

Since RuleDesigner Fusion can operate as a standalone solution or as a fully integrated component of the Fusion product development portfolio, it provides companies with significant versatility in how the solution is deployed.

## **About RuleDesigner**

RuleDesigner innovating technology aims at creating value for companies. Indeed, it enables companies' entire development team to collaborate more effectively from the beginning to the end of the product lifecycle process, maximizing their productivity organization and competitiveness. In addition, the ability to capture and support customers' requirements, gives our staff the confidence we are producing a very high quality product that will meet or exceed our customers' expectations.

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## ***Samsung DFM Ready for 20 nm Based on Mentor Graphics Calibre Platform***

1 March 2012

Mentor Graphics Corporation announced that Samsung Electronics and Mentor® have successfully delivered a complete design-for-manufacturing (DFM) sign-off reference solution for Samsung's foundry customers based on the Calibre® platform. The DFM sign-off solution is available for world class consumer and telecommunications designs targeting advanced process nodes. Samsung has already released the Calibre kits to their customers for 32 nm and 28 nm, and has completed evaluation for 20 nm.

“We have been working closely with Mentor to provide a comprehensive and consistent ecosystem for our customers,” said Kee Sup Kim, vice president of Infrastructure Design Center, Samsung Electronics. “We have used Mentor's 32/28 nm DFM solution on several advanced SoCs to reduce late-stage problems that could lead to delayed product releases or slower than expected yield ramp-up. We are currently working with Mentor to expand the DFM solution to 20 nm processes as well.”

The components of the Calibre DFM platform at Samsung include the Calibre LFD™ product for litho simulation and hot spot pattern identification; the Calibre nmDRC and Calibre PM products for pattern-based design rule and hot spot checking and fixing; and the Calibre YieldAnalyzer product, which is used in conjunction with the Samsung manufacturing analysis deck for DFM scoring and critical area analysis (CAA).

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## ***SpringSoft and Synopsys Link Debug Technologies to Speed Protocol Verification for SoC Designs***

27 February 2012

[SpringSoft, Inc.](#) announced that they have linked SpringSoft's Verdi™ Automated Debug System with Synopsys' Protocol Analyzer. Part of the Synopsys Discovery™ VIP family, Protocol Analyzer enables

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engineers to understand, identify and debug protocols in their designs. Through this linkage, the identified protocol violations and errors are passed to the Verdi environment for detailed signal-level analysis to rapidly pinpoint the root causes of violations.

As leading system-on-chip (SoC) designs incorporate multiple complex protocols, verification IP (VIP) has become a critical component of the verification environment, enabling engineers to reach their coverage goals within tight project schedules. With the increase in protocol complexity, protocol debug is now one of the most difficult and time-consuming aspects of SoC functional verification. This collaboration, implemented with SpringSoft's VIA (Verdi Interoperability Apps) platform, directly addresses these challenges by combining the protocol-centric debug capabilities in Protocol Analyzer with the advanced design debug capabilities of the Verdi system.

"Protocol debug poses a significant challenge for SoC design teams," said Mark Milligan, vice president of corporate marketing at SpringSoft. "We have had a long-term partnership with Synopsys to jointly address the verification challenges of our mutual customers with interoperable tools and flows. The VIA-enabled integration of Verdi, the industry's de facto standard debug platform, and the advantages of Synopsys' Discovery VIP provide a compelling solution to speed protocol debug."

"As protocol complexity has increased, efficient protocol debug has become an area of concern for the industry," said Janick Bergeron, verification fellow at Synopsys. "Addressing the protocol debug challenge was one of our key areas of focus when developing our next-generation VIP. With this collaboration, our protocol debug technology is integrated with SpringSoft's market-leading design debug technology to further enhance SoC verification productivity."

Verification engineers use VIP to test all SoC interface protocols, including ARM® AMBA® AXI4™, USB 3.0, PCI Express, and others. Protocol Analyzer, available with the Synopsys Discovery VIP family, provides protocol-centric debug and unique capabilities that enable engineers to quickly understand protocol activity, identify bottlenecks and debug unexpected behavior by minimizing unnecessary detail and focusing on high-level protocol activity such as AXI transactions, USB transfers or PCI Express packets. The Verdi Automated Debug System, the cornerstone of SpringSoft's family of functional closure products, accelerates the process of finding, analyzing and correcting the root causes of errors revealed during the verification of complex digital IP components, design modules or entire SoCs.

The integrated flow between Protocol Analyzer and Verdi provides synchronized access between protocol transactions, transfers, packets and signal-level analysis of the design. This enables verification engineers to work at the most relevant level to determine the root cause of protocol violations and thereby speed the overall SoC debug process.

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## ***Synopsys and Arteris Develop IP Solution to Reduce Mobile Phone Memory Costs***

29 February 2012

Synopsys, Inc. and Arteris, Inc., the inventor and leading supplier of network-on-chip (NoC) interconnect IP solutions, announced their joint analog and digital IP solutions to implement the MIPI Alliance Low Latency Interface (LLI) 1.0 specification. The combined offerings deliver high performance with low power consumption in a compact silicon footprint while providing interoperability with the MIPI standard. By providing a collaborative solution that adheres to the LLI specification, Arteris and Synopsys give system-on-chip (SoC) designers access to pre-tested and pre-



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optimized analog and digital MIPI-based IP that can reduce design cost and accelerate time to market.

The MIPI Alliance LLI specification enables high-bandwidth, low-latency inter-chip communication between two chips using a minimal number of SoC pins. The LLI specification utilizes the MIPI M-PHY physical layer, which also supports five other protocols including USB SSIC, JEDEC UFS, MIPI CSI-3, DSI-2 and DigRF v4. The round-trip latency of the LLI inter-chip connection is fast enough for a mobile phone modem to share an application processor's memory while maintaining enough read throughput and low latency for cache refills. This enables phone manufacturers to remove the modem's dedicated RAM chip from the phone's bill of materials, MIPI Alliance estimates saving approximately \$2 in cost per phone as well as significant printed circuit board (PCB) space that can be used for additional features or to create smaller or thinner devices.

"As active MIPI contributors, Synopsys and Arteris are aiding in the adoption of the MIPI M-PHY and MIPI Low Latency Interface," said Joel Huloux, chairman of the board of MIPI Alliance. "The early integration and availability of the Arteris and Synopsys solution helps speed time to market for MIPI LLI adopters."

The joint solution consists of Arteris' Flex LLI™ MIPI LLI digital controller IP and Synopsys' DesignWare® MIPI M-PHY IP. A team of Arteris and Synopsys engineers, formed to facilitate verification and testing of the joint solution, validated its functionality and interoperability.

"The Synopsys-Arteris MIPI LLI joint solution is the easiest and lowest risk path to adopting MIPI LLI," said Charlie Janac, president and CEO of Arteris. "Arteris and Synopsys have worked together to offer joint customers the most integrated LLI solution with the fastest time to market and least design risk."

"The new Synopsys-Arteris MIPI LLI solution eases adoption of this innovative low latency chip-to-chip interface by providing high-quality IP that has been jointly validated and is ready for customers to rapidly integrate into their SoCs," said John Koeter, vice president of marketing for IP and systems at Synopsys. "With the increasing demand to incorporate display, camera and mobile broadband connectivity into consumer devices, SoC designers must rely on proven IP that is verified compliant with MIPI standards such as DSI, CSI-2, D-PHY, DigRF 3G/v4 and M-PHY."

## **Availability**

Arteris and Synopsys' joint MIPI LLI IP solution is available today for select early access customers to start their design. System hardware implementing the joint solution will also be available in the second half of 2012.

For more information on Arteris' FlexLLI MIPI LLI digital controller IP, please visit:

[www.arteris.com/lli](http://www.arteris.com/lli)

For information on Synopsys' DesignWare M-PHY features, capabilities and availability, please contact Synopsys. For more information on DesignWare MIPI IP, please visit:

<http://www.synopsys.com/IP/InterfaceIP/MIPI/Pages/default.aspx>

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***Synopsys Introduces Industry's First 28-nm Multi-Gear MIPI Alliance M-PHY IP Supporting Six Standards for Mobile Applications***

29 February 2012

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Synopsys, Inc. announced availability of a new [DesignWare® MIPI M-PHY](#) IP solution supporting multiple speed gears and a broad range of high-speed interfaces for mobile applications. Based on the industry's first silicon-proven DesignWare MIPI M-PHY IP introduced by Synopsys in 2010, the new MIPI M-PHY IP is the first 28-nanometer (nm) multi-gear solution that supports six different inter-chip interconnect protocols including the JEDEC Universal Flash Storage (UFS), the USB SuperSpeed Inter-Chip (SSIC), and the MIPI Alliance's Low Latency Interface (LLI), DigRF v4 and future CSI-3 and DSI-2 interfaces. By providing application-oriented M-PHY IP that runs at multiple speeds and is interoperable with multiple protocols, Synopsys enables design teams to "future-proof" their designs while reducing the risk and cost of integrating MIPI interfaces into basebands, application processors and mobile ICs.

The 28-nm DesignWare MIPI M-PHY IP offers Type-I and Type-II low-speed implementations to support different application requirements. With support for high-speed GEAR1, GEAR2 and GEAR3, ranging from 1.248Gbps to 5.8Gbps, this scalable solution can meet ever-increasing data rate requirements, enabling reuse of proven IP in next-generation devices. Using a variety of high-speed and low-speed burst modes and power management modes, including idle, sleep and hibernate with quick entry and exit capability, Synopsys' DesignWare MIPI M-PHY IP can be optimized to achieve required data rates while meeting the stringent power and area requirements of mobile SoCs.

"Synopsys is regarded as a technology leader in the development of MIPI IP, and we are continuing our successful collaboration to deliver the future-proof DesignWare MIPI M-PHY IP with the Tektronix M-PHY test suite," said Mike Rizzo, technology solutions manager at Tektronix. "Our [M-PHY test suite](#) includes the DSA70000 Series Oscilloscope and allows M-PHY users to test the M-PHY electrical functionality and integrate high-speed MIPI interfaces into mobile chipsets."

"As a longtime contributor to the MIPI working groups, Synopsys continues to help drive MIPI specifications to build a robust mobile ecosystem," said Joel Huloux, president and chairman, MIPI Alliance. "The new DesignWare MIPI M-PHY IP will likely prove useful to designers and expand their interface choices."

The DesignWare MIPI M-PHY IP is compliant with the MIPI Alliance M-PHY v1.0 specification. By working closely with the MIPI Alliance to develop its specifications, Synopsys targets its IP to comply with future MIPI M-PHY specification releases. Synopsys DesignWare MIPI M-PHY IP supports High Speed GEAR1, GEAR2 and GEAR3 rates A/B along with Type-I and Type-II low-speed capabilities. The DesignWare MIPI M-PHY's modular architecture allows implementation of a variety of transmitter and receiver lanes to meet a broad range of system requirements and all modes outlined in the protocol specification. A sophisticated clock recovery mechanism and power efficient clock circuitry are designed to maintain the integrity of the clocks and signals required to meet strict timing requirements. The DesignWare MIPI M-PHY supports large and small amplitudes, slew rate control and dithering functionality for optimized electromagnetic interference (EMI) performance.

"With an increasing number of devices integrating mobile functionality, IP solutions supporting mobile standards must be capable of meeting the power and performance targets of multiple end applications," said John Koeter, vice president of marketing for IP and systems at Synopsys. "With support for multiple speed gears and interface protocols, the 28-nanometer DesignWare MIPI M-PHY gives designers a high-quality IP solution that can reduce the risk of integrating MIPI interfaces into their SoCs today with the scalability needed to address faster data rates in the future."

## **Availability**

The multi-gear DesignWare MIPI M-PHY IP in the 28-nm process node will be available for early adopters in calendar Q2, 2012. For more information, visit: <http://www.synopsys.com/mipi>.

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## ***Synopsys Unveils Next-Generation Verification IP for Faster SoC Verification***

27 February 2012

Discovery VIP delivers up to 4X faster performance, rapid configurability, efficient protocol-aware debug, and quicker protocol compliance closure

### **Highlights**

- Synopsys Discovery VIP speeds and simplifies verification of the most complex system-on-chip (SoC) designs.
- Synopsys Discovery VIP offers greater performance, debug and coverage management features, ease-of-use and ease-of-integration for complex SoCs.
- Synopsys Discovery VIP is written entirely in SystemVerilog, includes native support for UVM, VMM, and OVM, and is compatible with all related verification environments.
- Synopsys Discovery VIP supports all major simulators.
- Included with Discovery VIP, Protocol Analyzer enables engineers to quickly understand, identify and debug protocols in their designs.

Synopsys, Inc. unveiled its Discovery™ Verification IP (VIP) family based on the new VIPER architecture. Written entirely in SystemVerilog with native support for the UVM, VMM and OVM methodologies, Discovery VIP provides inherent performance, ease-of-use and extensibility to speed and simplify verification of the most complex system-on-chip (SoC) designs. The Discovery VIP family includes Protocol Analyzer, a unique protocol-aware debug environment. Discovery VIP supports all major simulators and offers up to four times (4X) higher performance than other commercial VIP, as well as configuration, coverage and test-development capabilities to improve IP and SoC designers' productivity. The next-generation VIPER architecture lays the foundation for future innovation in protocol-centric verification and SoC-level validation.

"We have been users of Synopsys VIP for several years now and are very pleased with its quality, performance, features and capabilities," said Bruce Fishbein, vice president of IC engineering, Networking and Communications Division, at Cavium, Inc. "As our designs and our verification environments reach new levels of complexity, the vision and roadmap behind the Discovery VIP architecture will enable us to address the next wave of SoC verification challenges."

As leading SoC designs incorporate more complex protocols, VIP has become a critical component of the verification environment, enabling engineers to reach their coverage goals within tight project schedules. VIP provides functional models of on- and off-chip protocols like ARM® AMBA®, PCI Express, USB, MIPI, HDMI and Ethernet. Verification engineers use these models to test all SoC interfaces before manufacturing, enabling them to verify whether an interface conforms to published standards.

### **One-Hundred Percent SystemVerilog with Native UVM, VMM and OVM Support**

Unlike other commercially available VIP, Discovery VIP is written entirely in SystemVerilog without

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any wrappers or methodology extensions around an original implementation in a different language. Discovery VIP is architected with native support for UVM (Universal Verification Methodology), VMM (Verification Methodology Manual) and OVM (Open Verification Methodology) without methodology-level interoperability wrappers or under-the-hood translations or remapping. Not only does this remove unnecessary performance overhead, but it also offers other uniquely inherent benefits. These benefits include portability across all major simulators and easy integration within SoC environments, as well as capabilities and features for VIP debug, coverage planning and management.

"In response to the need for greater performance and power efficiency we are seeing broad and rapid industry adoption of AMBA 4 AXI4™ and ACE™ protocols to support coherent, heterogeneous, multi-processor SoCs," said William Orme, strategic marketing manager, processor division, ARM. "We support Synopsys' development of verification IP for AMBA4 AXI4 and ACE protocols and have provided reference models for compliance and interoperability testing. We look forward to continuing to work closely with Synopsys to address the needs of our mutual customers."

## **Efficient, Protocol-Aware Debug with Protocol Analyzer**

With increasingly complex protocols, debug has become one of the most difficult and time-consuming aspects of functional verification. Synopsys' Protocol Analyzer, available in the Discovery VIP family, provides protocol-centric debug and intelligent visibility. These capabilities enable engineers to quickly understand protocol activity, identify bottlenecks and debug unexpected behavior.

## **VIPER Architecture**

The Discovery VIP family is based on Synopsys' new VIPER architecture, which has been engineered from the ground up for enhanced VIP performance, configurability, portability, debug, coverage and compliance management, and extensibility. The bulk of VIPER's functionality and protocol correctness-checking comes from a layered protocol architecture implemented in SystemVerilog, using best practices for all methodologies, including UVM, VMM and OVM. All layers are visible, providing complete controllability of protocol verification. Verification engineers are able to work at the highest layer as required by their verification plans, yet are still able to inject errors at the lowest layer for self-checking requirements.

The VIPER architecture offers the ability to track protocol-centric simulation information to provide protocol-level analysis views with timelines synchronized to RTL waveforms and other views. This architecture can be fully configured to specified protocol configurations and includes several capabilities such as pruning of non-applicable run-time configurations from pre-defined sequences. The VIPER architecture is also highly extensible, accommodating additional capabilities unique to the device-under-test (DUT) such as error injection modes, coverage sampling, and other capabilities.

"Protocol verification has become a critical part of SoC verification, with major implications for cost and time to market," said Manoj Gandhi, senior vice president and general manager of the Synopsys Verification Group. "Synopsys identified the need for a next generation of verification IP to improve debug, performance and ease of SoC integration. The launch of our next-generation VIP architecture is critical for the industry to address growing SoC verification challenges."

## **Availability**

Synopsys VIP is available for a broad portfolio of protocols including USB 3.0, ARM AMBA AXI3, AXI4, ACE, HDMI, MIPI (CSI-2, DSI, HSI, etc.), Ethernet 40G/100G, PCI Express, SATA, OCP, and many others. See the complete list at <http://www.synopsys.com/VIP>

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## **ZW3D Free to Students with Premium CAD/CAM Features**

1 March 2012

[ZWSOFT](#) announced the release of ZW3D Student Edition, the all-in-one hybrid modeling system. The design work of students becomes easier, as they are able to create, model, and edit 3D design projects with one of the top CAD/CAM software packages -- for free.

### **How Students Can Benefit**

The Student Edition of ZW3D starts students off with core 2D and 3D design capabilities, and then enhances their experience by providing the same capability of ZW3D Premium Edition except for some output functions. The ZW3D Student Edition offers these benefits to students:

- **Easy to Learn & Use**

Students get up to speed faster with the built-in Show-n-Tell™ tutorials that are designed to shorten their learning curve. Simplified design process with new ribbon allows students to customize the user interface to suit the way they work.

- **Productive Hybrid Modeling with Direct Edit**

Students are able to work with 3D solid, surface, and wireframe models, enjoy design flexibility with hybrid modeling, and quickly edit all imported geometry through direct edit.

- **Whole-process Mold Design**

The new whole-process solution for mold design offers students parting line, parting face, core and cavity, mold base, electrode and more.

- **Intelligent and Efficient CAM Machining**

Students interested in computer-aided manufacturing can work with the integrated CAM system, offering QuickMill™ technology, hole making, 2X turning, and efficient 2-3X mill operation.

### **Easy Steps to Obtain Student Licenses**

To obtain a 12-month educational license, students should follow these steps:

1. Go to the ZWSOFT Student Community website at <http://www.zwsoft.com/en/student/>, and then register with a valid .edu email address.
2. Request a free, 12-month license from the ZWSOFT Student Community site.
3. Activate ZW3D software with the student license, and start designing!

### **Schools Enroll as Cooperation Partners**

ZWSOFT additionally announces today its new cooperative program for schools and universities. Once schools enrolled themselves as Cooperation Partners at <http://www.zwsoft.com/en/student/>, they are eligible to receive student licenses for use as teaching tools.

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