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## CIMdata News

### ***CIMdata Welcomes ECS as their Latest PLM Leadership Alliance Member***

10 March 2010

CIMdata, Inc., the leading global Product Lifecycle Management (PLM) consulting and research firm welcomes ECS GmbH, a leading specialist in Product Lifecycle Management (PLM) solutions, as their latest CIMdata PLM Leadership Alliance Member.

The *CIMdata PLM Leadership Alliance Membership* program was created to improve CIMdata's ability to serve the worldwide industry more efficiently. This program is open for selected industry associations, educational institutions, and PLM software and implementation services companies. *CIMdata PLM Leadership Alliance Members* are authorized to promote, organize, and host five-day public CIMdata PLM Certificate Programs. The [CIMdata PLM Certificate Program](#) is the flagship offering of *CIMdata PLM Leadership*, the PLM industry's most comprehensive non-biased education and training offering for today's PLM professionals.

According to Mr. Peter Bilello, CIMdata's Vice President, "CIMdata warmly welcomes ECS as the newest member of our growing global network of CIMdata PLM Leadership Alliance organizations. We are excited about the PLM education and training opportunities enabled through this membership which we offer to industrial companies throughout Central Europe. We look forward to a long and productive working relationship. Mr. Peter Teckentrup, COO of ECS, added to that "ECS GmbH is very glad to be a member of CIMdata's PLM Leadership Alliance. Based on our extensive PLM knowledge, international project experience, and recognition of CIMdata's leading market position, we at ECS are

# CIMdata PLM Industry Summary

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happy to support this critical market education program and thus increase our contribution to the quality of PLM projects. This will be an excellent training offering for PLM users and customers.”

## About CIMdata

CIMdata, a leading independent worldwide firm, provides strategic 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 25 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 CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA. Tel: +1 (734) 668-9922. Fax: +1 (734) 668-1957; or at Siriusdreef 17-27, 2132 WT Hoofddorp, The Netherlands. Tel: +31 (0)23 568-9385. Fax: +31 (0)23 568-9111.

## About ECS GmbH

ECS—Engineering Consulting and Solutions GmbH is a leading specialist in Product Lifecycle Management (PLM). With its international network of partners, ECS covers the complete product lifecycle from initial concept, development and construction, through manufacturing, sales and service, to recycling. The ECS portfolio includes business process design and improvement, product data modeling and system integration as well as an extensive and in-depth knowledge of the standard solutions from software providers like Oracle, IBM, PTC, SAP, or Siemens PLM. ECS also provides products of its own for the manufacturing industries in the form of the eCenter integration platform and the SAP-certified partner solution PLM Integrator. ECS customers come from mechanical, electrical, and plant engineering, automotive, information and communication sectors, as well as aviation and space technology. The ECS network employs 120 engineers worldwide. Visit their website at [www.ecs-gmbh.de](http://www.ecs-gmbh.de) or contact ECS at Holzgartenstrasse 8, D-92318 Neumarkt, Germany. Tel: +49 (0)9181 4764-16. Fax: +49 (0)9181 4764-50. Email: [info@ecs-gmbh.de](mailto:info@ecs-gmbh.de).

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## Company News

### *ArcherGrey Joins Aras Partner Program*

9 March 2010

[Aras®](#) announced that ArcherGrey, a global systems integration firm specializing in PLM, has joined the Aras Partner Program.

ArcherGrey offers complete PLM services, from initial strategy and planning, through vendor selection, system design, development and deployment, and ongoing maintenance and support. The company’s certified PLM consultants have an average of 12+ of industry experience and 5+ years of PLM application experience, bringing its clients the dual benefit of industry experience and technology

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expertise. ArcherGrey adds the Aras enterprise open source PLM suite to its PLM practice which includes Enovia MatrixOne and PTC Windchill.

“We are glad to offer our clients the option to take advantage of Aras’s advance PLM software suite,” said Jack Schroeder, Managing Partner, ArcherGrey. “ArcherGrey prides itself on working with top-quality people and products to deliver outstanding results. Aras’s enterprise PLM technology and ArcherGrey’s consulting expertise are a great combination that will serve global corporate clients well.”

“Aras welcomes ArcherGrey to the partner program and the corporate community,” said Peter Schroer, President of Aras. “ArcherGrey has a team of experienced professionals with an in-depth knowledge of PLM and a reputation for exceptional customer satisfaction on enterprise-wide deployments, all of which are in high demand within the Aras community.”

## **About ArcherGrey**

ArcherGrey offers complete PLM services, from initial strategy and planning, through vendor selection, system design, development and deployment, and ongoing maintenance and support. ArcherGrey also offers a full suite of training, IT infrastructure services and best practices assessment and implementation. For more information please visit <http://www.archergrey.com>

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## ***Dassault Systèmes to Open R&D Center in Korea in April***

12 March 2010

Dassault Systèmes (DS) announced the signing of an agreement with Daegu Metropolitan City and Daegu Gyeongbuk Free Economic Zone Authority (DGFEZ) for the establishment and operation of a new R&D center in Daegu City, Korea. Dedicated to developing and supporting 3D PLM solutions for the shipbuilding industry, the R&D center will open this April.

Opening the R&D Center is a strong move by Dassault Systèmes to get closer to its customers in the Shipbuilding Industry in Korea and in the Asia-Pacific region. Located in the International Cultural District of Daegu Gyeongbuk Free Economic Zone, the center will initially accommodate a skilled team of R&D engineers and industry specialists to develop and support innovative and collaborative PLM solutions for shipbuilding. Drawing on its widespread resources and technology, Dassault Systèmes intends to partner with world leading shipbuilders in the region to develop the PLM solutions they need, resulting in wider discipline coverage and a new level of ease of use. In addition, the PLM solutions will help companies improve their quality of understanding and communication among all parties involved as they collaborate through 3D Lifelike experience.

Dassault Systèmes’ R&D center in Daegu will also focus on developing local talents and expertise in research, deployment of PLM solutions and their associated best practices for the shipbuilding industry. As such, DS will explore the possibility of cooperating with research centers and universities in the region.

"Working in a close contact with industry leaders to build our PLM solutions is a must for Dassault Systemes. Our customers and their input are truly one of the key strengths of Dassault Systèmes Research & Development," said Philippe Laufer, Vice President, Research & Development, Dassault Systèmes.

Through its partnership with Dassault Systèmes, Daegu Metropolitan City is expected to further

# CIMdata PLM Industry Summary

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invigorate the regional economy, increasing employment and enhancing its position as an international city. The city will have better exposure to major international companies and more clout in attracting domestic IT solution companies. And, in line with Daegu's objectives, the use of PLM will help more companies realize Green IT.

"The R&D center illustrates [Dassault Systèmes](#)' strong commitment to the Korean market. Through this center in Daegu, we will be able to accelerate the development of world-class PLM solutions for the shipbuilding industry by using our cutting-edge 3D and PLM technology," said YoungBin Cho, Managing Director of Dassault Systèmes Korea.

"We are delighted that Dassault Systèmes, a globally recognized company, has chosen Daegu as its partner. Our goal is to build Daegu as one of the nation's R&D hub where companies can receive outstanding resources and opportunities. On the other hand, by leveraging Dassault Systèmes' reputation and network, we are aiming to encourage many of its 115,000 customers around the world to set up R&D centers in the city," said BumIl Kim, Mayor of Daegu Metropolitan City.

"The establishment of Dassault Systèmes in Daegu is the result of the efforts of DGFEZ and the Ministry of Knowledge Economy to grow the city by attracting international companies to set up R&D centers. The efforts meet the goal of Daegu Metropolitan City, which aims to develop a knowledge-based free economic zone. We will continue to partner with more reputable companies such as Dassault Systèmes to eventually become a global knowledge hub," said InCheol Park, Head of DGFEZ.

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## ***Lectra Appoints Andreas A. Kim Managing Director for Greater China***

9 March 2010

Lectra announced the appointment of Andreas A. Kim as Managing Director of Lectra Greater China.

Based in Shanghai, China, Andreas Kim reports directly to Daniel Harari, Lectra CEO. His mission is to drive business growth in Greater China.

Established in Greater China since 1986, Lectra's activity in the region has gone from strength to strength. The company now manages close relationships with nearly 2,000 customers, through a team of 90 people located in five main offices in Shanghai, Hong Kong, Beijing, Guangzhou, Taipei, along with staff in several additional services locations. Lectra ensures permanent high-quality services through its International Call Center, and has an International Advanced Technology Center (IATC) to present the entire range of Lectra technologies. Both are located in Shanghai.

"Nowadays, Chinese companies need to use more and more sophisticated technologies to improve the quality of their products and remain competitive. Lectra's range of solutions will open up new opportunities for Chinese companies. In these very challenging times, Lectra has a vital role to play in supporting the textile industry and maintaining a permanent communication link between its experts and customers in Greater China. Andreas Kim's extensive professional experience—in both marketing and services—and his knowledge of our customers and our technologies are key strengths that will help us achieve our ambitious goals in Greater China," said Daniel Harari, Lectra CEO.

"At [Lectra](#), we believe it is our role to help customers overcome the challenges their industries face. Manufacturers operate in an increasingly competitive environment and are under pressure to improve time to market and reduce costs, while expanding their product offer. In China, the fashion, automotive and furniture markets are undergoing rapid transformation in order to supply growing domestic and

# CIMdata PLM Industry Summary

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export demands. We will capitalize on Lectra's added-value solutions and services to create a clear competitive advantage for our customers and help them turn challenges into opportunities," added Andreas Kim.

Andreas Kim has over 20 years' experience in engineering, marketing, sales, services, business development and strategy, developing international businesses both in the U.S and across the globe. In his most recent position, Andreas was Senior Vice President for Marketing and Services of Lectra Asia-Pacific, based in Shanghai. Prior to joining Lectra, Andreas Kim worked in such large global companies as Texas Instruments, Sun Microsystems and Tektronix, as well as in market-leading startups, such as WebTrends. Andreas Kim has previously lived and worked in Asia, and, as a Korean-born U.S. citizen, grew up with both western and eastern cultures, allowing him to successfully navigate global business relationships.

Andreas Kim holds a BSc in Mathematics and Computer Science, an MSc in Computer Science and Engineering, and an MBA in Marketing and Finance from top American universities.

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## ***Premier Indian Maritime Institution Integrates AVEVA Marine into its Training Curriculum***

9 March 2010

AVEVA Group plc announced that AMET University will be featuring AVEVA Marine solutions as part of its curriculum. Located in Chennai, AMET University is the first private maritime academy in India.

Launched in 1993, AMET was formerly known as the Academy of Maritime Education and Training. Currently, 1500 students are enrolled in various diploma, degree and post graduate degree courses.

Commander Perumal, Head of Naval Architecture Department, AMET University, said: "The collaborations between AMET University and world leaders in the shipbuilding industry such as AVEVA will ensure that our graduates can look forward to jump-starting their career in shipbuilding, not only in India, but anywhere in the world as AVEVA Marine is widely used in global shipbuilding enterprises."

Peter Finch, President, AVEVA Asia Pacific, said: "India's prominence as a source of skilled labour in the marine industry is seen in the rise of outsourced marine engineering projects by the world's leading shipyards. The AVEVA Academic Initiative equips graduates with hands-on skills in using the leading shipbuilding range of solutions preferred by top global shipyards."

### **About the AVEVA Academic Initiative**

Skills shortages continue to be a challenge in most engineering companies and it will take some time for the recent increases in the number of engineering students at universities and technical colleges to overcome the generation gap that currently exists in the market.

In recognition of this, and in addition to its own in-house graduate recruitment schemes, AVEVA will continue to work with educational establishments and government bodies around the world to support initiatives aimed at narrowing the skills gap. In particular, AVEVA will continue to:

- Work with universities and technical institutes to promote the use of AVEVA products within undergraduate courses and postgraduate research projects;

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- Work with government agencies to re-skill engineers from other disciplines; and
- Work with engineering bodies to encourage school leavers to pursue careers in engineering.

AVEVA sees this as a vital investment that will bring long term benefits to the engineering world.

Some of the marine education institutions covered by the AVEVA Academic Initiative include:

**Bulgaria:** Trieste University

**Croatia:** FSB Zagreb, Rijeka University

**Greece:** NTUA

**India:** AMET

**Italy:** Trieste University, Naples University, Naval Academy of Livorno (Navy)

**Korea:** Changwon College, DongEui Institute of Technology, Gyeongnam Provincial Geochang College, Gyeongsang National University, Jeonnam Provincial College, Jinan Industrial High School, Inha Technical College, Inha University, Koje College, Korea Advanced Institute of Science and Technology (KAIST), Kwangwoon University, Mokpo Industrial High School, Mokpo Science College, Seoul National University, Ulsan Science College, Pusan National University, Yeungjin College, Yonam Institute of Digital Technology

**Portugal:** Instituto Superior Tecnico - Lisboa

**Russia:** State Marine Technical University of St. Petersburg

**Singapore:** Singapore Polytechnic, Ngee Ann Polytechnic School of Engineering, Institute of Technical Education

**Taiwan:** National Cheng Kung University, National Kaohsiung Marine University

**Turkey:** Karadeniz Teknik Universitesi (KTU), PADML, Istanbul Teknik Universitesi, Yildiz Teknik Universitesi

**United Kingdom:** University College London, Universities of Glasgow and Strathclyde, University of Newcastle

**Ukraine:** Sevastopol National Technical University

**United States:** Naval Postgraduate School Foundation -- Monterey, California

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## ***PROLIM Solutions of India Joins Aras Partner Program***

11 March 2010

[Aras®](#) announced that PROLIM Solutions, an experienced PLM systems integrator located in Bangalore, India, has joined the Aras Partner Program.

PROLIM, which stands for PROduct Lifecycle Management, offers PLM, MCAD and engineering services to a wide range of industries throughout India. PROLIM leverages industry best practices and extensive experience with PTC Windchill, Pro/ENGINEER and other leading PDM/CAD systems to provide its customers with outstanding results, quickly and cost-effectively.

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“We are very impressed with Aras’s enterprise open source software suite,” said Venkatesha Prasanna, Director of Operations at PROLIM Solutions. “Aras is an advanced, highly scalable and flexible PLM solution and we are confident that it will meet our customers’ needs today and long into the future.”

“Aras welcomes PROLIM to the partner program and the Aras community,” said Peter Schroer, President of Aras. “PROLIM has seen first-hand the limitations of legacy PLM systems and we are very pleased that they recognize the advantages the Aras model brings to their business and to their customers.”

## About PROLIM Solutions

PROLIM Solutions provides product data and life cycle management solutions to today’s modern industries. Privately held and based in Bangalore, India, PROLIM’s team of experienced professionals in CAD/CAM/CAE and PDM/PLM provide a full range of services, including product selection, training, implementation optimization and maintenance. For more information please visit <http://www.prolim.in>

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## *Spanish Engineering Students Get the Professional Tools They Deserve: SolidWorks*

8 March 2010

The [Escola Universitària Salesiana de Sarrià](#) (EUSS) of Barcelona has standardized on [SolidWorks](#)<sup>®</sup> CAD software. Rather than maintaining six different CAD products in classrooms to cover the needs of students in mechanical, electrical, and electronics engineering, the university now has 500 licenses of SolidWorks software. That’s one for every engineering student and faculty member to take home, and one for every computer lab desktop.

“We’re empowering every student and saving a lot of time and money,” says Dra. Marta Mata Burgarolas, head of the EUSS mechanical engineering department. “And we now have much more time to teach engineering principles rather than software use. We have one powerful, intuitive CAD product with all of the features that any success-minded engineering student needs, including drawings, mechanical CAD, data management, and simulation, both mechanical and fluid. This covers every student in every discipline, at home and in the classroom. By eliminating five separate software packages, we spend less money and time on installation work, updates, training, and retraining.”

Standardizing on SolidWorks gives every student a full personal license of SolidWorks with all the functionality millions of professional engineers possess. In fact, many of the businesses EUSS students work with in outreach projects or internships are SolidWorks users. These include robotics maker [Mecalux](#), the engineering consulting firm [MIRA Tecnologia](#), the fiberglass manufacturer [PROTESA](#), and Spain’s national auto manufacturer, [SEAT, S.A.](#)

“With everyone using SolidWorks full time and learning simulation as part of the design process, our students are better prepared than ever to successfully transition to the professional world,” says Mata. “And the chances are good they’ll continue using SolidWorks.”

EUSS relies on authorized SolidWorks reseller [Ibermática, s.a.](#) for ongoing software training, implementation, and support.

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# CIMdata PLM Industry Summary

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## *Spatial Launches Industry Partner Program for Complementary Component Providers*

9 March 2010

Spatial Corp. is launching the Industry Partner Program, a technology partnership program for developers of best-in-class software components. The program offers technical assistance to support a partner's integration of its [3D component](#) with Spatial's 3D modeling or related components and includes opportunities for partners to promote the solution to Spatial's world-wide user community. The program is open to independent software providers that offer complementary [3D components](#) with specialized capabilities such as machining, simulation, specialized rendering, and surfacing. Charter members of the Industry Partner Program include Optimal Solutions Software LLC, The IntelliCAD Technology Consortium, MachineWorks Limited, T-Splines, Inc., Lightwork Design Ltd, and ModuleWorks GmbH.

“The Industry Partner Program is a great way to match our customer community with providers of complementary software components. Our customers view Spatial as a trusted development partner, so we are often asked about third-party technology. The program establishes closer cooperation with technology partners so that we understand their technology and how it may be applied to meet our customer's needs,” commented Howie Markson, Spatial Director of Marketing. “Partners receive the benefit of our world-wide sales organization identifying opportunities for their technology and providing referrals back to them.”

The program seeks technology-leading partners that support Spatial's mission to help application developers maximize productivity, and bring engineering applications to market faster. By partnering with Spatial, program participants obtain support for their integration efforts resulting in a better integration and eliminating the burden placed on customers to develop and test the integration themselves. The end result is higher-quality applications, fewer customer support issues and faster time-to-market.

“We have a number of customers that use both Lightworks and Spatial components in their applications. We joined the Industry Partner Program because we wanted to work more closely with Spatial and demonstrate our commitment to ensure our technology works well together. With Spatial's support we can ensure a high-quality integration,” commented David Forrester, Lightworks CEO. “Our goal is to offer the best possible solution to meet our customer's application needs and partnering with Spatial enables us to do that.”

To find out more about Spatial's Industry Partners – <http://www.spatial.com/community/partners>

To apply to join Spatial's Industry Partner Program - <http://www.spatial.com/resources/industry-partner-program>

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## Events News

### *AspenTech to Sponsor and Speak at CERAWeek 2010 Executive Summit and Conference*

8 March 2010

[Aspen Technology, Inc.](#) announced it will sponsor and participate in [CERAWeek 2010](#) –a global energy industry conference – March 8-12 in Houston. AspenTech is sponsoring the CERAWeek *Global Oil*

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*Summit*, and AspenTech Executive Vice President Antonio Pietri is one of the industry experts speaking at CERAWeek.

For the third consecutive year, AspenTech will be one of three exclusive sponsors of the CERAWeek *Global Oil Summit*, along with IBM and PriceWaterhouseCoopers. The invitation-only senior executive event will be held on Monday, March 8.

On Tuesday, March 9, the kickoff “Oil Day” of CERAWeek, AspenTech’s Pietri will participate with executives from ConocoPhillips, Chevron and IHS CERA on a panel examining “Implications of Green House Gas Reporting for the Oil Industry.”

Nearly 2,200 energy and power executives, policymakers and financial and technology leaders from more than 55 countries will meet at CERAWeek to discuss topics such as energy demand, climate change policies, energy markets and strategies, as well as the impact of new technologies in the economic recovery.

Speakers during the CERAWeek Executive Summit and Conference include senior executives from the largest energy companies in the world, as well as industry and government leaders from the Brookings Institution; the International Energy Agency, the US Department of Economic, Energy, and Agricultural Affairs, and the MIT Sloan School of Management.

## **Supporting Quote:**

*Antonio Pietri, Executive Vice President, Field Operations, AspenTech*

“As energy companies continue to operate in uncertain times, those that have optimized their operations are best prepared to capture opportunity in the days ahead. AspenTech’s customers are industry leaders who employ these best practices and many of them come to CERAWeek to share their insights. We are proud to continue our support of the CERAWeek Executive Summit and Conference, and look forward to helping drive discussion about how the industry can create new opportunities to drive economic growth.”

## **Supporting Resources:**

Links to more information:

[CERAWeek 2010](#)

[aspenONE for Exploration & Production](#)

[aspenONE for Refining & Marketing](#)

[aspenONE for Power & Utilities](#)

[Follow AspenTech on Twitter](#)

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## ***Delcam Reseller to Launch Dental CAD/CAM in Australia***

12 March 2010

[Delcam](#)’s Australian reseller, Complex, will demonstrate the DentCAD dental design software and the DentMILL dental machining system in Australia for the first time at the ADX Dental Exhibition to be held in Sydney from 26th to 28th March. Delcam has enjoyed international success with its dental CAD/CAM software, which has been adopted by leading industry practitioners including BienAir,

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Simeda, Biomet 3i, Diadem and Glidewell Laboratories. Camplex is confident that it will be equally popular in the Australian dental market.

New releases of both programs will be shown at ADX. The 2010 version of DentCAD includes a completely new interface, an integrated data management module, an expanded library of standard tooth designs and improved STL file output for rapid prototyping equipment, as well as a number of enhancements to the design options, while the new DentMILL has additional five-axis machining options.

The improved DentCAD interface features a reduced number of toolbars to allow the maximum screen space for design, while the icons have been made bolder and clearer. Even dental technicians with limited experience of computer-aided design will find the software easy to learn and to use.

The new data management module makes it easier to record the details of the patient and dentist, and the restoration and material type etc. It enables a smooth process flow between the scanner used to collect the initial data, DentCAD and DentMILL.

Among the design enhancements is the automatic creation of a prep-line as soon as the restoration design is started in DentCAD. The prep-line is the most critical area of the design as it marks the border between the tooth and the gum, and so determines the accuracy of the fit of the restoration. The automatically-generated line can be edited by the user if required.

To reduce the chances of failure of the restoration in manufacture or, even worse, after fitting, DentCAD now lists any areas where the thickness of teeth fall below a chosen set of minimum parameters. The text description of any problem areas is reinforced by a colour map which highlights all the surfaces that fall below the specified requirements.

The extra five-axis machining options in DentMILL will make it easier to program the manufacture of dental bars, implant bridges and customised abutments. In addition, the previous options for the production of copings, bridges and abutments in ceramics and titanium have been enhanced. In particular, the ability to use multithreading technology has reduced calculation times for users with multi-processor computers.

As well as broadening the range of dental restorations that can be produced, the use of five-axis machining helps to reduce material wastage, minimise hand-finishing operations by removing undercut regions, and give more flexibility when machining difficult parts and materials such as hard-state Zirconia.



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## ***Delcam to Demonstrate Unique Medical Machining Solutions at OrthoTec 2010***

11 March 2010

Delcam's Healthcare Division will demonstrate its technology for medical device manufacture at OrthoTec 2010 in Warsaw, Indiana, on 12th and 13th May. The products to be spotlighted on booth 303 are the most recent releases of Delcam's PowerMILL and PartMaker CAM systems.

PowerMILL is Delcam's solution for the machining of complex shapes, while PartMaker is Delcam's solution for automating the programming of the complex multi-axis, turn-mill centres and Swiss-type lathes often found in the medical device sector. Also on display will be PowerINSPECT, Delcam's software for automating the inspection process across a variety of metrology hardware platforms.

# CIMdata PLM Industry Summary

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Delcam established a dedicated Healthcare Division in 2009, to provide a greater focus on this increasingly important part of its business. The new Division helps companies across the medical, dental and associated industries to apply Delcam's expertise and experience in taking advantage of the latest design and manufacturing techniques.

"Companies in the healthcare industry face the same demands from their patients that our traditional engineering clients see from their customers for faster delivery of better and cheaper products," explained Delcam's Managing Director, Clive Martell. "Patients want to receive higher quality products and services, and they want to complete their treatment in the shortest-possible time. At the same time, healthcare companies are under pressure to provide this higher quality at lower cost and to increase their productivity to meet the growing demand. These requirements can only be met through the application of more advanced and more automated technology."

Multi-tasking machines are being used increasingly in the medical and dental industries, to the extent that over 70% of Delcam's PartMaker software, the company's dedicated system for this class of equipment, is sold into the sector. Applications include the manufacture of all types of medical and dental screw, prosthetics, and components for medical equipment.

The area in and around Warsaw, where the OrthoTec show is to be held, represents a large segment of Delcam's medical device business, with a number of PartMaker users based in the region. Of particular focus at Orthotec will be the integration between PartMaker and PowerMILL introduced in PartMaker Version 2010. The integrated PartMaker-PowerMILL solution provides the most powerful system on the market for automating the programming of complex multi-axis turn-mill equipment and Swiss-type lathes. Each system, on its own, provides support for the applications which they target. The combination provides medical device manufacturers with an unlimited range of machining capability.

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## ***Delcam to Show Faster Design and Machining at Die & Mould China***

9 March 2010

Delcam will show how the 2010 versions of its PowerSHAPE CAD software and its PowerMILL CAM system can speed the design and manufacture of all types of tooling at the Die & Mould China exhibition to be held in Shanghai from 11th to 15th May. The programs allow toolmakers to increase their productivity at all stages of any toolmaking project and to ensure the highest quality in the finished tool and in all components produced from it.

The faster mould design has been made possible by the incorporation within PowerSHAPE of a new kernel for solid modelling and assembly modelling. This complements the surface modelling capabilities developed by Delcam over more than 30 years. The combination of the two technologies provides a range of benefits for toolmakers, especially those that use imported product design data from other CAD systems as the basis for their tooling designs.

Users will be able to tackle all the common problems that can be found when translating low precision and incomplete data, and generate a valid, high-precision CAD model. This process uses the automatic data repair tools that are provided within the software, together with powerful surface creation and editing options. 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.

# CIMdata PLM Industry Summary

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The addition of the new kernel will also enhance Delcam's unique Power Features technology. Components that contain Power Features react automatically as they are placed within the tool assembly, adding all the necessary fit-features to the connecting components. As each part is added, the tolerances between the various components are also defined automatically. This automatic creation of relationships makes the development of the overall design much quicker and also makes errors in the design process far less likely.

The new release of PowerSHAPE also speeds up and simplifies the development of more complex tooling assemblies. It is much easier to create solid models of any non-standard components and to define their relationships with the other components.

Furthermore, all identical parts within an assembly are recognised automatically as instances of the same component so preventing unnecessary duplication of data. This reduces overall model sizes and makes regeneration of the complete tool much faster after any design changes.

The 2010 PowerMILL release is the first to incorporate 64-bit technology. This removes the memory limitations of 32-bit computers so allowing more efficient toolpath generation, especially for companies machining large or complex parts.

The 2010 release also improves user productivity by extending the application of the latest background-processing and multi-threading technologies available in recent hardware. The combination of these two developments is estimated to reduce calculation times by up to 25%, although this will depend on the size and complexity of the part.

PowerMILL 2010 includes more than 50 other major enhancements. This is the largest number in a single release for over five years and reflects the continued high levels of investment in product development at [Delcam](#). These improvements allow faster and easier generation of highly-efficient toolpaths for three- through five-axis milling.

The most obvious change for existing users will be an updating of all the toolpath-creation forms to a new and improved layout. The forms make it simpler for new users to find the commands they need, while also giving experienced operators more logical access to the more advanced options.

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## ***Delcam's Design Software on Show at APMM***

10 March 2010

DM Solutions, Delcam's reseller based in Derry, New Hampshire, will demonstrate how Delcam's software for artistic applications can help professional modelmakers at the APMM conference taking place in Boston from 26th to 29th March. Among the software range that DM will present will be the ArtCAM family of products, plus the PowerSHAPE CAD program for more complex design projects.

The main change in the ArtCAM 2010 version that visitors will see at the expo is the completely new interface. This can be customized by each user to give them the optimum productivity. Every user can set up the software to give quicker access to the commands that they use most frequently, so releasing much more of the screen for visualization of the model as the design progresses.

Another change that will increase productivity is the ability to use many more commands on the 3D model directly. Previously, much of ArtCAM's modelling had to be carried out on a 2D view, and then calculated and visualized in 3D. Direct editing in the 3D window will give more immediate feedback,

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and allow much faster creation and modification of designs.

Further improvements have been made to the sculpting tools. These tools are highly valued by ArtCAM's creative users as they can be used to produce virtually any shape. They duplicate in the virtual world the ability to sculpt physical materials but with the added advantage that material can be added as well as taken away.

On the machining side, a great deal of underlying technology has been incorporated into ArtCAM from [Delcam](#)'s engineering CAM system, PowerMILL, such as the latest in multi-threading technology which gives faster calculation times. The machining improvements in ArtCAM 2010 will also give users greater flexibility to edit toolpaths, in particular to optimize the leads and links.

The main change in the new release of PowerSHAPE is a new solid modelling kernel. The addition of this additional kernel, together with Delcam's existing tools, allows PowerSHAPE to read in and repair models from all sources, including IGES and native CATIA files, and output solid models that can be read directly into all major CAD software.

The new Solid Doctor feature uses automatic data repair tools, together with the surface creation and editing options that are available from 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.

Designs from ArtCAM and PowerSHAPE can be combined by wrapping decoration developed in ArtCAM onto product models developed in PowerSHAPE. This combination of functionality is ideal for adding logos or other branding onto packaging, for creating highly decorated items such as toys and for converting standard products into more distinctive designs with higher apparent value.

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## ***ESPRIT 2010, by DP Technology, at MecSpe Eurostampi 2010 Parma, Italy, March 25-27***

11 March 2010

[DP Technology](#), creator of ESPRIT®, will exhibit ESPRIT 2010, the latest version of its innovative software, at MecSpe Eurostampi 2010, scheduled for March 25-27 at the Parma Fairgrounds in Parma, Italy.

Meccanica Specializzata, or Specialized Mechanics Eurostampi 2010, is an international exhibition of time-saving technologies created to ensure quality while making your machining operations faster and more efficient. The exhibition will showcase machine tools and accessories, computer systems and software, work-holding devices, optical inspection equipment, environmental testing equipment, tool-holding systems and much more.

Eurostampi participants are encouraged to visit the ESPRIT display, at which knowledgeable representatives of DP Technology will be available to discuss vital upgrades and perform demonstrations of how those upgrades can be put to work for you.

ESPRIT 2010 includes 13 new FreeForm 3- and 5-axis machining cycles that are available for milling, mill-turn and Swiss-turn machine tools. These high-speed, multi-axis machining cycles offer a wide variety of new choices and capabilities for ESPRIT customers who are performing 3D machining. Additions for 3-axis include a new roughing cycle that can also be used for rest-machining, seven new finishing cycles and three specialized cycles — 3D contouring, pencil tracing and corner machining.

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Two new specialized 5-axis machining cycles are also included within this release, swarf machining and impeller machining.

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## ***Ford's Vice President of Engineering for Global Product Development to Keynote Altair Engineering's Americas HyperWorks Technology Conference***

8 March 2010

More than 600 professionals are expected to gather at Altair Engineering's 2010 Americas HyperWorks Technology Conference (HTC2010). Ford Motor Company's Vice President of Engineering for Global Product Development, Paul Mascarenas, will open the April 27-29 conference at the Rock Financial Showplace in Novi, Mich. with a keynote address titled, "ONE Ford - Accelerating Global Product Development."

"Leveraging the benefits of innovative digital technologies, such as advanced CAE simulation tools and virtual vehicle assembly, is a key enabler to Ford's Global Engineering strategy," Mascarenas said. "I look forward to sharing my experiences at the HyperWorks Technology Conference."

HTC2010 will feature several renowned keynote speakers – from Ford, Porsche, Boeing, BAE Systems, the National Center for Manufacturing Sciences (NCMS) and NASA Engineering and Safety Center (NESC) – as well as 40 presentations where technology thought leaders will discuss industry trends in enterprise simulation and how manufacturers are enabling innovation through simulation.

Presenters and attendees come from a wide range of advanced manufacturing industry verticals, including aerospace, automotive, consumer products, electronics, healthcare, heavy equipment, military, rail transit, ship building and white goods.

"It is important for the advanced manufacturing community to share industry needs, challenges and successes to continue to grow and innovate," said Mike Humphrey, Americas executive vice president, Altair Engineering. "The economy has reshaped manufacturing; as a result, technology is playing an even bigger role in PLM. Conferences like HTC2010 provide a forum for knowledge sharing across industries to enhance innovation and long-term viability."

HTC is Altair's premier annual event and is free for all attendees. The three-day HTC2010 conference will offer sessions on advancements in the areas of simulation-driven design practices, design optimization, data management, process automation, cloud computing and decision support systems. Attendees also have access to an extensive hardware and software exhibition.

For more information and to register, visit <http://www.altairhtc.com/na/> Connect with HyperWorks on Twitter ([www.twitter.com/HyperWorks\\_Corp](http://www.twitter.com/HyperWorks_Corp)), Facebook ([www.facebook.com/HyperWorks](http://www.facebook.com/HyperWorks)) and LinkedIn ([www.linkedin.com/groups?gid=2052943](http://www.linkedin.com/groups?gid=2052943)) for HTC2010 updates and information.

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## ***GibbsCAM Plunge Roughing Unveiled at WESTEC 2010***

8 March 2010

Gibbs and Associates, developer of GibbsCAM® software for programming CNC machine tools and a Cimatron company, announced that it will reveal and demonstrate the release version of its highly

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enhanced Plunge Rough feature in exhibit #2236, at the WESTEC 2010 Exposition, to be held in the South Hall of the Los Angeles Convention Center, in Los Angeles, California, from March 23-25.

The new Plunge Rough feature, now one of many user-controlled custom processes within GibbsCAM 2010, accommodates the latest, inserted, plunge milling tools specially developed for this type of material removal, and allows users to specify machining patterns and multiple variables to control tools and motion for fast plunge roughing with optimal surface finish and tool longevity.

“Our Advanced 3D users will be quite surprised with the new feature,” said Bill Gibbs, founder and president of Gibbs and Associates. “The new Plunge Rough is fully integrated and has increased intelligence about stock condition, tracking where material has been removed, so it can detect safe pull-off direction and distance when it retracts the tool.”

GibbsCAM Advanced 3D users will see Plunge Rough as a custom process tile appearing in their Machining palette, with several new options and parameters, including the ability to:

- Specify plunge milling patterns as linear (with cutting direction at any angle), circular, contour, or as patterns between two specified guide curves
- Select part type as core or cavity
- Define pull-off motion and distance to eliminate surface marking and minimize tool wear
- Specify containment surfaces, containment geometry, and stock bodies to control areas to be machined
- Plunge rough contour patterns with containment, after faces to be machined, containment faces, and the start point of the contour are specified

“Early users of GibbsCAM Plunge Rough are reporting upward of eighty percent time savings over traditional rough milling processes on a regular basis,” added Mr. Gibbs. “That is truly exciting news, especially since these customers are also saying that the percentage of time saved varies directly with the amount of material removed.”

In addition to Plunge Rough, all the new features of GibbsCAM 2010 will be available for demonstration at WESTEC, including VoluMill™, another fast material removal feature recently added to GibbsCAM.

For more information about GibbsCAM and other Gibbs programming solutions, or to locate your local GibbsCAM Reseller, go to <http://www.GibbsCAM.com>, call 1-800-654-9399, or email [info@GibbsCAM.com](mailto:info@GibbsCAM.com).

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## ***Mastercam Demonstrates How to Save Time, Money, and Tooling with Dynamic Machining at EASTEC 2010***

March 2010

CNC Software, Inc., will spotlight the latest in their line of Mastercam machining software, with the most notable being Dynamic Machining. All products will be showcased in booth # 5245 at the Eastern States Exposition in West Springfield, MA, May 25-27.

Dynamic Machining creates a constantly adapting toolpath that delivers more consistent cutting conditions and allows use of the entire tool flute length, often eliminating the need for multiple depth

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cuts. This allows dramatic savings, with some Mastercam users reporting more than 50% reduction in cutting time, and longer tool life.

Dynamic Machining also offers flexible retract options to keep the tool down in smaller parts, as well as rapid retract on larger parts. In addition, the special “micro lift” option will retract the tool slightly off the bottom when moving to the next cut. This decreases the amount of heat generated in the part and also helps with chip evacuation.

Highly efficient entry methods along with customizable entry speeds and feeds, give you flexibility regardless of the material or cutter style being used. Dynamic Machining’s specialized motion works equally well with both “closed” and “open” parts.

Other features of Mastercam X4 include:

- Toolpath Refinement
- Mastercam® for SolidWorks®
- Multithreading
- And much more.

For more information about Mastercam X4, please visit <http://www.mastercam.com>.

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## ***MESA International 2010 North American Conference: Unlocking Your Operations Potential***

March 2010

### **Program & Agenda**

[MESA’s 2010 North American Conference](#) will open Monday, June 21, 2010 in Dearborn, Michigan with an evening reception and Keynote Speaker. (Pre-conference training sessions are planned for Monday afternoon, and more information on the topics and times will be posted shortly.) Tuesday, June 22, will be a full-day of general sessions, networking opportunities and Strategic Initiative Workouts/Wednesday, June 23, will feature a similar structure to Tuesday but a shorter schedule of events.

The Workouts will be lead by MESA Working Group leaders and will follow end-user presentations on the subject. Specific speakers and subjects will be updated as slots are filled but will center around the following topics:

- Tying Operational Performance Metrics to Financial Metrics
- Real-Time Enterprise
- Quality & Compliance
- Asset Performance Management (APM)
- Product Lifecycle Management (PLM)
- Lean
- Sustainability

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- Reducing Operational Costs

Tuesday evening's dinner will be held at the Henry Ford Museum (<http://www.hfmgv.org/>) which is directly across the street from the Ford Conference and Event Center (<http://www.cec.ford.com/>) the primary location of the 2010 MESA International North American Conference.

[Register online for this event.](#)

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## ***Sescoi Welcomes Prestigious Visitors to its Booth at India Aviation 2010***

10 March 2010

**Sescoi** demonstrated its broad range of manufacturing software at the recent **India Aviation 2010 show** in Hyderabad. India Aviation provided an opportunity for major representatives from civil aviation to visit more than 200 exhibitors, participate in conferences and see displays of helicopters, business and cargo aircraft.

Sescoi hosted visits from the French Ambassador to India, Mr Jerome Bonnafond, the Consul General de France, Mr Dominique Causse, while the Indian Minister for Civil Aviation, Mr Praful Patel, visited the French Pavilion, where the SESCOI booth was located. Numerous visitors met with SESCOI engineers who were pleased to demonstrate the range of aerospace functionality available in the latest version of SESCOI's automatic CAD/CAM system, WorkNC.

**WorkNC** is widely used in the aerospace sector, in companies such as Eurocopter, Snecma Moteurs and Aerospatiale, where its automated 2, 3-axis and 5-axis toolpaths enable safety critical parts to be manufactured to extremely high standards. Parts typically have thin walled pockets with undercuts, making 5-axis machining an essential part of the manufacturing process. **WorkNC's Auto 5** software enables engineers to apply 3-axis toolpaths to the component. The Auto 5 module will then transform these moves into full 5-axis, enabling previously inaccessible areas to be cut successfully while facilitating the use of shorter and more rigid cutters, which will have a positive impact on surface quality and tool life. WorkNC's collision avoidance and knowledge of the limitations of the machine tool warn when longer tools need to be used, and implement flip and unwind movements when the rotary axes of the machines have reached their limits, enabling machining to continue uninterrupted.

Sescoi used this show to build on its success in India, where it works in partnership with the Indian Machine Tool Manufacturers Association (**IMTMA**), currently participating in an ongoing series of seminars across the country. The company already has some very prestigious customers in India including Bharat Forge and Sermo ARRK India, part of the €1.8 billion ARRK Group, and is using its expertise to raise the aspirations and skill levels of Indian engineers both in CAD/CAM and in ERP and job management with its **WorkPLAN Enterprise** ERP system and its **MyWorkPLAN** job management software for custom manufacturers.

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## ***SolidProfessor Releases Routing and Simulation for SolidWorks 2010***

5 March 2010

SolidProfessor, a SolidWorks Solution Partner, unveils its newest additions to its 2010 series of on-demand SolidWorks content with Routing 2010 and Simulation 2010.

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**SolidProfessor's Routing course** teaches you how to create electrical, piping, and tube routed systems in your assemblies. Complex systems can be created quickly, and the course teaches you how to automate the process so your routed systems are incorporated into your assemblies from the early stages of your design. The course shows you how to create your own custom routing components to add to the library, as well as how to fully document your routes in 2D drawings with all the critical information, including Bills of Materials, Harness Reports, Wiring Summaries, and more!

**SolidProfessor's Simulation course** teaches you the fundamentals of using SolidWorks Simulation design validation software to analyze your parts and assemblies before manufacturing. You'll be able to test your SolidWorks models and predict how they will behave under various loads and conditions, which gives you confidence in your designs, and even optimize your designs before sending them out for prototype. The Simulation course covers everything from static analysis of parts and assemblies, to beam analysis, temperature loading, and shrink fit. Using easy to follow, step-by-step lessons, you'll learn how to use and apply all the tools you need to begin analyzing your own designs right away.

SolidProfessor Product Manager Jason Wright comments; "The tools in SolidWorks Premium can save you time and money by incorporating all of your design considerations into the 3D model, as well as reducing prototypes, so in order to take advantage of the benefits of the software, the courses we've created here at SolidProfessor help you get up and running quickly, and have a resource to look back to if you need help with any steps in along the way."

Both Routing and Simulation can be purchased as a standalone courses or as part of a subscription to SolidProfessor Premium. For more details on the options available to subscription customers visit <http://www.solidprofessor.com> and select "Products".

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## ***The MathWorks Hosts Energy Virtual Conference***

10 March 2010

**Who:** [The MathWorks](#) developer of software for technical computing and [Model-Based Design](#).

**What:** The MathWorks Energy Virtual Conference will showcase MATLAB and Simulink solutions for energy related applications including power generation, power conversion, hybrid-electric vehicles, oil & gas, and energy trading. Customers will present real-world examples of how professionals use MathWorks solutions to evaluate energy resources, develop systems for power generation and distribution, model energy markets, and create products that consume less energy and produce less waste.

Application areas include:

- Electric Utilities
- Energy Trading
- Hybrid electric vehicles
- Oil and gas
- Solar power
- Wind power

The virtual conference consists of live presentations (with question-and-answer sessions), on-demand presentations, an exhibit floor, and a networking lounge.

**Where/When:** [The MathWorks Energy Virtual Conference](#)

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Thursday, March 25, 2010, 5:00 a.m.–2:00 p.m. (EDT)/9:00–18:00 (GMT)

Featured customer presentations include:

- **5:00 am EDT/9:00 GMT:** “Flexible wind data processing with MATLAB” by [Andrea Vignaroli](#), Research Scientist, **VTT Wind Energy**
- **6:00 am EDT/10:00 GMT:** “MATLAB in the Lab: The Role of MATLAB in the National Nuclear Laboratory” by Brendan Perry, Thermo-fluid Modeling Team and Fiona Rayment, Head of Modeling and Environmental Technology, **National Nuclear Laboratory**
- **7:00 am EDT/11:00 GMT:** “Modeling Thermodynamics in Energy Systems” by Houda Karaki, Development Engineer, M. Sc., **EUtech Scientific Engineering GmbH**
- **9:00 am EDT/13:00 GMT:** “Wind Power Plant Modeling for Real-Time Simulation” by Richard Gagnon, Engineer, **Hydro-Québec**
- **10:00 am EDT/14:00 GMT:** “HEV Control Strategies to Maximize Vehicle Efficiency Via Model-Based Design” by Larry Michaels, Principal Vehicle Systems Engineer, **Argonne National Laboratory**
- **11:00 am EDT/15:00 GMT:** “Modeling the operation of LNG terminals” by Tristram Scott, Energy Consultant, **Quantitative Energy Models**
- **12:00 noon EDT/16:00 GMT:** “Modeling Wind Energy” by Hans Tuentner, Senior Model Developer, **Ontario Power Generation**
- **1:00 pm EDT/17:00 GMT:** “Delivering Innovation Across The Electrical Grid” by Charlie Vartanian, Director, Grid Integration, **A123**

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## ***3D PLM Seminar to Focus on Improving Aerospace Supply Chain Quality and Productivity***

10 March 2010

Lattice Technology®, Inc., Elysium Inc. and Kubotek USA announced a joint seminar targeted at improving aerospace supply chain quality and productivity.

The free seminar will be held at the Edgewater Hotel in Seattle, Washington on March 25, 2010, and will discuss how to manage 3D data effectively through the design-to-manufacture process, delivering compelling payoffs to manufacturers in the aerospace supply chain.

The event will feature keynote speaker Rick Zuray, Technical Principal at Virtual Engineering Advanced Technologies, The Boeing Company. Zuray will discuss the history of using 3D at Boeing, how the company leverages usable 3D data throughout its projects, and how they are leveraging 3D for design reuse and archiving. In addition, the three host companies will present examples of how 3D data can be effectively integrated throughout the supply chain to significantly raise quality and productivity of manufactured products.

"Manufacturers of every size need to continually improve operations by finding and removing every bottleneck that delays manufacturing," commented Ken Tashiro, CEO, Elysium Inc. "These three companies deliver industry-leading technologies and have established common, integrated workflows that deliver on that requirement by making 3D data useful and productive throughout the entire process."

Lattice Technology, Inc., Elysium Inc., and Kubotek USA each deliver key parts of a workflow which makes 3D data usable across the enterprise, including the exchange of data, verification of received data, and the ability to update data and then seamlessly manage engineering changes. Integration into design-to-manufacture channels keeps 3D data intact for downstream use, including process design, simulation

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and documentation.

"The integration of 3D data into every aspect of the supply chain means that delays are not just eradicated, but significant productivity improvements are also experienced," said Bill Barnes, General Manager, Lattice Technology, Inc. "Customers using 3D data after it has been released from design can reduce product lead times by 50%, improve design review times by 66% or more, and revolutionize assembly processes for greater accuracy and faster production."

"3D data is not exclusive to the design department-it is an asset that is critical to the entire manufacturing operation throughout the supply chain." said Bob Bean, Executive Vice President, Kubotek USA. "But the data needs to remain usable and flexible, and that's where the technology offered by Kubotek USA, Elysium Inc., and Lattice Technology, Inc., fits nicely. The three companies make the data not only productive, but tuned to the needs of each stakeholder throughout the supply chain."

Attendees to this seminar will gain valuable insight to the issues they face every day:

- . Understanding where inefficiencies are occurring in your manufacturing operation and how to address them using 3D data
- . Relieving bottlenecks in 3D data sharing, editing and reuse regardless of its source
- . Improving 3D product design quality and product time-to-market
- . Managing engineering changes faster and more efficiently
- . Streamlining the flow of relevant, timely information to other departments and suppliers
- . Eliminating errors, delays and scrap on the shop floor
- . Building seamlessly and affordably on existing 3D CAD seats, ERP and PLM installations

The seminar will run in two separate sessions, one in the morning and another in the afternoon and is free to qualified attendees. To find out more, and register for the event, please visit

[http://www.lattice3d.com/news\\_seminar.html](http://www.lattice3d.com/news_seminar.html)

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## ***VISTAGY President and CEO Steve Luby to Speak at CompositesWorld Investment Forum 2010***

9 March 2010

[VISTAGY, Inc.](#) announced that founder, president and CEO Steve Luby will speak at the CompositesWorld Investment Forum 2010 on Monday, March 15 at 3:15 p.m. at the Hilton La Jolla Torrey Pines Hotel in La Jolla, CA. Mr. Luby's presentation is entitled, "One Size Does Not Fit All: Taking an Industry-Specific Approach to Composites."

In addition to discussing the importance of addressing the unique business and technical challenges that composites present on an industry-by-industry basis, Mr. Luby's presentation will also touch on a number of other timely topics, including: The importance of meeting design timelines and understanding the financial implications of manufacturing for new markets, capitalizing on the growing and changing demands of the supply chain and taking advantage of opportunities to address the increasing fragmentation in the composites industry.

"When composites first emerged more than 20 years ago in the aerospace industry, the main question

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was, ‘Can we make it and, if so, will it break?’” said Mr. Luby. “But as more industries have adopted composites and the range of materials and processes have expanded greatly, the design and manufacturing challenges have become far more complicated and industry-specific. Now the question is, ‘How can we optimize part performance, reduce product development cycles and stay within budget?’ It’s a more sophisticated challenge.

“VISTAGY supports the entire process for highly complex engineering projects by providing open and flexible, industry-specific software that helps customers leverage their existing engineering and product development tools, while our professional services enable them to implement effective development processes. These kinds of products and services are resonating strongly in all our target markets around the world.”

VISTAGY’s [FiberSIM®](#) is a comprehensive software suite that addresses the entire composites engineering process, from conception, laminate definition and ply creation through simulation, performance optimization, documentation and manufacturing.

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## ***Zuken Announces PCB Design Software E-Training in America***

11 March 2010

Based on customer feedback, Zuken in America has launched an e-training package for its PCB design solution, [Design Gateway](#). This more cost-effective and flexible training approach overcomes scheduling and travel issues associated with group classroom based training traditionally on offer.

Sandy Jones, Zuken USA Manager of Educational Services, responsible for the introduction of this e-learning package, comments on the growing demand of e-learning among the American user base, "The concept of e-learning has been growing in popularity over recent years as companies and individuals recognize the benefits of the just-in-time learning concept. For Design Gateway we recognize that there are large groups of electronics engineers that need training in this software. By introducing this concept we are able to serve the needs of these broader audiences in a relatively short time frame, while delivering a flexible package that easily fits around projects."

The course, which is split into nine chapters, runs for three hours online, with additional off-line tasks - the estimated completion time is six hours. Throughout this interactive course, narrated PowerPoints and AVIs along with quizzes, ensure e-learners stay engaged and information is absorbed and retained. At the end a course completion certificate is supplied. Zuken also provides specialist support to address questions as required.

A preview movie of the Design Gateway e-Training Course is available by clicking the following link: <http://www.zuken.com/movies/DG-eTraining/player.html>

This preview gives an overview of how the course is served from the Zuken Educational Services Website, the structure of the Design Gateway Learning path, and a demonstration of an AVI segment from within the Zuken E-Training Course Player.

The course is currently available in America from \$500, visit [www.zuken.com/dg-etaining](http://www.zuken.com/dg-etaining) or contact the local Zuken account manager.

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## Implementation Investments

### *Aircraft MRO Provider Sabreliner Corp. Selects IFS Applications to Support Government Prime Contractor Growth*

8 March 2010

[IFS](#) announced that Sabreliner Corp., of St. Louis, Missouri, selected IFS Applications to support its aviation services organization, which is recognized worldwide for aircraft manufacturing support and for the maintenance, repair and overhaul (MRO) of existing aircraft.

As a diversified aviation services company, Sabreliner supplies other aviation organizations and the U.S. military with aircraft MRO services. Sabreliner also manufactures airframe assemblies, parts, components and tooling for use in new fixed-wing and rotary-wing aircraft production. Some of Sabreliner's customers include Airbus, BAE Systems, Boeing, Bombardier Aerospace, L-3 Communications, Lockheed Martin, Northrop Grumman and Sikorsky Aircraft.

Sabreliner plans to implement IFS Applications components for Financials, Distribution, Manufacturing, Engineering, Maintenance, Sales and Support, and Human Resources.

IFS Applications was selected to consolidate several ancillary, stand-alone systems at Sabreliner into one enterprise solution. It was also chosen to provide management with timely information to ensure informed decisions are made regarding staffing, working capital management, and future planning.

"We were looking for an ERP solution which would position us for future growth and provide Sabreliner with the infrastructure needed to better support our work on behalf of both prime contractors and directly for the military services," Sabreliner CIO Steve DeBarry said. "We needed a system that provides management with information quickly, easily, and in a timely fashion. IFS Applications offers Sabreliner the additional tools to meet our current and growing program management needs."

"IFS Applications is one of the most advanced and comprehensive solutions for MRO operations available on the market today," IFS North America President and CEO Cindy Jaudon said. "It covers everything from quotation handling, maintenance planning, and tracking of open service bulletins (SBs) and airworthiness directives (ADs) to maintenance execution, warranty management, supply chain logistics, cost tracking, and invoicing."

Aerospace and defense is one of IFS' targeted market segments. IFS customers in the aerospace and defense industry include the United States, British and Norwegian defense organizations as well as the Eurofighter consortium. Commercial MRO shops, manufacturers and operators include Bristow Helicopters, Aero-Dienst GmbH, K&L Microwave, Hawker Pacific, Ensign Bickford, Todd Pacific Shipyards and Jet Turbine Services. In addition, IFS provides solutions to original equipment manufacturers (OEMs) such as General Dynamics, Lockheed Martin, BAE SYSTEMS, Saab Aerosystems, and GE Aircraft Engines.

#### **About Sabreliner Corp.**

Sabreliner Corp. is a proven provider of a wide variety of civilian and government aviation services, as well as an acknowledged leader in aviation production support. The company has nearly 500 employees and more than 425,000 square feet of aviation maintenance, manufacturing, processing and repair facilities at three service locations in Missouri and one in Kansas. Its headquarters are in St. Louis. More information is available at [www.sabreliner.com](http://www.sabreliner.com).

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## ***Autodesk Names Dynamic Structures as Inventor of the Year for 2009***

11 March 2010

[Autodesk, Inc.](#) has named Dynamic Structures as the Autodesk Inventor of the Year for 2009.

Members of the Autodesk manufacturing community chose the Canada-based provider of dynamic, complex structures as the 2009 Inventor of the Year by voting on the [Autodesk Manufacturing Community website](#). Dynamic Structures—which designs all types of complex structures from ski jumps and bridges to astronomical observatories—was originally named [Inventor of the Month](#) in March 2009 for its work designing the enclosure that will house the world’s largest telescope, the Thirty Meter Telescope. The company is also using [Autodesk Inventor](#) software to raise the bar on what consumers expect from theme parks by creating bigger and more thrilling rides.

“Our company motto is ‘Anything you can dream, we can build,’” said Craig Breckenridge, senior designer at Dynamic Structures. “Inventor software has played a big role in helping us make good on that promise, and we’re honored to have the innovative work that we do recognized with the Inventor of the Year award.”

### **Digital Prototyping Creates Next-Generation Thrills**

The company has successfully been using Inventor software to expand the offerings of its entertainment division, which designs attractions for the multibillion-dollar international amusement ride industry.

Notably, Dynamic Structures specializes in adding robotics to entertainment rides. This takes the form of roller coasters that operate on articulated arms, so that riders experience more unexpected motion and positions than on a regular rollercoaster track; motion theaters whose seats have programmable pitch and heave, so that audiences feel the sensations that they are viewing on the movie screen; and automatically guided vehicles that can navigate indoor and outdoor attractions in a pre-programmed fashion, without requiring a track.

Since these large amusement rides are difficult to physically assemble and test during the prototype phase of product development, Dynamic Structures relies on [digital prototypes](#) created in Inventor software as well as collaboration with Autodesk reseller and training partner IMAGINiT Technologies. Digital Prototyping enables the company to put all the mechanical and structural components in motion to simulate performance.

For example, this dynamic analysis helps the company identify corners that are too sharp or drops that are too steep long before the ride is built. The company can even check to see that it is not exceeding the acceptable G-force that a passenger is subjected to on a ride, helping to allow thrills and safety to go hand in hand.

Additionally, Dynamic Structures participates in a mentoring program with the engineering departments of 17 universities as part of the Association of Canadian Universities for Research in Astronomy’s involvement in the Thirty Meter Telescope project. As part of the program, Dynamic Structures provides student engineers with hands-on experience helping develop rides and structures.

“[Dynamic Structures](#)’ innovations are bringing a whole new level of entertainment to theme parks, and Inventor software is helping them design, visualize and simulate even the most audacious of ideas,” said Robert “Buzz” Kross, senior vice president, Manufacturing Industry Group at Autodesk.

## **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. For more information about Autodesk Inventor of the Month, contact us at [IOM@autodesk.com](mailto:IOM@autodesk.com).

## **About IMAGINiT Technologies**

IMAGINiT Technologies, a RAND Worldwide Company, is a provider of design and engineering solutions to the building, manufacturing and infrastructure, media and entertainment industries. With over 40 offices in North America and Asia-Pacific, IMAGINiT is a leading provider of Autodesk software and the largest North American Autodesk Authorized Training Center (ATC) partner. IMAGINiT delivers knowledge, expertise and design processes to clients through proven technical support, training and consulting services. For more information please visit <http://www.rand.com/imaginit>.

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## ***AVEVA NET Delivers New Growth in Russia***

11 March 2010

AVEVA Group plc announced that sales of its AVEVA NET Information Management solution have surged forward in Russia over recent months, despite challenging worldwide economic conditions.

New AVEVA NET customers in the region include:

**TEP, Moscow, Russia** - project institute (part of Engineering Centre UES) with more than 80 years of experience in the design of thermal power plants. In Russia, more than 80% of power stations are based on the institute's work. About 80 active thermal power plants are built upon the Institute's projects all over the world.

**VNIPIneft, Moscow, Russia** - Strategic engineering company with more than 80 years of experience, the designer of over 300 oil-refining units. Nowadays VNIPIneft is one of the leading Russian engineering companies in the area of oil refining, gas processing, petrochemical, chemistry, and oil-field construction.

**RusGazEngineering, Moscow, Russia** - Holding company providing all types of work required for the execution of oil and gas field facilities construction projects. The key customers of RGE are Lukoil, Rosneft, Surgutneftegas, Gazprom, Novatek and many other reputable oil and gas Companies.

**INHP, Ufa, Russia** - One of the largest and most well known project institutes in the Republic of Bashkortostan. The Institute provides research and design work in the field of petroleum refining and petrochemistry.

**ZELENODOLSK DB, Zelenodolsk, Russia** - Design Bureau which has operated in the shipbuilding market since 1949. Designer of over 800 ships and vessels.

These customers join over 100 other organisations worldwide, both plant and marine, of varying sizes, using AVEVA NET to manage their Information Management needs, in both project engineering and operational environments.

AVEVA NET is a ISO 15926-compliant Information Management solution that automatically controls, links, evaluates and makes available all types of engineering and associated data and documents,

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regardless of application and format.

Its ability to reduce the time spent manually searching for information and its ability to link related items of information together have been proven to save businesses millions in productivity, decision making and rework (see Footnote).

Explaining the success of AVEVA NET in the territory, Dirk Drozd, Vice President AVEVA East EMEA, said: "Russia is one of the largest heavy engineering markets in the world and the pace of projects is now so fast that traditional information management methods are no longer sufficient. This is as true of new builds as it is of rebuilds, revamps, refits and extensions. We are delighted that AVEVA NET, with its data neutrality and its ability to be deployed at any point in the plant lifecycle, has been recognized as the Information Management solution of choice by these extremely experienced customers."

Owner Operators can learn more about how AVEVA NET can help their business at:

[http://www.aveva.com/aveva\\_net/oos](http://www.aveva.com/aveva_net/oos).

## Footnote

A new review, published by Deloitte, is available, showing how Australian business Woodside Energy has saved millions of dollars by deploying AVEVA NET. If you would like a copy, please contact [simon.fletcher@aveva.com](mailto:simon.fletcher@aveva.com)



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## ***Dassault Systèmes and Leading German Automaker Sign Strategic Five-Year Agreement for Sustainable Innovation***

9 March 2010

Dassault Systèmes (DS) announced that BMW and DS have signed a strategic 5-year global agreement to pave the way to meet the automotive market's new challenges. Through this agreement, the companies will establish a close link between their research & development centers that will not only improve the DS automotive product offering but also the BMW development and production process. Dassault Systèmes software solutions support BMW in core areas for design and manufacturing process planning with CATIA as the backbone for product development.

The necessity to reduce CO2 emission levels has forced automotive manufacturers to reshape their business processes to deliver greener cars. Fully embracing the cause of leaving a minimum carbon footprint on the planet, the implementation of the DS solutions will help automakers conceive, analyze and simulate eco-friendly low-emission vehicles like the Project I, a new Megacity vehicle, optimized for better performance and low energy consumption.

By consolidating design in a single PLM software platform BMW can tap into "proven design" concepts and re-use them across all product lines achieving time savings in the design and manufacturing of new cars. The single platform also enables all designers, including development partners in the supply chain, to collaborate, which is another factor in streamlining the design process. SIMULIA realistic simulation solutions combined with CATIA further allow BMW to virtually test their vehicle's real-world performance early in the development cycle which helps improve product quality, while reducing time and cost of physical testing.

The agreement also defines a set of strategic projects where BMW will evaluate possible migration

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paths that ensure a smooth transition to [Dassault Systèmes](#) V6 PLM solutions for all its vehicle development programs.

“BMW has fully understood the importance of the collaborative and integrated Dassault Systèmes V6 solutions for sustainable innovation”, comments Bruno Latchague, executive vice president, Dassault Systèmes. “We are enthusiastic about working with the premium German car manufacturer on a new, environment friendly generation of cars and are confident that this alliance will positively contribute to the profound changes the automotive industry is going through.”

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## ***Delcam’s PowerMILL CAM Chosen by Die Manufacturer EXCO***

8 March 2010

NC programmers at die manufacturer EXCO are now phasing out several different brands of CAM software in favour of the flexibility and capability of [Delcam](#)’s PowerMILL CAM system. This decision followed a six-month evaluation of products from six leading CAM developers to determine how they could help EXCO achieve its goals in boosting productivity and quality.

EXCO Engineering, based in Newmarket, Ontario, is a world leader in large high-pressure die-casting dies. The company has been a major tooling supplier to the automotive industry worldwide for more than 50 years, with huge experience in the design of large dies for engine blocks, transmission cases and instrument panels. To ensure the accuracy and functionality of its dies, EXCO makes extensive use of CNC equipment, including machining centres, large boring mills and CMMs.

Already at EXCO, in some early tests with PowerMILL, the company has seen up to three times increase in productivity for some parts, reducing programming time for a large insert from a week to a day, in one example. A significant benefit is the collision avoidance in PowerMILL, which allows programmers to cascade down with a shorter tool assembly, allowing large areas to be cut safely before moving to a longer tool. Another bonus is that, for all roughing strategies, PowerMILL orders toolpaths so that air moves are greatly reduced. This better ordering also makes the rest-roughing toolpaths more efficient.

When users want to edit toolpaths, they can do it quickly. They can pick any part of a toolpath, delete it and still leave the rest of the toolpath intact. When they wanted to make any change in the program with the other software, they had to re-calculate everything, which could take five or ten minutes, depending on the size of the file.

One big change has been the addition of semi-finishing operations to the machining sequences. “Previously, we did not semi-finish because it greatly increased our programming time,” explained New Project Engineer, Mr. Gabor. “Now we can program roughing, semi-finishing and finishing fairly quickly, and run the programs more smoothly. PowerMILL helps us control material removal rates at each stage. Tool life has improved and the programs run faster.”

For EXCO, the main advantages from PowerMILL are its flexibility, its range of machining strategies and the many options with which a job can be tackled. Also, Delcam was the most willing to prove the value of its software by providing training during the evaluation, programming times were very impressive and customer support has been excellent. Delcam also took EXCO staff to other customers where they saw ideas that they felt could help them, such as programming at the machine, which would allow an operator to program one machine and run another, saving time.

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## ***French Fashion Designer, Artextyl Selects Gerber Technology's YuniquePLM™***

10 March 2010

Gerber Technology announced that YuniquePLM has been selected as the product lifecycle management solution for [Artextyl](#), a leading designer, importer and distributor of men's, women's, and children's garments for the casual and outdoor markets.

"Faced with increased pressure from our customers and partners to reduce delays, strengthen quality levels and increase supplier collaboration, YuniquePLM emerged as the clear favorite," stated Artextyl owner Mr. Alain Harfi. "Each area of YuniquePLM's software including collection and line planning, product development, task management, and cost control will have a positive impact on our day-to-day operations. We are extremely impressed with Gerber's YuniquePLM product and feel that it is an ideal fit for us," added Harfi.

Because artwork, color and high-performance textile development are key factors to the success of the Artextyl brands, YuniquePLM's process-centric design allows individual teams to begin, develop and track their activities in the area of the system that most suits their needs. The embedded Pantone® library offers great appeal to the color team while the image catalogs are an instant win with design, sales and marketing. Controlling and managing costs is vital to the success of any company and the highly visible and collaborative quote-, material-, and sample-management features will provide the tools necessary to allow Artextyl to not only be competitive, but keep and grow their leadership position within their market.

"The intuitive user interface was also an instant win for us," explained Mr. Y. Schlezinger, Artextyl's IT Manager. "After the first demo we immediately knew our design and development staff would rapidly adopt the system and we would see immediate effects in the reduction of time required to go through the development and sampling cycles."

For more information about YuniquePLM visit <http://www.yuniqueplm.com/>.

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## ***HyperWorks' Optimisation Solutions Give the Airbus-Sponsored 'Team Invictus' a Winning Edge in the International C-class Catamaran Challenge 2010***

9 March 2010

Altair Engineering announced that Team Invictus, a dedicated group of Airbus engineers and professional sailors, has deployed the HyperWorks suite of simulation tools to aid in the design of a new racing catamaran. The Bristol-based team, sponsored by Airbus, is leveraging the flexible model build and optimisation technologies within HyperWorks to minimise development time and overall weight for their bespoke racing catamaran. The team is scheduled to enter the vessel for the International C-class Catamaran Challenge (I4C) at the New York Yacht Club later this year, a competition not won by a British team for almost 40 years.

HyperWorks' optimisation solution, OptiStruct, has become a standard tool for Airbus when designing lightweight components and composite-material structures to reduce aircraft fuel consumption. The same technology is now being deployed by the aerospace engineers to reduce the mass of critical

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catamaran components to ensure a minimum-weight, maximum- speed design. One example of how Team Invictus used OptiStruct for optimised component design is the development of a new, lightweight mast fitting. The component, a cone at the base of the wingsail, undergoes extremely heavy loading during use. Team Invictus used OptiStruct's topology optimisation module to automatically identify the ideal location for structural material that would meet all required performance criteria. The cone was then manufactured from titanium powder using laser sintering, the first use of this process for a structural component within Airbus.

"The design of the cone was a real challenge for us, since it is heavily loaded but needed to remain light and simple to manufacture. It's one of the most important parts of the boat, and we cannot afford any breakages there," said Julien Chaussee, future project engineer at Airbus and a member of Team Invictus. "Having access to the Altair HyperWorks suite via Airbus, we were able to apply the experience gathered in our day-to-day work to shorten the development cycle. The topology optimisation took only a couple of hours to run from setup to final results. Combined with the highly innovative manufacturing process available to us, thanks to Airbus and EADS Innovation Works, it allowed us to obtain a complete solution from design to assembly in a matter of days, rather than months—all this for less than one kilogram!"

With the HyperWorks suite proving to be a highly successful solution for Team Invictus, the optimisation technology will be used more aggressively as the final design of the catamaran takes shape.

'It is exciting to see the [HyperWorks](#) suite being implemented by Airbus engineers on this ambitious project,' said Maurice Linscott, regional director of Altair UK. "The drive to reduce the weight of aircraft through optimisation and the integration of more composite materials draws many parallels with the business drivers affecting our clients in the boat and yacht manufacturing industries worldwide. Team Invictus has the engineering experience, along with the best simulation tools available to make its bid for the I4C a success. I would like to wish the team members the best of luck in this and future races."

## **About Team Invictus**

Team Invictus is a Bristol-based team comprising a number of aerospace engineers and professional sailors, who share a common vision to produce a highly efficient, exceptional and original craft to compete in the next I4C Challenge. The team has grown in capacity following Airbus sponsorship with the help of both experienced and graduate aerospace engineers. With that growth has come the expansion of skills, knowledge and capabilities. To learn more, please visit [www.teaminvictus.com](http://www.teaminvictus.com).

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## ***Imec and Synopsys Collaborate on 3D Stacked IC Development***

9 March 2010

Synopsys, Inc. and the Belgian nanoelectronics research center, imec, announced they have entered into a collaboration to use Synopsys TCAD (Technology Computer-Aided Design) finite-element method tools for characterizing and optimizing the reliability and electrical performance of through-silicon vias (TSVs). The collaboration will accelerate the development of 3D stacked IC technologies.

While considered an emerging technology, 3D stacked IC complements conventional transistor scaling and allows multiple chips to be stacked and integrated into a single package. This technology reduces form factor and power consumption, and increases bandwidth of inter-chip communication by

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minimizing connections through the circuit board with high parasitic capacitance. As with other innovative technologies, 3D stacked IC introduces a number of new issues that can potentially affect its reliability and performance. The collaborative research to address these issues will take place at imec, where silicon wafers with test structures will be manufactured and tested, and Synopsys' TCAD tools will be used to model the TSVs in the chip stacks to optimize 3D stacked IC performance and reliability.

"We consider the availability of Synopsys' silicon-proven finite-element method tools to be an integral part of deploying 3D stacked IC technology. This collaboration will speed up the development of through-silicon via technologies and will in turn facilitate the adoption of 3D stacked ICs in the semiconductor industry," said Luc Van den hove, president and chief executive officer of imec.

"This collaboration with imec affords us the opportunity to validate Synopsys' TCAD simulation tools for addressing the emerging 3D stacked IC technology. Imec is an ideal collaboration partner for this effort given its excellent research facilities, industry focus and expertise," said Howard Ko, general manager and senior vice president of the Silicon Engineering Group at [Synopsys](#).

## About imec

Imec performs leading research in nanoelectronics. Imec leverages its scientific knowledge with the power of its global partnerships in ICT, healthcare and energy delivering industry-relevant technology solutions.

Imec is headquartered in Leuven, Belgium, and has offices in Belgium, the Netherlands, Taiwan, US, China and Japan. Its staff of more than 1,750 people includes over 650 industrial residents and guest researchers. In 2008, imec's revenue (P&L) was 270 million euro. Further information on imec can be found at <http://www.imec.be>.

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## *Omnify Software Helps XEI Scientific Improve Profitability Despite Economy*

9 March 2010

[Omnify Software](#) announced that [XEI Scientific](#), a manufacturer of RF Plasma Cleaning Systems for Electron Microscopes and High Vacuum Systems, has reported that the company was able to improve profitability during the economic downturn due to significant overhead savings and product development efficiencies gained with Omnify Software.

As an emerging company, XEI Scientific had a small staff, heavy workload and limited bandwidth. They did not have time to organize product data, leaving it scattered across multiple computers and in different formats. XEI was looking for a way to bring order to their product information and instill disciplines to make sure they had a solid product development process in place.

The company determined that [Product Lifecycle Management](#) software would address their needs. After comparing multiple vendors, XEI selected Omnify Software for its affordable price, ability to scale with XEI as their requirements change, and rich feature set. XEI centralized their product information within Omnify which helped to improve collaboration and made accessing product data a simple process. This environment helped XEI to reduce errors and costly rework, resulting in a higher quality product for their customers. "Omnify has paid off by reducing the time it takes to find information and assuring that we are building to the latest approved documentation," stated Ross Bernheim, production manager for XEI Scientific.

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With over half of their sales overseas, XEI needs to design and manufacture compliant products. "Proof of compliance is a major contributor to XEI's marketing success," stated Ronald Vane, president of XEI Scientific. "Having all part data, Bills of Materials, and procedures controlled by Omnify Software makes it easy to conform with RoHS standards and pass NRTL and SEMI-S2 product inspections of our assembly and QA procedures. What used to be a multiday inspection with time spent searching for documents has turned into a single day visit because the documents can be easily retrieved from Omnify with the click of a button."

XEI has reported that one of the biggest returns on investment with implementing Omnify was a significant savings in overhead which helped the company to remain profitable in the down economy. "Without Omnify we would need to increase our headcount [with the addition of at least one documentation clerk] and office space to have and maintain the control of information we get using Omnify," said Mr. Bernheim. "Even with a large drop in business due to the recession, Omnify allowed us to continue to grow and improve profitability by keeping costs and headcount down."

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## ***PBC Linear Announces 700 Percent Improvement in Sales Leads With PARTsolutions***

9 March 2010

[PARTsolutions LLC](#) and PBC Linear, a worldwide leader in the design and manufacturing of best-in-class linear motion solutions, announce that PBC Linear has increased qualified sales leads by more than 700 percent with the PARTsolutions® 3D catalog technology. As a result, PBC Linear has invested further in the technology by embedding the PARTsolutions 3D Part Catalog solution directly into its web product pages as a 3D embedded sales configurator.

PBC Linear first implemented [PARTcatalog™](#) from PARTsolutions in 2008, in order to web enable its vast product line of bearings, slides, actuators, CAM rollers and guides. The online catalog has grown to feature 2 million orderable PBC Linear products for 212 independently configurable products. The number of registered users of its 3D-enabled online catalog has reached 17,500, which marks an increase of 130 percent over its previous technology provider. Today all 2 million products are accessible in more than 85 native and neutral CAD and graphics formats, representing more than 170 million different digital representations of PBC Linear products.

"Teaming with PARTsolutions has been an increasingly beneficial source to the growth of our business," said Michael Moss, president of PBC Linear. "Not only are we helping our customers gain efficiencies, we're enhancing lead generation, increasing sales and winning more and more repeat business from high-volume customers."

Today PBC Linear is further investing in 3D part catalog technology by embedding a PARTsolutions configurator directly into its website, making CAD a more integral part of its customers' product selection and design processes. The configurator eliminates the need to move between websites and utilize printed catalog tables to arrange the exact part that a customer wants to build-up and purchase. PBC Linear has reduced engineering support costs while streamlining the design process for its industrial market customers.

In addition to the PBC Linear website, PARTsolutions provides PBC Linear products digitally in various online market places, including the Autodesk® Manufacturing Supplier Content Center,

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Machine Design® Magazine CAD Library and ConnectPress® CAD Communities and others to increase awareness and sales of their products. Availability of the PBC Linear products within PARTsolutions enterprise solutions also enables PBC Linear to introduce its products to PARTsolutions clients who access engineering content within their enterprise environments and whose corporations forbid accessing uncontrolled engineering content via the Internet.

For more information on PARTsolutions visit: <http://www.partsolutions.com> or to view the Pacific Bearing solution in action go to: [http://www.partsolutions.com/customer\\_examples/Pacific\\_Bearing/](http://www.partsolutions.com/customer_examples/Pacific_Bearing/).

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## ***Siemens PLM Software's Technology Used by More Than 90 Percent of Automakers Displayed at 2010 Geneva International Motor Show***

11 March 2010

[Siemens PLM Software](#) announced its technology enabled the development and manufacture of more than 90 percent of the vehicles that top selling automakers exhibited at the 80<sup>th</sup> International Motor Show in Geneva.

“Siemens PLM Software is used extensively in the automotive industry. Of the top 30 automakers, 26 use our technology in the development and manufacturing of their vehicles,” said Dave Taylor, senior global director, automotive and machinery industry marketing, Siemens PLM Software. “That’s more than any of our competitors.”

Siemens PLM Software’s technology is used by automakers and suppliers to collaborate, plan, design and validate the development and manufacturing engineering of vehicles. The tools satisfy the needs of leading automakers for managed collaboration across complex engineering functions and throughout the extended supply chain. By breaking down barriers between engineering functions, providing real-time access to information, and performing analysis and simulation, Siemens PLM Software has delivered double-digit efficiency improvements.

The vehicles of tomorrow, as evidenced by those revealed at this year’s Geneva show, will be differentiated by intelligent features that integrate mechanical functions with electronic controls, driven by software and connected by physical wiring. Consumer’s demand for a connected vehicle, with increased safety and convenience features is driving increased vehicle complexities. Because of these demands, the number of embedded software systems, which currently make up 70-90 percent of all automotive innovations, are predicted to increase another 30-40 percent in the next three years.

“Managing, integrating and synchronizing the domain and product information, as well as the globally distributed development team and supply chain can be overwhelming for companies using traditional tools and processes,” explained Taylor. “Our PLM software solutions provide a rich, integrated environment to help manage the complexity driven by mechatronics and make it a competitive advantage for automakers.”

Siemens PLM Software’s solutions allow the automotive industry to more effectively integrate a company’s mechanical, electrical, electronic and software domains to develop more complex, differentiated vehicles that consumers want to drive.

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## ***TOMRA Systems Selects IFS Applications***

12 March 2010

TOMRA Systems ASA, a leading global provider of recycling systems, has selected [IFS Applications](#), a comprehensive solution that will provide TOMRA with a more effective and more agile supply chain in its manufacturing units (Collection Technology division).

“We focus on a limited number of core processes, several of which are critical to TOMRA, such as the service, supply chain and manufacturing processes.”

IFS Applications will replace TOMRA’s existing business software, which was no longer able to meet the company’s demands for an agile, future-proof industry-specific solution. TOMRA will implement IFS Applications components for financials, sales, purchasing, logistics, customer relationship management and manufacturing.

TOMRA manufactures machines and equipment with short lead times; similar demands on planning and deciding whether to produce via its own operations or through suppliers are critical for optimizing operations. Because a large amount of production is done by suppliers, stable integration solutions with suppliers are central to the success of the company. IFS Applications has a component-based structure that is integration-ready, and offers industry-specific functionality that provides TOMRA with complete control of its operations at all times—regardless of the manufacturing structure.

"We selected IFS because of our positive experience of the company and its solutions, which we already use in our Nordic sales and service organization. Furthermore, the product and the organization made a solid impression on us during the procurement process and introductory workshops. Proximity to the development environment was another important factor in selecting supplier. The new solution will play a very central role in our efforts to reduce costs and streamline production and logistics. We know IFS is a competent, serious player of a size that suits TOMRA and are looking forward to fruitful collaboration in the years to come," said Espen Gundersen, deputy CEO and CFO at TOMRA.

"IFS’ strategy for continued growth means that we focus our product and industry competence on selected areas. The agreement with TOMRA is just one example that confirms this as the right direction to take," said Glenn Arnesen, managing director of IFS Scandinavia. "We focus on a limited number of core processes, several of which are critical to TOMRA, such as the service, supply chain and manufacturing processes."

High-tech manufacturing is one of IFS’ target industries. IFS offers industry-specific solutions manufacturers of electronics, electronic components, mechatronics and semiconductors. IFS’ industry-specific solutions support all processes from engineering and mixed-mode manufacturing to aftermarket sales and warranty management. IFS customers in this segment include Rockwell Automation, NEC Philips Unified Solutions, NEC, Eltek, PartnerTech, Kitron, Maxon Motor and Olympus Optical.

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## ***UNOX Selects Siemens PLM Software’s Teamcenter to Enhance Enterprise Data Management***

8 March 2010

[Siemens PLM Software](#) announced that UNOX S.p.A. selected [Teamcenter® software](#), Siemens PLM Software’s digital lifecycle management solution, as its company-wide PLM system to help reduce time-to-market, enhance decision making, optimize resources and better control projects and process

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development.

UNOX, established in 1990, has quickly become a leading global company for the design and production of professional ovens for the baking, pastry and gastronomy markets, thanks to a continuous process of research and innovation. By developing a PLM strategy, the Italian company now plans to connect all product data, making it easier to access information and enhance cooperation among all involved parties.

UNOX selected Teamcenter following an extensive evaluation process against competing solutions. Teamcenter proved to be the best solution for UNOX as it met all key criteria out-of-the box without requiring any customization. The company cited the quality of the solution, the reliability of direct support, and implementation time as key decision making factors.

UNOX will use Teamcenter to enhance its product development, process engineering, engineering data management, and to consolidate existing legacy systems, including Pro/E® software and ERP SAP® software. Beyond easing data sharing within the group and with the suppliers, Teamcenter automatically acquires best practice knowledge for future traceability, promoting innovation and efficiency.

“UNOX required a unique environment, to connect product development, manufacturing and services to enhance innovation and help reduce time-to-market,” said Enrico Franzolin, president, UNOX. “Based on our extensive evaluation, the PLM backbone based on Teamcenter could support separate product and management data in an easily accessible knowledge centre which could be accessed across the company to enable everyone to make the most of different applications. Siemens PLM Software helped us build a solid awareness of our needs and of the different solutions with total transparency, clearness and simplicity.”

Fabio Duregon, technical manager, UNOX added, “More than buying a product and implementing services, we have invested in a consultancy relationship. The consistent approach of the Siemens PLM Software team stood as a further warranty: all the professionals we met have shown the same competency, professionalism and passion to help UNOX succeed.”

“We are proud that an innovative company such as UNOX has selected Teamcenter to efficiently support its objectives for tighter synchronization and broader business reach,” said Franco Megali, vice president and managing director, Italy, Siemens PLM Software.

## **About UNOX S.p.A.**

Born in 1990, UNOX imposed itself quickly in the international market as a leading company for the production of professional ovens, for the bakery, pastry and gastronomy markets. The evolution of UNOX passes through the development of its Organization, the Improvement and the Widening of the range of the products and the increase of the company asset. UNOX’s growth is the acknowledgment that the market has given and is giving to this evolution: today UNOX is number one in the world for selling professional ovens in one year. Based in Vigodarzere (PD), UNOX operates in 85 countries around the world, of which Germany, Italy, Spain, Russia, United States and Japan stand as the main markets. Its products range in six product lines, each one including a broad variety of ovens and accessories (hood, leavener, stand, washing systems, etc). UNOX’s business has constantly grown, reaching the annual output of about 60.000 manufactured product units, and extends to a series of small business companies, connected into a common collaborative model.

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## Product News

### ***Cadac Organice BV Introduced the Cadac Organice 2010 Product Suite Including Cadac Organice Explorer 2010 and Cadac Organice Workbox 2010***

8 March 2010

Cadac Organice BV, a Microsoft Gold Certified Partner developing Cadac Organice, a SharePoint based engineering document management solution, introduced the Cadac Organice 2010 Product Suite including Cadac Organice Explorer 2010 and Cadac Organice Workbox 2010.

The Cadac Organice 2010 Product Suite brings exiting new features and functionalities to enhance the document management capabilities of SharePoint and to make SharePoint suitable for Architecture, Engineering and Construction and other project driven engineering industries. The new version of the Product Suite is again 100% based on Microsoft SharePoint and provides with Cadac Organice Explorer 2010 a smart client to SharePoint that is developed in Microsoft .NET 3.5 technology.

Cadac Organice Explorer 2010 has a state of the art and flexible user interface and allows opening multiple lists from multiple sites simultaneously. As a smart client for SharePoint it offers offline capabilities, supporting users that are often travelling or working in areas where they cannot connect. Search capabilities are enhanced and now include a Filter Editor that users can use to create advanced filters to retrieve the right SharePoint information. When users have created a specific view on a list or library, they are able to save this as a personal view.

The integration with Microsoft Office and CAD applications is also enhanced, providing users the capability to open, save and update their SharePoint documents directly from the Cadac Organice Toolbar in their application. E-mail messages can be save through drag & drop, and when e-mail messages with attachments or CAD drawings with reference files are saved, Cadac Organice automatically recognizes the attachments or reference files and provides users the option to save these too. The integration with Microsoft Word includes Advanced Document Creation functionality that allows users to create templates for specific documents like letters, faxes and reports and automatically populate new documents based on these templates with SharePoint metadata like company, sender, receiver and project information.

Cadac Organice Workbox 2010 is a new module in the Cadac Organice Product Suite and can be used to build SharePoint state machine workflows and execute them automatically or manually on documents and items in SharePoint. Cadac Organice Workbox is fully integrated into the Cadac Organice Explorer 2010 user interface and presents users the workflow options they have related to their role and the status of the workflow. User are presented an overview of the running and completed workflows on documents and items and are able to get a graphical overview of the workflow history, showing who was involved in every workflow step and the actual workflow status.

The Cadac Organice 2010 Product Suite enhances the SharePoint document management capabilities and provides companies in Architecture, Engineering, Construction and other project driven engineering industries the tools they need to manage their Office documents, e-mail and CAD drawings and to collaborate with their internal and external project partners.

Cadac Organice Explorer 2010 and Cadac Organice Workbox 2010 are available from March 8, 2010



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## *Comet Solutions Inc. Announces the Availability of the Comet Performance Engineering Workspace v2010*

1 March 2010

[Comet Solutions, Inc.](#) announces the immediate availability of Comet™ v2010 with new integrated modeling and process automation capabilities to enable customers to take advantage of product performance simulation results much earlier in the product design process starting with concept/proposal development and conceptual engineering trade studies.

“This release is a major leap forward in terms of providing a more mature, proven and broader offering to our customers and prospects,” states Mr. Malcolm Panthaki, Founder and CTO of Comet Solutions, Inc.

Major enhancements to Comet v2010 include:

An enhanced graphical user interface which provides greater flexibility and transparency in defining complex, multi-disciplinary design analysis process templates within the Comet Workspace. In addition to an improved look and feel, the Process Schematic introduces enhanced data access capabilities, which allow users to pre-define a much larger list of specific result types expected from analysis applications.

Full bi-directional support for SolidWorks® 2009 CAD geometry utilizing the Comet ActiveTag plug-in application which enables users to apply and manage functional “tags” to their design geometry for use in downstream design simulation processes. Comet also continues to support Pro/Engineer Wildfire® in this same manner.

The ability to import native design geometry from CATIA® v4, CATIA v5, NX™/Unigraphics®, Autodesk Inventor® as well as in CAD-neutral formats of IGES and STEP.

Copy and Paste within the Comet project - The ability to move data from one project or stage to another by copying an existing abstract model and templates and easily reusing this generic functional model in totally new projects or new stages within an existing project. Teams can recreate and re-use their models in another Comet project by exporting it from one and importing it into another. This saves manual re-work and enables rapid use of engineering best practices across product teams as well as within integrated project team environments.

The formal introduction of Abstract Constructors - Comet’s Abstract Constructors support many types of standard modeling entities. An abstract constructor is a modeling tool used to automatically create new objects in Comet, based on functional “tags” attached to the CAD model. The Comet Abstract Engineering Model™ (AEM) finds them and automatically constructs these generic “building block” objects including assignment of any pre-defined properties. The type of objects that can be automatically created include meshing rules (for points and spider meshing), mechanical contact interactions (tied contact and regular contact, thermal contactors) and low fidelity objects such as joints, springs, bushings. Comet’s automatic labeling feature greatly improves modeling efficiency and makes the abstract modeling capability much easier to use.

Comet can run in 64-bit emulation mode interacting with codes such as Pro/ENGINEER®, Thermal Desktop®, MSC.ADAMS®, MATLAB® and FEA codes such as ABAQUS™, ANSYS® and NASTRAN® running in native 64-bit mode.

Expanded integration with Thermal Desktop enables users to work simultaneously within both environments to leverage the Comet abstract modeling capabilities in the up-front thermal model definition and execution of complex thermal analysis processes. V2010 has more robust bi-directional

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adaptors with SigFit and CodeV® - analysis tools used in the design of advanced electro-optical instruments.

FEA meshing enhancements based on the Simmetrix v7 toolkit such as:

- Users can specify contact interactions such as tied contact/mesh meshing directly via the GUI. This local mesh control allows the specification of faces of separate parts to be meshed with nodes that are in the same spatial location for more accurate analysis results.
- Improved mesh propagation control of the gradation of the mesh as it propagates from dense areas (small elements) to coarse areas (large elements).
- Rigid body equivalent “spider mesh” capabilities now enable automatic loads transfer from an ADAMS Multi-Body Dynamics analysis directly into an FEA code for structural analysis.
- Ability to perform mesh generation in parallel, using all the cores available on single and multi-CPU machines.
- Mesh quality-driven meshing allows users to specify the desired lower bounds on various mesh quality metrics, to automatically achieve the required balance between quality and number of elements.
- Improved quad meshing algorithm.
- Significant improvements in the reporting and handling of bad geometry.

Fully integrated and automated, static and dynamic structural analysis process going from CAD to Multi-Body Dynamics (MBD) to FEA. The MBD model (with joints, low fidelity parts such as springs and bushings, and mass/inertia properties) is automatically generated from the tagged CAD model and supports both rigid and flexible-body analysis. Any subset of the overall model can be specified for static or dynamic structural analysis using an FEA code - all joint loads are automatically extracted from the MBD results and used in the FEA analysis. Comet's AEM takes care of all unit and coordinate system transformations that are required.

"Comet's Abstract Modeling allows the user to make radical changes to the geometry and configuration of the model and to re-analyze the changed model automatically. Customers have begun to measure significant productivity gains and reduced manual errors," says Mr. Malcolm Panthaki.

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## ***Geometric Releases Ver 7.1 of eDrawings Professional for NX***

9 March 2010

[Geometric Limited](#) announced the release of version 7.1 of [eDrawings Professional](#) for NX’.

Some of the highlights of this release include:

- [Support for NX 7](#): Both 32-bit and 64-bit versions of NX 7 eDrawings Viewer:
- eDrawings Viewer version upgraded to eDrawings 2010 SP1 Arrangements:
- Support for exporting Arrangements as configurations in eDrawings

eDrawings is the first e-mail enabled collaboration tool designed to ease the sharing and interpretation

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of 2D and 3D product design data. eDrawings Publishers are available on [Pro/ENGINEER®](#), [CATIA V5®](#), [NX®](#), [Autodesk Inventor Series®](#), [SolidEdge®](#), [Google SketchUp®](#), as well as for STEP/IGES/STL & DWG/DXF file formats.

With eDrawings Publishers a user can:

- Generate ultra compact eDrawings (up to 95% compressed) for sharing over e-mail
- Share and receive feedback on product designs with review-enabled eDrawings and collaborate with unlimited number of recipients
- Manage, track, and merge comments from different team members
- Measure part, assembly and drawing geometry Dynamic cross sectioning and Hide/Show/Move components for understanding assembly structure.
- Visualize drawings effectively with 3D Data, Layouts and 3D Pointer tool. Insert Stamps, password protect and disable measurement for protecting sensitive design data.

For a free 15-day trial of the new version of eDrawings Professional for NX , please visit <http://edrawings.geometricglobal.com>. For pricing and purchase options please contact [ed.sales@geometricglobal.com](mailto:ed.sales@geometricglobal.com)

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## ***LEDAS Releases Next Beta Version of its RhinoDirect Plug-in***

12 March 2010

LEDAS Ltd., an independent provider of end-user variational design tools, technology components, and software development services for the CAD/CAM/CAE/PDM market, announced the public release of beta 0.2 of its RhinoDirect plug-in module for Rhinoceros 3D modeling software from Robert McNeel and Associates. RhinoDirect allows Rhinoceros users to modify 3D geometric shapes parametrically using geometric constraints and driving dimensions. Version 0.2 of RhinoDirect is available as a free download at <http://www.DrivingDimensions.com/labs.php>.

Version 0.2 adds several important features to RhinoDirect. Geometric constraints and driving dimensions are now stored when users perform commands such as copy-and-paste and importing models from other 3DM files. Constraints and dimensions are no longer deleted when users modify geometry with Rhino commands, such as for holes, fillets, and Boolean operations. The plug-in now correctly supports Rhino's built-in history. And in another enhancement, the plug-in can now parametrize arbitrary solid bodies composed of planar and cylindrical faces independently of their orientation with each other.

"In the two months since we released RhinoDirect 0.1, more than 500 worldwide Rhino users took part in beta testing the plug-in," said Dmitry Ushakov, Director of Product Management at LEDAS. "Driven by reports from our beta testers and internal quality assurance process, we found and fixed several bugs. As a result, we significantly increased the stability of the plug-in. We thank these users for their useful feedback that helped us to improve our product."

## **About RhinoDirect**

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RhinoDirect 0.2 is compatible with Rhinoceros 4.0 SR5B (and higher), and can be run on 32-bit Windows XP, Vista, and 7. The beta version can be freely downloaded at [DrivingDimensions.com/labs.php](http://DrivingDimensions.com/labs.php), where visitors will also find detailed on-line help, step-by-step tutorials, video tutorials, and a set of sample examples to play with.

RhinoDirect is an extension of LEDAS' RhinoAssembly plug-in, the ultimate tool for assembly design and kinematic simulation of mechanisms composed of rigid parts. It is commercially available from [DrivingDimensions.com/store/Rhino](http://DrivingDimensions.com/store/Rhino) for US\$395.00. Both RhinoDirect and RhinoAssembly belong to the LEDAS Driving Dimensions product line.

## About Driving Dimensions

Driving Dimensions are end-user applications developed by LEDAS as plug-ins for popular 2D and 3D modeling systems. They provide advanced parameterization capabilities for programs like SketchUp and Rhinoceros. Driving Dimensions are based on the LEDAS' Variational Direct Modeling technology for history-free editing model elements that preserve design intent, and are expressed by explicit and implicit driving dimensions (linear, angular, radial) and geometric constraints.

Simultaneous satisfaction of geometric and dimensional constraints is achieved through LEDAS' LGS 3D geometric constraint solver, technology developed by LEDAS since 2001 and available for licensing to all CAD developers. More information about Driving Dimensions portfolio of applications can be found at <http://www.DrivingDimensions.com/>

## About LEDAS

LEDAS Ltd. is an independent software development company founded in 1999. It is based in Novosibirsk Scientific Centre in Akademgorodok, the Siberian Branch of the Russian Academy of Science. More information about LEDAS is available at <http://www.ledas.com>

\*Limited time offer. RhinoDirect is available at no charge during its beta testing stage.

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## ***LMS Releases LMS Test.Lab Rev 10 with Increased Productivity and New Acoustics Applications***

9 March 2010

LMS International has released the latest version of LMS Test.Lab, its integrated solution for noise and vibration testing and engineering. LMS Test.Lab Rev 10A not only offers significant improvements in productivity, efficiency and user-friendliness, it also introduces new applications, such as Time Domain Transfer Path Analysis (TPA) and MIMO FRF testing. Rev 10A integrates innovative solutions for acoustic testing.

Bruno Massa, Vice-President Test Division at LMS International, "LMS Test.Lab is the solution that testing departments count on to increase test productivity while maintaining the utmost product quality. With Rev 10 of LMS Test.Lab, we continued to improve on efficiency and ease-of-use. With the integration of new acoustic testing capabilities and transfer path analysis techniques, test engineers can more efficiently trace where a sound is coming from and what the root cause is of particular noise and vibration issues. This significantly increases test productivity and delivers more reliable results.

"LMS Test.Lab Rev 10A delivers a new extension to the renowned LMS Test.Lab Transfer Path Analysis capabilities: LMS Test.Lab Time Domain TPA. This new application complements frequency domain TPA and is the perfect solution for the analysis of transient phenomena. With this extension,

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LMS now offers a complete portfolio of TPA solutions for a broad spectrum of applications. The new LMS Test.Lab MIMO FRF Testing extends the modal testing techniques in LMS Test.Lab. With this new solution, users can specify their specific excitation signals, define a shaped amplitude spectrum and extend the application to multi-sine excitation.

LMS Test.Lab Rev 10A integrates new acoustic testing capabilities and scalable solutions for spot-on sound testing and analysis. The LMS Test.Lab Rev 10A Sound Quality solution has been extended with new psycho-acoustic metrics used in the automotive, aerospace, and white goods sectors. The [LMS](#) Test.Lab Sound Intensity's geometry module has been extended with a 3D acoustic mesh generator. The new intensity data sheet presents a clear overview of all measured and processed data, quality indicators and related components. User can easily analyze, browse and interpret data for sound power, source ranking and sound source localization.

The LMS Test.Lab Rev 10A High Definition Acoustic Camera supports both real-time far field and realtime near field sound source localization. The camera's array with wide angle lens provides sharp pictures even when taken close to the structure. For interior sound source localization with maximum accuracy, the new LMS Test. Lab 3D Acoustic Camera has a laser that automatically scans the geometry without operator intervention. During the scanning, pictures are taken to obtain a full 3D photorealistic image of the vehicle. With this solution, users can spot sources of interior noise problems with high precision and in record time.

Finally, LMS test.Lab Rev 10 takes optimal advantage of the new E-series signal conditioning input modules of the LMS SCADAS, which offer enhanced usability and increased efficiency. The E-modules provide a hardware-based solution to ensure faster test set-up and accurate measurements without data loss, even for demanding applications with high-channel count.

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## ***Magma Announces FineSim Fast Monte Carlo -- New Method for Statistical Simulation and Monte Carlo Analysis Delivers Superior Accuracy and Up to 100X Speed Improvement Over Traditional Monte Carlo Analysis***

10 March 2010

[Magma® Design Automation Inc.](#) announced the availability of FineSim™ Fast Monte Carlo, a new alternative to traditional Monte Carlo analysis. FineSim Fast Monte Carlo makes it possible to achieve much more accurate statistical analysis as much as 100 times faster than traditional Monte Carlo methods.

Most engineers today rely heavily on statistical methods such as traditional Monte Carlo analysis for design reliability, an approach that has limitations making accurate analysis almost impossible. FineSim Fast Monte Carlo uses proprietary dynamic error-controlled algorithms along with sophisticated statistical techniques to provide dramatic improvement in speed and accuracy compared to traditional Monte Carlo statistical analysis. It has shown as much as 100 times better runtime when compared to other commercial methods, with superior accuracy.

"As engineers continue to push their products into more advanced process technologies, the need for improved reliability becomes even more critical. But the increasing number of process parameters and parasitic variability make it virtually impossible to predict accurate statistical yield analysis, reliability and failure analysis," said Anirudh Devgan, general manager of Magma's Custom Design Business Unit. "FineSim Fast Monte Carlo was developed to address these issues with greater accuracy and

predictability."

The algorithms in FineSim Fast Monte Carlo, coupled with Magma's native-parallel technology, improve throughput for statistical simulations even further. FineSim Fast Monte Carlo makes statistical analysis practical for many different applications. "Several key customers have tested FineSim Fast Monte Carlo option on their memory, custom digital, and mixed-signal designs, and they are very excited about its performance and accuracy of results," Devgan said.

Designers can use FineSim Fast Monte Carlo to improve the speed of statistical analysis, enabling statistical analysis on designs that would previously have been infeasible. Fast Monte Carlo can also improve the accuracy of statistical analysis on a given number of statistical samples, providing users improved overall confidence in the analysis.

## Availability

FineSim Fast Monte Carlo is available now for production use with FineSim SPICE and FineSim Pro for fast, accurate statistical circuit analysis.

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## ***Magma Unveils Tekton -- First Static Timing Analysis Solution to Deliver Fast Multi-Scenario Analysis on a Single CPU***

10 March 2010

[Magma® Design Automation Inc.](#) unveiled Tekton™, a new timing analysis platform that offers significantly higher capacity and faster runtimes than traditional tools, without sacrificing accuracy. Unlike other solutions, Tekton runs multi-scenario analysis efficiently on low-cost hardware without requiring a large number of expensive servers and software licenses. Leveraging breakthrough technology, this revolutionary new platform addresses complex sign-off challenges and is uniquely suited for today's most challenging designs.

"The complexity of timing sign-off has reached crisis proportions, forcing design teams to re-evaluate resource planning, design architectures and final sign-off solutions," said Premal Buch, general manager of Magma's Design Implementation Business Unit. "Capacity and runtime limitations of current STA tools often force teams to sacrifice accuracy to meet tight design schedules, or they must invest in expensive servers and additional software licenses in an attempt to achieve reasonable turnaround times. By enabling STA in just minutes for the industry's biggest chips – on a single machine – Tekton is truly the next-generation timing analysis platform."

## **Tekton: Fast, Accurate, High-Capacity Static Timing Analysis**

Designed to more efficiently handle on-chip-variation (OCV), composite current source (CCS) models and crosstalk analysis, Tekton overcomes the speed, capacity and accuracy limitations of traditional static timing analysis (STA) tools. It brings a new level of performance to static timing analysis and extraction while maintaining complete flow compatibility with existing STA tools.

Tekton meets the runtime, capacity and accuracy requirements for sign-off through an architecture designed to accommodate more than 100 million instances and greater than 15 PVT corners. Traditional STA solutions often take hours or days and numerous machines to deliver results on complicated designs that have many analysis scenarios. Tekton's multi-threaded architecture provides near-linear scaling on up to 24 CPUs. For a single timing scenario, with OCV and crosstalk enabled, Tekton

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performs timing analysis on designs greater than 10 million cells in minutes.

## **QCP: New Full-Chip Extractor**

The Tekton platform includes QCP™, a fast, high-capacity, full-chip extractor that delivers results with the accuracy of the industry standard, QuickCap®. QCP's architecture enables efficient multi-corner extraction with minimal increases in runtime as additional process, voltage and temperature (PVT) corners are added for each process node migration. Built on a similar architecture to Tekton, QCP is fully multi-threaded for near linear performance on up to 32 CPUs. Tekton and QCP can be used together in a single STA timing session for very fast and accurate "what-if" analysis for engineering change orders (ECOs).

## **Tekton and QCP: Tight Integration Means Fewer and Faster ECO Loops**

Today's complex chip designs require accurate timing analysis to be performed across many scenarios (operating modes and PVT corners). Coupling Tekton's timing analysis with QCP's extraction in a single session allows designers to simultaneously iterate through the timing closure process of analyzing, fixing and extracting nets. The ability to make changes and get accurate timing results can drastically reduce the amount of time spent in trial-and-error ECO loops.

## **Tekton Multi-Mode/Multi-Corner Analysis Speeds Turnaround Times and Reduces Costs**

Performing multi-mode/multi-corner or multi-scenario analysis using traditional tools is time consuming, expensive and cumbersome. Design teams are often forced to purchase many expensive servers and accompanying software licenses to parallelize the multi-scenario analysis in order to shorten run times. In some cases, design teams resort to using abstracted timing models to accelerate the analysis, but at the expense of accuracy. Tekton performs extremely fast, multi-scenario analysis on a single machine and provides the accuracy of existing sign-off solutions. Over a variety of designs with 5 to 50 scenarios enabled, Tekton performs timing analysis, with OCV and crosstalk enabled, in less than one hour on a single CPU.

"To ensure we provide the highest quality of silicon, we analyze our chips across many operating modes and PVT corners," said Jay Avula, vice president of Technology at ServerEngines. "The amount of STA we require puts our tapeout schedule at risk, and it will be only getting worse. Tekton runtimes are truly exceptional. We believe Tekton will meet our growing STA challenges without increasing our compute resources."

"Today, companies are budgeting millions of dollars for hardware to address the rapidly increasing number of STA scenarios," said Premal Buch, general manager of Magma's Design Implementation Business Unit. "Tekton is the only STA solution that meets the multi-scenario analysis problems of today and five years from now – on a single machine without any investment in new hardware."

## **Tekton Platform: Increasing Accuracy, Reducing the Timing Closure Burden**

To address the timing closure challenges design teams face at 40 nm and below, Tekton supports advanced OCV (AOCV) margin reduction techniques. By incorporating AOCV into timing closure flows, design teams can minimize global pessimistic margins that lengthen tapeout schedules and potentially increase die sizes. For critical path and net analysis, Tekton and QCP offer high accuracy modes that leverage Tekton's integrated SPICE engine and QCP's accurate extraction.

## **Availability**

Tekton and QCP are in limited release. General availability will begin in June 2010.

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## ***Mentor Graphics Adds AMBA 4 Verification IP to the Questa Multi-view Verification Components Library***

9 March 2010

[Mentor Graphics Corporation](#) announced that the quickly-growing library of Questa® Multi-view Verification Components (MVCs) has been expanded to support phase one of the AMBA® 4 specification, recently announced by ARM. Phase one of the AMBA 4 specification includes AMBA 4 AXI, AXI-Stream and AXI-Lite interfaces, allowing increased functionality and efficiency for complex, media-rich, on-chip communication. The Questa MVC library dramatically improves verification coverage and helps speed the functional verification of integrated circuits (ICs) using industry standard protocols. As a result, users of MVCs can expect to see an improved time to market and a higher quality product.

By adding support for AMBA 4, the Questa MVC library continues to provide a leading-edge, comprehensive solution for verifying ARM AMBA-based platforms. Using the Questa MVC library, designers can rapidly verify correct interpretation of the new specification and be assured of a successful integration with other IP. This allows less time to be spent developing the interface logic and more time to be spent on the key differentiating functionality within the design.

“Our AMBA MVCs have proved very popular and by supporting the latest AMBA 4 specification, we are continuing to provide a complete verification solution for AMBA-based designs,” said Stephen Bailey, director of product marketing for the Design Verification Technology division of Mentor. “Users of MVCs can expect to see an improved time to market and a higher quality product thanks to features such as a verification plan with full coverage metrics, a comprehensive test suite with transaction and protocol stack debugging and full support for OVM.”

### **Questa MVCs**

With Questa MVCs, a verification team can connect to any level of abstraction from system to gates—ensuring consistent model behavior and giving them more options to improve performance and increase coverage. The Questa MVC technology also greatly reduces the labor intensive and error prone manual interpretation of signal activity. This allows simulation results, from RTL verification, to be viewed as sequences of initiated transactions and responses, with the RTL signal activity correlated to a higher level transaction view of activity.

### **Availability**

Questa MVC support for phase one of the AMBA 4 specification is available immediately for select customers.

### **Questa Functional Verification Platform**

The Questa functional verification platform combines high performance and high capacity with the most comprehensive verification capabilities in the industry. Assertion-based Verification (ABV), intelligent testbench automation, Multi-view Verification Components (MVCs), and Coverage-driven Verification (CDV) are supported natively by the Questa platform’s high-performance assertion engine; a modern, high-performance constraint solver; and extensive functional coverage features, including verification management leveraging the Unified Coverage Database (UCDB). Verification of low power design functionality can be proven in an RTL environment with power-aware functional verification. This full

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set of advanced verification functionality is enabled by a flexible Open Verification Methodology (OVM) that delivers unrivaled language and feature support in any design and verification flow.

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## ***MSC.Software Releases Patran 2010***

3 March 2010

MSC.Software announced that **Patran 2010** is available. This latest release delivers substantial increases in performance and enhanced productivity, thereby significantly improving user experience, and expanding solver support.

### **Performance**

Patran 2010 now provides 64-bit platform support for Windows and Linux providing analysts with the ability to access, create, and manipulate dramatically larger models (demonstrated with 20X larger and more complex models). Models that were impossible before due to size and memory limitations are now routine with 64-bit Patran 2010. Customers have seen typical speed improvements of approximately 15% in importing and meshing large models and huge performance improvements for models that taxed the limits of 32-bit systems previously.

"In benchmark testing using 64-bit hardware we were able to create and manipulate a 53 million element solid model. The Patran infrastructure is ready to handle extremely large models and with continued development, our aim is to process models in the billion degree of freedom size range," said Sanjay Choudhry, VP Product & Release Management at MSC.Software.

### **Usability**

The Windows version of the **Patran 2010** release provides a new, modernized user interface for increased productivity. Users will see a fresh and improved appearance to the menus through a familiar Windows and Office ribbon structure making menu items easily accessible with less mouse travel. Along with improved ribbon menus comes expanded right mouse button menu control. These changes significantly decrease the learning curve for new users, while giving existing users quicker access to Patran's rich pre and post processing functions. These significant interface improvements are only the start of even greater productivity enhancements to come in future releases.

"The 64-bit version has made a big leap in terms of generating large size models and visualization. It is also very easy to teach new users to use this software. The icons are logically located, and the methodology to generate a full working model is very easy," said George Wong, Senior Structural Analyst, BAE Systems.

### **Broader Range of Real World Behaviors**

Extended solver support delivered in this release enables analysts to setup and run a full range of physics based event simulations including advanced contact, composites, rotordynamics, external acoustics, multi-physics, and more. Engineers can study more real world behaviors than previous releases by accessing more of **MD Nastran's** comprehensive, integrated capabilities while continuing to integrate with 3rd party solvers.

"It's thrilling to see the excitement level within the engineering community about Patran 2010. This new release immediately helps our customers speed simulation times so they can get answers faster. The interface enhancements provide significant productivity gains thereby enabling users to focus more on

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product innovation and less time on mundane tasks in the software," said Dominic Gallelo, President & CEO of MSC.Software.

For more information about Patran 2010, listen to the *On-Demand What's New webinar* at <http://www.mscsoftware.com/events/Webcasts/Patran/Patran2010.html>.

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## ***Pointwise V16.03 Attacks CAD Interoperability Issues***

4 March 2010

Pointwise announced the latest release of its Pointwise computational fluid dynamics (CFD) meshing software featuring tools for addressing problems associated with computer aided design (CAD) geometry data. Pointwise's Solid Meshing feature suite can automatically create watertight geometry models without the gaps and overlaps that can cripple the mesh generation process.

"Solid Meshing represents the sharpest tool available to avoid sloppy geometry problems," said John Chawner, Pointwise's president. "Sloppy geometry is going to occur and that means wasted time and money. We've all heard the statistics about the millions of dollars wasted on CAD interoperability problems, such as the annual cost of interoperability problems exceeding the market capitalization of all the CAD companies combined. Solid Meshing is a faster, better alternative to repairing the geometry directly."

Solid Meshing comprises solid models and quilts. Models are watertight collections of surfaces. Quilts are subregions of the geometry that capture engineering intent, simplify the topology, and are meshed as a single unit. The Solid Meshing suite includes tools for trimming and untrimming surfaces; solid model import; and multi-tiered tools for automatic and manual model and quilt assembly. Solids and quilts also can be formed automatically, as part of the CAD file import process.

CAD files often include translation, tolerance and representation errors and incompatibilities resulting in geometry with gaps and overlaps that unnecessarily complicate the meshing process, especially when the geometry errors exceed the mesh size, as is often the case in CFD. Rather than repairing the geometry directly, which can be exceedingly complex, Pointwise's Solid Meshing forms the geometry into a topological solid with gaps implicitly closed.

The new release of Pointwise, Version 16.03, also includes support for the 3D mouse, user-customizable export to CFD solvers, and support for 64-bit versions of Microsoft Windows.

Pointwise, Inc.'s Gridgen and Pointwise software generates structured, unstructured and hybrid meshes; interfaces with CFD solvers, such as ANSYS FLUENT, STAR-CD, ANSYS CFX and OpenFOAM as well as many neutral formats, such as CGNS; runs on Windows (Intel and AMD), Linux (Intel and AMD), Mac and Unix, and has scripting languages that can automate CFD meshing. Large manufacturing firms and research organizations worldwide rely on Pointwise as their complete CFD preprocessing solution. More information about Gridgen and Pointwise is available at <http://pointwise.com>.

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## ***STAR-CCM+ V5 Delivers Truly Parametric Engineering Simulation***

8 March 2010

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CD-adapco announced the release STAR-CCM+ V5.

Since its first release, STAR-CCM+ has evolved into an integrated platform for multi-disciplinary engineering simulation, including: combustion; multiphase flow; heat transfer through solids and fluids; dynamic fluid body interaction; solid stress; and fully implicit fluid structure interaction: all from within a single environment.

STAR-CCM+ provides a complete simulation workflow – from the creation of geometry to the analysis of simulation data output – all inside a single application:

“STAR-CCM+ V5 introduces 3D-CAD, a fully parametric geometry modeling capability. Designed by and for simulation engineers, 3D-CAD provides modeling capabilities that bridge the gap between CAD and CAE,” says Jean-Claude Ercolanelli, CD-adapco’s VP Product Management. “What we are talking about is nothing less than a paradigm shift: in three decades of commercial engineering simulation, practitioners have always had to worry about communication between the different tools that make up their simulation process. Not anymore. STAR-CCM+ V5 provides the complete simulation workflow in a single powerful application.”

The payoff is immense. Using STAR-CCM+ V5 engineers and designers have the opportunity to modify their designs in response to engineering simulation data, either manually, or in a completely automated manner, allowing them to explore the entire design space rather than just a few design points.

As an integral part of STAR-CCM+, the 3D-CAD functionality is completely client/server based, delivering numerous advantages including full scripting and workflow automation:

As with every new release, STAR-CCM+ includes a comprehensive range of new features including, but not limited to:

- Conformal thin meshing: this technology designed to generate prismatic polyhedral for thin objects is now conformal across multiple regions and allows more efficient studies of sheet metals and other high aspect ratio geometries surrounded by fluid.
- Specular reflectivity: STAR-CCM+ already delivers one of the most complete radiation feature sets and this is further extended to handle directional reflectivity for the simulation of solar collectors, headlamps and highly polished heat shields.
- Primary atomization and secondary breakup: extended capabilities to include primary atomization and secondary breakup to add flexibility and accuracy to spray modeling.

For a complete list of the new features in STAR-CCM+ V5, contact a CD-adapco representative.

STAR-CCM+ V5 will be officially launched at the [STAR European Conference](#) on March 22nd, 2010. CD-adapco invites all attendees to attend a complimentary day of STAR-CCM+ v5 Orientation Training on March 24 2010, worth €600, which will allow you to deploy the lessons learned during the conference into your engineering process. Click [here](#) to go to the Conference website.

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***Synopsys Galaxy Custom Designer Accelerates Analog/Mixed-Signal Engineering Productivity with Built-in DRC Visualization and Correction***

9 March 2010

[Synopsys, Inc.](#) announced that it has enhanced its Galaxy Custom Designer™ solution with the addition

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of SmartDRD, a design-rules-driven technology. SmartDRD technology enables layout engineers to more quickly achieve design-rule-check (DRC) clean designs with significantly reduced effort for analog and custom designs. SmartDRD automates many DRC repair tasks, reducing hours of manual effort to mere seconds.

Driven by the need to manage increasing design complexity and ever-growing design rule counts and their interrelationships, SmartDRD was architected to reduce a substantial bottleneck in layout implementation. Until now, layout engineers have had to remember and accommodate all design rules without negatively impacting schedules. The SmartDRD technology is designed to assist layout engineers during manual placement and routing by automatically bringing an edited design into rule compliance.

"DRC correction in custom layout is a difficult and time-consuming activity, and we often have to go through multiple iterations to fix all errors," said Ebi Abedifard, vice president of engineering at Avalanche Technology. "Bringing automation to this task will help increase engineering productivity and eliminate a tedious step in getting the layout finalized."

Custom Designer SmartDRD technology helps engineers achieve faster final physical verification and quicker time-to-tapeout. It includes:

- DRDAutoFix**--Designed to automatically correct DRC violations. Developed around an interactive and incremental use model, DRDAutoFix allows the layout engineer to specify an area of a design for repair. DRDAutoFix automatically modifies that area of the design while keeping track of the design rules and their interrelationships to bring the design into rule compliance.

- DRDVisual**--Designed to graphically show correct DRC spacing for wires and objects in real-time. Driven from the design rules in the OpenAccess technology file, DRDVisual provides dynamic highlighting that guides the engineer towards correct manual placement.

"Our new SmartDRD technology brings automation to an area of custom layout that until now has been primarily handled using painstakingly manual methods," said Farhad Hayat, senior director of marketing for Synopsys' Analog and Mixed-Signal Group. "By taking advantage of SmartDRD technology, layout engineers can identify and fix DRC violations in just seconds, significantly increasing their productivity without compromising quality of results."

DRDAutoFix and DRDVisual are available now in the 2009.12 release of Custom Designer. To see SmartDRD in action, attend the "Custom Designer: [Custom Designer: Advances in Custom Layout Automation with SmartDRD](#)" webinar premiering on March 23, 2010. The webinar will continue to be available online after the premiere for convenient viewing at any time.

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## *The MathWorks Announces Release 2010a of the MATLAB and Simulink Product Families*

5 March 2010

[The MathWorks](#) announced Release 2010a (R2010a) of its [MATLAB](#) and [Simulink](#) product families. Key in this release are new streaming capabilities for signal processing and video processing in MATLAB, nonlinear solvers for standard and large-scale optimization, and expanded Simulink support for large teams designing complex systems. R2010a also introduces [Simulink PLC Coder](#), which helps industrial control system engineers generate IEC 61131 structured text. This release updates 83 other products, including [PolySpace](#) code verification products.

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Advancements for the MATLAB family that are part of the R2010a release include:

- [Signal Processing Blockset](#) and [Video and Image Processing Blockset](#): New System objects for stream processing in MATLAB. Supporting more than 140 algorithms, System objects use less memory, improve the handling of lengthy signal and video data streams, and simplify the development of streaming algorithms.
- [Symbolic Math Toolbox](#): New interface with Simscape to automatically generate Simscape language equations for physical modeling.
- [Global Optimization Toolbox](#) and [Optimization Toolbox](#): New nonlinear solvers for more complex and realistic problems and the ability to use parallel computing to accelerate time-to-solution.
- [SimBiology](#): Stochastic approximation expectation-maximization (SAEM), dosing schedules support, and performance enhancements for improved data fitting and modeling for pharmacokinetics (PK) and pharmacodynamics (PD).

R2010a reflects a continued focus on performance within the MATLAB product family, including multicore support and performance enhancements for more than 50 functions in Image Processing Toolbox, and additional multithreaded math functions in MATLAB. There are also enhancements to file sharing, path management, and the desktop in MATLAB.

With this release, Simulink offers expanded support for large design teams, enabling them to design complex systems more efficiently. These capabilities include tunable parameter structures for management of large parameter sets and triggered model blocks and function-call branching for component-based modeling.

Other Simulink 2010a highlights designed for more efficient embedded system development include:

- [Embedded IDE Link](#) and [Target Support Package](#): Code generation support for Eclipse, Embedded Linux, and ARM processors, which provides simplified embedded system development workflows for systems engineers and software engineers.
- [IEC Certification Kit](#): ISO/DIS 26262 tool qualification support for Real-Time Workshop Embedded Coder and PolySpace verification products, easing certification of ECUs developed to Automotive Safety Integrity Level (ASIL) A through ASIL D.
- [DO Qualification Kit](#): DO-178B tool qualification support extended to model coverage, which expands the certification credit possible with model verification.

The new release is available immediately and is being provided to users with current subscriptions to MathWorks Software Maintenance Service. Additional information on R2010a 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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